SPECIALTY TRAINING CURRICULUM

FOR

AUDIOVESTIBULAR MEDICINE

2015

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Joint Royal Colleges of Physicians Training Board

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1 Introduction

Audiovestibular Medicine is the medical specialty concerned with the investigation, diagnosis and management, in adults and children, of disorders of balance, hearing, tinnitus, and auditory communication – including speech and language disorders in children.

The specialty curriculum outlines the specialty training in Audiovestibular Medicine from Specialist Training year 3 (ST3) through to Certificate of Completion of Training (CCT).

2 Rationale

2.1 Purpose of the Curriculum

The purpose of this curriculum is to define the competences and to describe the training system in Audiovestibular Medicine. The training system ultimately aims to provide the patient with a doctor trained as an attentive listener, a careful observer, an effective communicator and a knowledgeable and capable clinician. The curriculum describes the competences required to obtain a Certificate of Completion of Training (CCT) and to be registered on the Specialist Register in Audiovestibular Medicine maintained by the General Medical Council. The CCT specialist will be able to work as a consultant specialist within the National Health Service in paediatric and adult Audiovestibular Medicine (previously known as Audiological Medicine) and will have the knowledge, skills and attitudes required to provide a high standard professional service in the specialty.

After completing training in Audiovestibular Medicine and having been awarded a CCT the curriculum will have prepared the doctor to:

- Practise Audiovestibular Medicine to a high level of competence
- Continue with their professional development
- Engage with appraisal and revalidation
- Review practice in the light of Good Medical Practice
- Identify their learning needs and goals to develop further specialised practice.

Links to Stages of Training

The curriculum builds on skills and competences acquired during the foundation years and core training. The curriculum makes allowance for the fact that trainees may not have had any specific training or exposure to Audiovestibular Medicine on entry to ST3. Entrants come from a variety of disciplines e.g. neurology, rehabilitation medicine, paediatrics, otolaryngology, general practice and enhance the specialty through their differing knowledge and experiences. Fundamental to the practice of Audiovestibular Medicine is a physicianly approach to the whole patient and their problems; this is acquired through gaining core medical competences (CMT), or the equivalent basic training in paediatrics (ST1 to ST3) or general practice (ST1 and ST2).

Trainees who have successfully completed basic training in otolaryngology will need to acquire certain core medical competencies. All trainees, regardless of their core training pathway, will need to demonstrate competencies in general medicine, in otorhinolaryngology and in paediatrics and developmental paediatrics as detailed in the content of learning section. If any of these competencies have not been covered during core training before entering Audiovestibular Medicine, the trainee will be

expected to acquire them during appropriate secondments early in the training programme.

Appropriateness of the Curriculum
The curriculum is appropriate for trainees preparing to practise as consultant Audiovestibular Physicians in the UK. All consultant Audiovestibular Physicians will have covered the full curriculum during specialty training and are able to practise in all aspects of Audiovestibular Medicine.

Most Audiovestibular physicians practice as general Audiovestibular physicians and care for both paediatric and adult populations providing a high standard of care for patients with both audiological and vestibular problems. Some develop a purely paediatric practice, others deal only with adult patients. Specialist areas include areas such as cochlear implantation, auditory processing disorders, paediatric balance disorders, paediatric speech & language disorders etc. Limited exposure to these subjects occurs during training with full competence requiring training post CCT.

2.2 Development

This curriculum was developed by the Specialty Advisory Committee (SAC) for Audiovestibular Medicine under the direction of the Joint Royal Colleges of Physicians Training Board (JRCPTB). The 2010 curriculum replaces the Audiological Medicine Specialty Training Curriculum dated 2007 with changes to ensure that the curriculum meets GMC's 17 Standards for Curricula and Assessment. It builds on the content of learning of the 2007 curriculum, which itself was based on the 2003 curriculum, thus ensuring a robust and well-established basis for the current curriculum. The curriculum takes into consideration new developments in the specialty and recent changes in training and assessment. Major changes from the previous curriculum include the incorporation of additional leadership, health inequalities and fundamental competences. Amendments in 2013 addressed training needs for those entering from otorhinolaryngology as well as bringing the curriculum up to date, while those in 2015 target a change in the knowledge based training and assessment. The group responsible for the development of the 2010 curriculum included a lay member, a senior consultant in Audiovestibular Medicine and a trainee. The curriculum was widely circulated to training consultants and specialist registrars in Audiovestibular Medicine, for their comments and contributions to the content of training and methods of assessment. These comments were taken into consideration in developing this current curriculum. The amendments developed in 2013-2015 have again been developed by consultants working with trainees in close consultation with other training consultants and have been widely distributed for comment to all training consultants, trainees, the lead dean and a lay member.

2.3 Entry Requirements

Specialty training in Audiovestibular Medicine consists of core and higher speciality training. Core training provides physicians with the ability to investigate, diagnose and treat patients with acute and chronic medical symptoms and with high quality review skills for managing inpatients and outpatients. Higher speciality training then builds on these core skills to develop the specific competences required to practise independently as a consultant in Audiovestibular Medicine.

Core training may be completed in either a Core Medical Training (CMT) or Acute Care Common Stem – Acute Medicine (ACCS-AM) programme. The full curriculum

for specialty training in Audiovestibular Medicine therefore consists of the curriculum for either CMT or ACCS-AM plus this specialty training curriculum for Audiovestibular Medicine. Trainees entering from CMT or ACCS-AM must have full MRCP.

There are common competences that should be acquired by all physicians during their training period starting within the undergraduate career and developed throughout the postgraduate career, for example: communication, examination and history taking skills. These are initially defined for CMT and then developed further in the specialty. This curriculum supports the spiral nature of learning that underpins a trainee's continual development. It recognises that for many of the competences outlined there is a maturation process whereby practitioners become more adept and skilled as their career and experience progresses. It is intended that doctors should recognise that the acquisition of basic competences is often followed by an increasing sophistication and complexity of that competence throughout their career. This is reflected by increasing expertise in their chosen career pathway.

Alternative entry routes are possible for trainees who have completed core training or equivalent in Paediatrics, Otolaryngology or General Practice. Experience in Audiovestibular Medicine is not essential for entry into specialist training. It is considered that basic training in paediatrics (ST1 to ST3 plus completion of MRCPCH) imparts physicianly skills, and also develops skills in paediatrics which are fundamental to much of the training in Audiovestibular Medicine. Likewise trainees who have completed ST1 and ST2 in General Practice and acquired MRCGP are considered to have adequate physicianly skills to progress through to ST3 training in Audiovestibular Medicine. Trainees transfering from Otolaryngology (ENT surgery) require MRCS(ENT) or FRCS(ENT) and must have at least six months experience in ENT surgery. These entrants will need to acquire certain core medical competences as a basis on which to develop competences in Audiovestibular Medicine; these competences are defined in the content of learning section. This is not expected to prolong the training to CCT as these trainees will have sound competences in Otorhinolaryngology which trainees from other disciplines will need to acquire.

The curriculum provides for training across a range of related specialties ensuring that, regardless of the initial training route, an Audiovestibular Physician acquiring CCT will have appropriate competences in all related subjects as well as the core curricular subjects of Paediatric Audiological Medicine, Paediatric Vestibular Medicine, Adult Audiological Medicine and Adult Vestibular Medicine. Where trainees have prior experience in the related specialties it may be possible to reduce the length of time in Audiovestibular Medicine training.

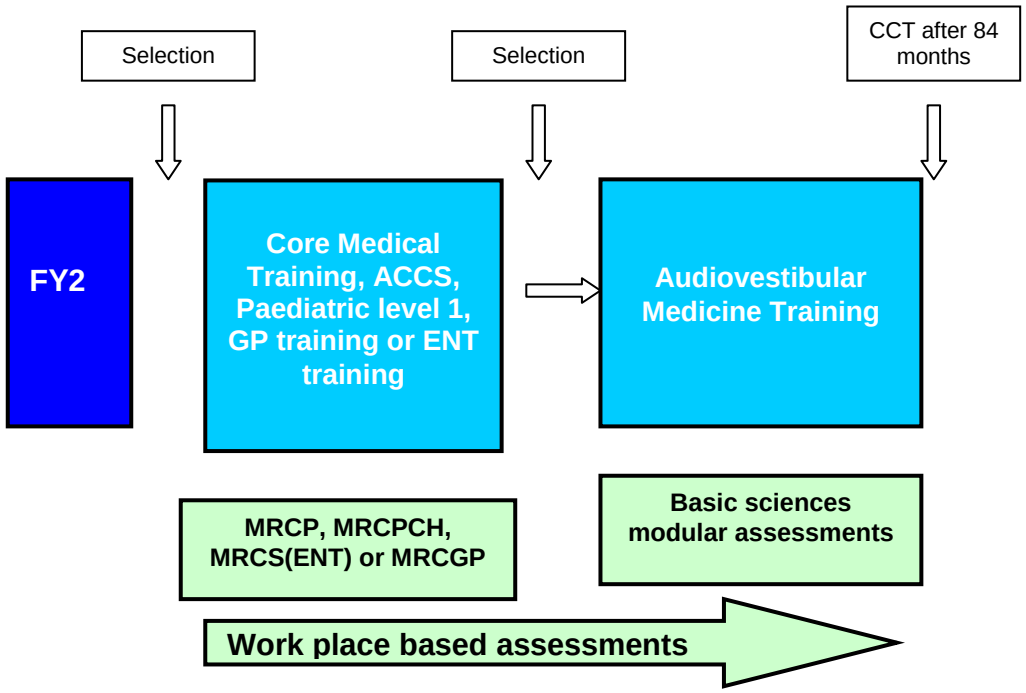


Fig 1.0 Training pathway for trainees in Audiovestibular Medicine

2.4 Enrolment with JRCPTB

Trainees are required to register for specialist training with JRCPTB at the start of their training programmes. Enrolment with JRCPTB, including the complete payment of enrolment fees, is required before JRCPTB will be able to recommend trainees for a Certificate of Completion of Training (CCT). Trainees can enrol online at www.jrcptb.org.uk

2.5 Duration of Training

Although this curriculum is competence based, the duration of training must meet the European minimum for post registration in full time training adjusted accordingly for flexible training. The SAC has advised that training from ST1 will usually be completed in seven years in full time training.

Following core training the expected duration of specialty training in Audiovestibular Medicine is 5 years, although previous relevant experience, skills and competences may shorten training by up to 12 months. A minimum of four years of clinical training must be spent in the practice of clinical Audiovestibular Medicine, covering all aspects of the specialty at all ages. During the training period time will be spent in acquiring skills in related specialties, including general medicine, paediatrics, neurology, care of the elderly, immunology & allergy, otolaryngology, ophthalmology, genetics, psychology and psychiatry. Posts in these other disciplines will not be part of a formal inter-specialty rotation but will be secondments approved as appropriate by the SAC in Audiovestibular Medicine. Previous and appropriate experience in these related specialties during core medical training may count towards specialty training, dependent on SAC approval.

2.6 Less Than Full Time Training (LTFT)

Trainees who are unable to work full-time are entitled to opt for less than full time training programmes. EC Directive 2005/36/EC requires that:

- LTFT shall meet the same requirements as full-time training, from which it will differ only in the possibility of limiting participation in medical activities.
- The competent authorities shall ensure that the competences achieved and the quality of part-time training are not less than those of full-time trainees.

The above provisions must be adhered to. LTFT trainees should undertake a pro rata share of the out-of-hours duties (including on-call and other out-of-hours commitments) required of their full-time colleagues in the same programme and at the equivalent stage.

EC Directive 2005/36/EC states that there is no longer a minimum time requirement on training for LTFT trainees. In the past, less than full time trainees were required to work a minimum of 50% of full time. With competence-based training, in order to retain competence, in addition to acquiring new skills, less than full time trainees would still normally be expected to work a minimum of 50% of full time. If you are returning or converting to training at less than full time please complete the LTFT application form on the JRCPTB website www.jrcptb.org.uk .

Funding for LTFT is from deaneries and these posts are not supernumerary. Ideally therefore 2 LTFT trainees should share one post to provide appropriate service cover.

Less than full time trainees should assume that their clinical training will be of a duration pro-rata with the time indicated/recommended, but this should be reviewed during annual appraisal by their TPD and chair of STC and Deanery Associate Dean for LTFT training. As long as the statutory European Minimum Training Time (if relevant), has been exceeded, then indicative training times as stated in curricula may be adjusted in line with the achievement of all stated competences**.**

3 Content of Learning

This section lists the specific knowledge, skills and behaviours or attitudes to be attained throughout training in Audiovestibular Medicine. The programme defines the competences which a trainee will need to acquire to take a senior role in the management of patients presenting with audiovestibular disorders at specialist level or above.

3.1 Programme Objectives

The training programme in Audiovestibular Medicine aims to produce physicians who:

- Apply appropriate knowledge and skill in the investigation, diagnosis and management of patients with audiological and vestibular disorders
- Establish a differential diagnosis of patients presenting with audiovestibular problems by the appropriate use of the clinical history, examination and investigations
- Are competent to instigate the core investigations required in Audiovestibular Medicine
- Have a good theoretical and practical knowledge of the audiovestibular tests used in Audiovestibular Medicine
- Are able to apply the knowledge of basic sciences in clinical practice

- Can develop management plans for the 'whole patient' with sound knowledge of the appropriate treatments including health promotion, disease prevention and rehabilitative plans
- Demonstrate appropriate attitudes and communication skills in dealing with patients and colleagues
- Take into account all aspects of the healthcare needs of patients and their families
- Are able to act as safe independent practitioners whilst recognising the limitation of their own expertise and the obligation to seek assistance of colleagues where appropriate
- Develop clinical practice which is based on an analysis of best available evidence and/or within national guidelines where available
- Have acquired and developed team working and leadership skills
- Work effectively with other health care professionals, social services, education departments and voluntary agencies
- Manage time and resources to the benefit of themselves, their patients and colleagues
- Are able to identify and take responsibility for their own educational needs and the attainment of these needs
- Are capable of being educational supervisors/trainers able to perform an objective appraisal and honest assessment.
- Can use current methods in information technology effectively
- Are aware of current thinking about ethical and legal issues
- Participate fully in all clinical governance activities
- Accept the clinician's role and responsibilities in providing high quality patient care, setting and monitoring standards.
- Have developed management skills e.g. chairing a meeting, negotiating skills, dealing with conflicts and complaints etc.
- Have developed competences in medical leadership
- Have basic general skills as a doctor as described in Good Medical Practice.

3.2 Programme Content

Fundamental Competences
There are common competences that should be acquired by all physicians during their training period starting within the undergraduate career and developed throughout the postgraduate career. Some of these fundamental competences apply to direct clinical practice, such as history taking, clinical examination, safe prescribing, communication and team working; others apply to the broader work and responsibilities of medical practice such as personal development, management, safe practice and audit/research. Some of these competences will have been acquired during the Foundation programme and Core Medical Training: and as part of the maturation process for the physician and the specific training in Audiovestibular Medicine these competences will become more finely honed and all trainees should be able to demonstrate the competences as described by the highest level descriptors by the time of their CCT.

Audiovestibular Medicine is a non-acute specialty and many of the patients have long term conditions affecting their ability to communicate, thus requiring specific fundamental competences which are reflected in this curriculum. The fundamental competences specific to the clinical encounter are listed before the subject specific curriculum. The difference in needs between the paediatric and adult patient groups

is reflected in the differing competences required; these are outlined as introductions to the paediatric and adult sections respectively.

In addition to these competences are those fundamental competences that support a physician in all aspects of their career, such as personal development, audit, research, management and leadership competences. These are covered in Section J.

Specialty Specific Curriculum
This curriculum is based on the four core areas of Paediatric Audiological Medicine, Paediatric Vestibular Medicine, Adult Audiological Medicine, and Adult Vestibular Medicine, three additional topics and a number of other related specialties which contain subject matter which complements all four core areas. The assessment methods and evidence for competence will be relevant to the specific key areas and will be outlined within the relevant sections.

The trainee is expected to be competent in all areas of the curriculum in order to achieve CCT.

Knowledge Base
The basic sciences of anatomy and physiology of the audiovestibular system; physics, acoustics and psychoacoustics; and clinical diagnostics (the theory of audiovestibular testing) – please see content of learning H.1, H.2 and H.3 - require specialist tuition and assessment which will be delivered via modules of an Audiology- themed MSc course. Trainees will usually complete these modules as part of a postgraduate certificate, which will normally be undertaken on a part-time basis in the first two years of training. Please refer to the JRCPTB website for guidance on the MSc modules and approved providers (www.jrcptb.org.uk/specialties/audio-vestibular-medicine).

The small size of the specialty means that it is not feasible to run a full specialty certificate examination to assess the knowledge base of the clinical aspects of the curriculum. The specialty is currently piloting a formative knowledge-based assessment method. The KBA has been mapped to the syllabus as a possible assessment method where appropriate. The KBA will be subject to future evaluation by the GMC.

Practical Skills
In order to develop critical appreciation of the values, limitations, difficulties and pitfalls of the various audiovestibular tests the trainee needs practical experience of performing a wide variety of these tests. For all tests, regardless of the degree of clinical skill expected within this curriculum, the trainee will need to be competent in interpretation of the test results in the context of the clinical case and will need to be able to discriminate between true pathology and artefactual results and be able to identify pitfalls and to suggest remedial or alternative action. It is expected, and recommended, that trainees who develop a special interest in a particular field will acquire greater skills in performing practical tests than this curriculum indicates.

3.3 Good Medical Practice

Good medical practice is the GMC's core guidance for doctors. It sets out the values and principles on which good practice is founded.

The guidance is divided into the following four domains:

1. Knowledge, skills and performance
2. Safety and quality
3. Communication, partnership and teamwork
4. Maintaining trust

Good medical practice is supported by a range of explanatory guidance which provides more detail on various topics that doctors and others ask us about. The “GMP” column in the syllabus defines which of the 4 domains of Good Medical Practice2013 are addressed by each competency.

3.4 Syllabus

A Fundamental clinical competences required for practice in Audiovestibular Medicine - applicable to both adult and paediatric practice

1 The Clinical Encounter
2 Communication
3 Team working Skills
4 Therapeutics and safe prescribing

B Additional fundamental competences for practice specifically in paediatric Audiovestibular Medicine

1 Clinical Encounter
2 Emotional and Social Development of the Child/ Safeguarding Children

C Paediatric Audiological Medicine

1 Congenital and Prelingual Deafness
2 Progressive, sudden or late onset deafness
3 Fluctuating deafness including otitis media with effusion
4 Non-organic hearing difficulties
5 Children with complex medical or developmental problems and others who are “difficult to assess”
6 Children with Speech & Language Problems (ST6 & ST7)
7 Auditory Processing Disorders (APD)
8 Auditory Neuropathy Spectrum Disorder (ANSD)
9 Tinnitus, Dysacusis and Hyperacusis in Children
10 Transition & Transfer of Adolescents
11 Practical Procedures in Paediatric Audiological Medicine

D Paediatric Vestibular Medicine

1 Imbalance in Children
2 Dizziness in children
3 Practical Procedures in Paediatric Vestibular Medicine

E Additional fundamental competences for practice specifically in adult Audiovestibular Medicine

1 Clinical Encounter
2 Emotional and Social Aspects

F Adult Audiological Medicine

1 Tinnitus, dysacusis and hyperacusis
2 Sudden hearing loss
3 Unilateral hearing loss
4 Hearing problems in younger adults
5 Congenitally deaf adult

6 Hearing problems in the elderly
7 Central Auditory Dysfunction and Auditory Processing Disorder
8 Learning disabled adults
9 Practical Procedures in Adult Audiological Medicine

G Adult Vestibular Medicine

1 Acute vertigo
2 Recurrent vertigo/disequilibrium
3 Chronic imbalance
4 Blackouts/drop attacks
5 Falls in the elderly
6 Practical Procedures in Adult Vestibular Medicine

H Additional Topics

1 Basic sciences – Anatomy and Physiology
2 Basic Sciences – Physics, Acoustics, Psychoacoustics
3 Clinical Diagnostics
4 Radiological Investigation
5 Prevention of Audiovestibular Disorders
6 Hearing Instruments

I Related Specialities

1 General Medicine
2 Otorhinolaryngology
3 Paediatrics and Developmental Paediatrics
4 Allergy and Immunology
5 Paediatric neurology
6 Adult neurology
7 Child and Adolescent Psychiatry
8 Child and Adolescent Psychology
9 Adult Psychiatry
10 Adult Psychology
11 Paediatric Ophthalmology
12 Adult Ophthalmology
13 Genetics
14 Care of the Elderly

J Complementary Fundamental Competences

1 Personal Performance and Development
2 Clinical Governance
3 Audit and Research
4 Teaching and Training
5 Management and NHS Structure

In the tables below, the “Assessment Methods” shown are those that are appropriate as **possible** methods that could be used to assess each competence. It is not expected that all competences will be assessed and that where they are assessed not every method will be used. See section 5.2 for more details. “GMP” defines which of the 4 domains of the Good Medical Practice Framework for Appraisal and Assessment are addressed by each competence.

A. Fundamental Clinical Competences Required for Practice in Audiovestibular Medicine

A.1. The Clinical Encounter

To develop good diagnostic skills through accurate history taking, thorough and pertinent examination, and appropriate investigation

To be able to formulate a management plan in conjunction with the multi-disciplinary team and evaluate its benefit

To develop an holistic approach to patient management

To be aware of the many factors that affect a patient's presentation, understanding of the problem and approach to management

To understand the impact of audiovestibular disorders on the individual and their family and friends

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The importance of a detailed clinical history including psychological, social and cultural aspects as well as the family history	CbD, KBA, mini-CEX	1
Patients not presenting a history in a structured or succinct fashion	CbD, mini-CEX	1,4
The value of a subsidiary history from significant others	CbD, mini-CEX	1
The importance of a detailed physical examination and its value in the diagnosis of audiovestibular problems	CbD, KBA, mini-CEX	1
The basis for clinical signs and the relevance of positive and negative physical signs	CbD, KBA, mini-CEX	1
The impact of audiovestibular disorders on patients and their families	CbD, KBA, mini-CEX	1
The mental health/psychological components of audiovestibular disorders and disability	CbD, KBA, mini-CEX	1
The importance of openly discussing all management options and agreeing management plans with the patient, or parents in the case of children	CbD, KBA, mini-CEX, PS	1,3
The different factors that have an influence on the patient's journey including physical or mental illness, learning difficulties, anxiety, cultural and social differences, in particular the effects of poverty, addiction and violence	CbD, mini-CEX	1
The agencies, both statutory and voluntary, that can provide support to individuals and their families in coping with their audiovestibular problems	CbD, KBA, mini-CEX	1
The existence of national/international guidelines and their value and limitations	CbD, KBA, mini-CEX	1,2
The importance of keeping good records	CbD, mini-CEX	1,3,4
Local patient services and how they can be accessed	CbD, mini-CEX	1
The significance of lifestyle choices on audiovestibular pathology	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take an accurate, relevant and detailed history of auditory and	CbD, mini-CEX	1

vestibular disorders and their associated problems, including a psychosocial history		
Supplement the history with standardised instruments or questionnaires when relevant	CbD, mini-CEX	1
Supplement the history using information available from other sources such as assessment reports	CbD, mini-CEX	1
Perform a relevant and detailed full general clinical examination, including ENT, neuro-otological, oculomotor, cardiovascular and neurological	CbD, mini-CEX	1
Identify systemic, syndromic and genetic causes of hearing and balance disorders	CbD, KBA, mini-CEX	1
Select and interpret audiological, vestibular and aetiological tests appropriate to the patient's presentation, age and additional difficulties	CbD, KBA, mini-CEX	1
Integrate the history, examination and investigative findings and formulate a diagnosis and management plan	CbD, mini-CEX	1
Formulate a management plan in partnership with the patient and members of the MDT	CbD, mini-CEX	1,3
Assess the impact of a management strategy using appropriate outcome measures	CbD, mini-CEX	1,2
Demonstrate analytic and informed clinical reasoning skills	CbD, mini-CEX	1
Keep good clinical notes	CbD, mini-CEX	1,2,3,4
Demonstrate insightful reasoning and reflection	CbD, mini-CEX	1
Demonstrate the ability to take responsibility for difficult decisions in situations of clinical complexity and uncertainty	CbD, mini-CEX	1
Assess the patient's ability to access various services in the health and social system and offer appropriate assistance	CbD, mini-CEX	1,4
Outline the concept of quality of life and how this can be measured	CbD, mini-CEX	1
Determine where lifestyle changes would have positive impact on the presentation and counsel the patient and significant others appropriately	CbD, mini-CEX	1,3
Determine where preventive measures could have value and advise the patient appropriately	CbD, mini-CEX	1,2,3
Help to empower patients and negotiate complex systems to improve health and welfare including, where appropriate, the right to work	CbD	1,3
Identify and communicate effectively with influential decision-makers/facilitators of change	CbD	1,3
Use appropriate methods of ethical reasoning to come to a balanced decision where complex and conflicting issues are involved	CbD, mini-CEX	1
Give adequate time for patients to express ideas, concerns and expectations and encourage them to do so	mini-CEX, MSF, PS	1,3, 4
Behaviours		
To demonstrate:		
An understanding of and respect for the views and attitudes of those within the Deaf Community	CbD, mini-CEX	1,3,4
An understand of the importance of patient confidentiality and informed consent	CbD, mini-CEX	1,2,3,4

Recognition of the importance of effective multidisciplinary team work and communication with colleagues both verbally and in writing	CbD, mini-CEX, MSF	1,3
Recognition of the importance of sharing information with the patient	CbD, mini-CEX	1,3
Recognition of the value of voluntary agencies in supporting the patient with disorders of hearing, and balance and their family/carers	CbD, mini-CEX	1
Recognition of the use and value of complementary medical approaches to holistic management and care	CbD, mini-CEX	1,4
Awareness of and sensitivity towards the way in which cultural and religious beliefs affect approaches to treatment and care, and respond respectfully to the expressed needs of the patient and carer	CbD, mini-CEX, PS	1,3,4
Recognition and understanding of the stigmatising effects of deafness, imbalance or poor speech and language and work to overcome that stigma	CbD, mini-CEX	1,4
Recognition that patients with audiovestibular or speech and language problems may be denied employment opportunities unnecessarily and be prepared to act as an advocate	CbD, mini-CEX	1,4
Recognition of the possible influence of socio-economic status, household poverty, employment status and social capital in taking a medical history	CbD, mini-CEX	1
Recognition of the possible effects of addiction (gambling, drugs or alcohol), violence and abuse on a patient's ability to access care	CbD, mini-CEX	1,2
An ethical, honest and non-judgemental manner and seek advice if unable to answer questions	CbD, mini-CEX, MSF	1,2,3,4
That all decisions and actions are in the best interests of the patient	CbD, mini-CEX, MSF, PS	1,2,4
Non judgemental behaviour	CbD, mini-CEX, MSF, PS	1,3,4
An awareness of the sources of legal and ethical guidelines to support their work	CbD	1
Respect for the request for a second opinion	CbD, mini-CEX	1,2
An acceptance of clinical uncertainty	CbD, mini-CEX	1
An awareness of ways in which one's own personal experiences, values and attitudes might affect professional practice	CbD, MSF	1,2
An awareness of one's own limitations and when and where to seek support	CbD, mini-CEX, MSF	1,2
An awareness of when to refer to another colleague	CbD, mini-CEX, MSF	1,2
An awareness of the sources of legal and ethical guidelines to support their work	CbD	1

Level Descriptor

1 Good basic clinical skills acquired during Foundation and CMT
Gaining skills pertinent to audiovestibular complaints

2 Able to take a good basic history of audiovestibular problems and conduct a detailed examination.
Able to integrate history, clinical findings and results of audiovestibular tests for simple cases.
Able to conduct a consultation with a patient with a straightforward complaint.

3 Able to take a detailed history of a complex audiovestibular problem and conduct a detailed examination.
Able to integrate history, clinical findings and results of audiovestibular tests for complex cases.

Able to conduct a consultation with a patient with a complex problem or in a difficult and complex situation

A.2. Communication

To develop effective communication skills with the patient and their family

To develop effective communication skills with professional colleagues, both within the immediate multi-disciplinary team and further afield

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The importance of effective communication: • Directly with the patient • With the parents, family or carers • With other members of the multidisciplinary team • With the GP and other professionals involved in the patient's care	CbD, KBA, mini-CEX, MSF, PS	1,3,4
The value of manual communication for patients with deafness, speech and language disorders or developmental delay	CbD, KBA, mini-CEX, PS	1,3,4
How to find assistance in cases where a patient or family may not all speak English	CbD, mini-CEX	1
Local procedures for engaging sign language and foreign language interpretation	CbD, mini-CEX	1,3
The principles of sharing difficult news	mini-CEX	1,3
Specific techniques and methods that facilitate effective and empathetic communication	mini-CEX	1,3
Skills		
To demonstrate the ability to:		
Communicate effectively with patients of all ages and their parents, family or carers: • With disorders of hearing • With poor speech production due to deafness or disorders of speech and language • With visual disorders including the deaf-blind • With learning disabilities • Needing sign language or spoken language interpretation	CbD, mini-CEX, PS	1,3
Explain clearly to patients, families or their carers the rationale of investigation, results of investigations (both audiovestibular and aetiological), the management options and the prognosis of audiovestibular problems so that they understand and can make informed decisions, where able to do so	mini-CEX, PS	1,3
Communicate effectively with colleagues within the multidisciplinary team and with specialists in other disciplines, both orally and in writing	CbD, mini-CEX, MSF	1,3
Determine the communication abilities and needs of the congenitally deaf and the deaf/blind patient	CbD, mini-CEX	1
Use finger spelling and British Sign Language (BSL) up to Stage I level	mini-CEX	3
Counsel patients appropriately and effectively	CbD, mini-CEX, PS	1,3
Inform patients about sources of support available e.g. educational support and statements, voluntary agencies, financial grants and allowances,	CbD, mini-CEX	1,3

Recognise and interpret the use of non verbal communication from patients and carers	mini-CEX	1,3
Produce accurate written reports and letters in a timely fashion	CbD	1,3
Behaviours		
To demonstrate:		
An understanding of the need to respect the patient's views in accordance with their beliefs and background	CbD, mini-CEX, PS	1,3,4
Respect for the need of the patient to receive information in a form which they understand, be this simplified English, sign language or a different spoken language	CbD, mini-CEX, PS	1,3,4
An understanding of the value of written information in the form of leaflets or copies of clinical letters	CbD, mini-CEX, PS	1,3
Respect for a patient's need for confidentiality	CbD, mini-CEX, PS	1,4
Recognition of the importance of prompt and accurate information-sharing with other professionals involved in the patient's care	CbD, mini-CEX, MSF	1,2,3
The fostering of a supportive and respectful environment where there is open and transparent communication	CbD, mini-CEX, MSF	1,3
Level Descriptor		
1	Aware of the communication needs of the deaf and hard of hearing Able to communicate well with hearing patients speaking English.	
2	Able to communicate effectively using interpreters, both sign and spoken language. Able to communicate effectively in clinic letters on simple cases. Developing good communication skills with members of the multi-disciplinary team.	
3	Demonstrates excellent communication skills in clinic with all patients, with the multidisciplinary team and in written communication on complex cases. Achieves all communication competences	

A.3. Team Working Skills

To work effectively within a multi-disciplinary, interdisciplinary or intradisciplinary team		
Knowledge	**Assessment Methods**	**GMP**
To demonstrate knowledge of::		
The value of multidisciplinary team working, and the principles of effective team working including team dynamics and how to maximise effectiveness	CbD, KBA, mini-CEX, MSF	1,3
The roles and responsibilities of the various team members in the local teams, both within the hospital and in the community, including social services and education	CbD, KBA, mini-CEX, MSF	1,3
The need to interact with professionals in other disciplines, agencies and from the voluntary sector	CbD, mini-CEX, MSF	1,3
The wide range of leadership styles and approaches and the applicability to different situations and people	CbD, mini-CEX	1,3
The role of chair at meetings	MSF	1,3
The role of the doctor in the team	CbD, MSF	1,2,3,4
Procedures for reporting unsafe practice of colleagues or team	CbD	2

members		
How to deal with poorly performing teams and team members	CbD, MSF	2,3,4
Skills		
To demonstrate the ability to:		
Work effectively within the multidisciplinary team to achieve optimal patient care	CbD, mini-CEX, MSF	1,2,3
Liaise appropriately with other professionals in hospital and within the community	CbD, mini-CEX, MSF	1,2,3
Liaise effectively with professionals in other agencies e.g. NDCS, RNID	CbD, mini-CEX	1,3
Employ collaborative negotiation to prevent and resolve conflict within teams	MSF	1,3
Actively seek the views of others as part of the team	CbD, mini-CEX, MSF	1,3
Identify and develop opportunities of working with others in order to effect benefit	CbD, MSF	1,3
Gain and maintain trust and support of colleagues	MSF	1,2,3,4
Show initiative and willingness to lead a team and to contribute actively to team meetings	MSF	1,3
Identify and prioritise tasks and responsibilities including safe delegation and supervision	MSF	1,2,3
Recognise and manage poor team players	MSF	2,3,4
Behaviours		
To demonstrate:		
A clear sense of their role, responsibility and purpose within the team	CbD, mini-CEX, MSF	1,3
Respect for the skills and opinions of other members of the multi-disciplinary team	CbD, mini-CEX, MSF	1,3,4
An inclusive approach within the team and encourage an open environment to foster concerns and issues about the functioning and efficacy of team working	MSF	1,2,3,4
Recognition of the importance of induction for new members of the team	MSF	1,2,3
Where appropriate, the sensitive and assertive use of authority to resolve conflict and disagreement within a team	MSF	1,3
Recognition of the patient's need for dignity, privacy and confidentiality and share only information necessary for health care amongst those members of the team who need to know	MSF	1,3,4
Encouragement of the health team in respecting the philosophy of patient focussed care	MSF	1,3,

Level Descriptor

1	Appreciates the different roles of the members of the multi-disciplinary team
2	Able to work well within the multi-disciplinary team
3	Demonstrates excellent team working skills Demonstrates the ability to lead a team and to deal with conflict within the team Demonstrates all team working competences above

A.4. Therapeutics and Safe Prescribing

To adopt safe prescribing strategies		
Knowledge	**Assessment Methods**	**GMP**
To demonstrate knowledge of::		
Safe prescribing and how to obtain information on drugs	CbD, mini-CEX	1,2
The effects of age, body size, organ dysfunction and concurrent illness on drug metabolism	CbD, mini-CEX	1,2
Drugs that are likely to have a deleterious effect on hearing and balance, including those that will impair reasoning or mood.	CbD, KBA, mini-CEX	1
Adverse drug reactions to commonly used drugs including complementary medicines	CbD, KBA, mini-CEX	1
Drugs with teratogenic effects that can lead to disorders of hearing and balance.	CbD, KBA, mini-CEX	1
The indications, contraindications, side effects, drug interactions and dosages of all commonly used drugs or know where to obtain this information	CbD, mini-CEX	1
How to administer effectively all medication prescribed	CbD, mini-CEX	1
The roles of regulatory agencies involved in drug use, monitoring and licensing (e.g. National Institute for Clinical Excellence (NICE), Committee on Safety of Medicines (CSM) and Healthcare Products Regulatory Agency and hospital formulary committees)	CbD	1,2
Skills		
To demonstrate the ability to:		
Prescribe safely and write legible prescriptions using appropriate medications in correct doses	CbD, mini-CEX	1
Provide effective explanation for the role of medicines in treating otological disease and disorders of hearing and balance	CbD, mini-CEX	1,3
Predict and avoid drug interactions, including those with complementary medicines	CbD, mini-CEX	1
Discuss the role of the prescribed medicine, its administration and its common side effects with the patient or parent (in the case of a child)	CbD, mini-CEX	1,3
Ensure prescribing information is shared promptly and accurately between a patient's health providers	CbD, MSF	1,2,3
Behaviours		
To demonstrate:		
Recognition of the importance of resources when prescribing, including the role of a drug formulary	CbD, mini-CEX	1,2
Recognition of the value of using a drug formulary to check drug efficacy, dosage, interactions and side effects	CbD, mini-CEX	1,2
Openness to advice from other health professionals on medication issues	CbD	1
Recognition of the benefit of minimising the number of medications taken by a patient	CbD	1
Level Descriptor		

1	Demonstrates good basic knowledge of safe prescribing practice Demonstrates knowledge of drugs commonly used in general medical problems which can affect hearing or balance, or the patient's mood and behaviour
2	Demonstrates knowledge of common drugs used in audiovestibular medicine, their dosage and common side effects Demonstrates a sound knowledge of drugs adversely affecting the audiovestibular system Able to instruct patients on accurate administration i.e. ear drops, nasal sprays
3	Demonstrates good prescribing practice with the wide range of drugs of value in audiovestibular problems, including migraine, in adults and children

B. Additional Fundamental Competences for Practice Specifically in Paediatric Audiovestibular Medicine

B.1. The Clinical Encounter

To develop appropriate competences in managing children in the clinical situation

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The importance of a detailed clinical history including general medical, psychological, social, educational and developmental aspects as well as the family history	CbD, KBA, mini-CEX	1
The value of obtaining the child's perspective when possible	CbD, mini-CEX, PS	1,3,4
Normal child development including normal speech and language development, normal locomotor development and normal emotional development	CbD, KBA, mini-CEX	1
Normal development of auditory attention and behaviour	CbD, KBA, mini-CEX	1
The range of speech, language and communication disorders in childhood	CbD, KBA, mini-CEX	1
The difference between delayed and disordered speech and language development	CbD, KBA, mini-CEX	1
The effect of multi-sensory impairment on a child's development	CbD, mini-CEX	1
The impact on parents and the rest of the family of paediatric audiovestibular disorders	CbD, KBA, mini-CEX	1
Audiovestibular disorders that can accompany systemic illness and can be the presenting feature of that illness	CbD, KBA, mini-CEX	1
The fact that the child with audiovestibular impairment can have a variety of complex medical needs, including visual impairment and learning difficulties	CbD, KBA, mini-CEX	1
The fact that audiovestibular impairment may be isolated or associated with other conditions	CbD, KBA, mini-CEX	1
The effect of neuro-developmental problems on auditory/vestibular behaviour	CbD, KBA, mini-CEX	1
The effect of hearing impairment and auditory perception on language acquisition and communication skills	CbD, KBA, mini-CEX	1
The impact of hearing loss and vestibular impairment on activity and participation	CbD, KBA, mini-CEX	1
The problems of the hearing impaired child in hearing families and in the hearing world	CbD, KBA, mini-CEX	1
The difficulties hearing children raised in Deaf families may face	CbD, KBA, mini-CEX	1
The mental health components of paediatric hearing, balance and speech & language disorders and disability	CbD,-CEX	1
The range of reasons why children with audiovestibular impairment may not make expected progress following interventions	CbD, KBA, mini-CEX	1
The need for support for families and the early introduction of communication strategies for children and their families	CbD, KBA, mini-CEX	1,3
Their duties and responsibilities in the safeguarding of babies,	CbD, mini-CEX	1,2

children and young people		
Their duties and responsibilities to support and enable parents and carers to be effective in caring for their children	CbD, mini-CEX	1,2
The effects that school and other social settings may have on childhood disability and vice versa	CbD, mini-CEX	1
The child's anxiety surrounding assessment, investigation and treatment	CbD, mini-CEX	1
The different factors that have an influence on the patient's journey including cultural and social differences	CbD, mini-CEX	1
The agencies, both statutory and voluntary, that can provide support to children and their families in coping with their health problems	CbD, mini-CEX	1
Statutory educational provision for children with special educational needs, including hearing loss, speech & language disorders, balance disorders and learning disability	CbD, KBA, mini-CEX	1
Possible medical and psychosocial reasons which might lie behind a patient's difficult behaviour	CbD, mini-CEX	1
How to access such national resources as the National Deaf Children's Society (NDCS) and Contact a Family (CAF) Directory as well as local sources to provide information to children and families about support groups	CbD, mini-CEX	1
The need to conduct a consultation in such a way that a child or young person feels able to talk about difficult or emotional issues	CbD, mini-CEX	1,3,4
The principles of consent governing children including Gillick competence	CbD, mini-CEX	1,3
Skills		
To demonstrate the ability to:		
Take an accurate, relevant and detailed history of auditory, vestibular and speech & language disorders and associated problems from the patient or their carer including a developmental or psychosocial history	CbD, mini-CEX	1,3
Perform a thorough and detailed physical examination of the child appropriate to the age of the child; to include ENT, neuro-otological, neurological and general medical examination	CbD, mini-CEX	1
Identify dysmorphic features that may indicate the aetiology of audiovestibular disorders	CbD, mini-CEX	1
Assess the developmental/functional level of children and young people	CbD, mini-CEX	1
Assess the social and emotional development and mental state of children and young people	CbD, mini-CEX	1
Identify additional medical problems which may be causative or may adversely affect rehabilitation e.g. visual defects, neurological disease, endocrine disease, autoimmune disease, cardiac disease, developmental delay or psychiatric problems	CbD, mini-CEX	1
Identify psychological problems needing referral to a psychologist or psychiatrist	CbD, mini-CEX	1
Identify parental grief or acceptance issues and refer appropriately	CbD, mini-CEX	1
Select and interpret appropriate multidisciplinary assessments including speech and language assessment, psychometric assessment and occupational therapy assessment	CbD, mini-CEX	1

Select appropriate management strategies through multidisciplinary team discussion and discussion with the patient and carers; e.g. hearing aids, pharmacological options, psychology, physiotherapy, occupational therapy, educational strategies, surgical options - depending on the cause and impact of the problem and the age and additional disabilities of the patient	CbD, mini-CEX, MSF	1
Manage emotionally complex family situations	CbD, mini-CEX	1,3
Have strategies to manage a child's anxiety around the clinical situation	CbD, mini-CEX	1
Manage parental anxiety or alternative and conflicting views during the clinical consultation	CbD, mini-CEX,PS	1,3,
Communicate effectively with patients of all ages and their parents, including those: • With disorders of hearing • With poor speech production due to deafness or other disorders of speech and language • With visual disorders including the deaf-blind • With learning disabilities • Needing sign language or spoken language interpretation	CbD, mini-CEX, PS	1,3
Explain clearly to patients, their parents or carers the rationale of investigation, results of investigations (both audiovestibular and aetiological), the management options and the prognosis of audiovestibular problems so that they understand and can make informed decisions, where able to do so	CbD, mini-CEX, MSF, PS	1,3
Show patience and sensitivity in their communications with children and their families and an ability to explore their individual perspectives of a problem	CbD, mini-CEX, MSF, PS	1,3
Develop active listening skills with children and young people	CbD, mini-CEX, PS	1,3
Share difficult information (new diagnosis) with patients and parents in a sensitive and constructive way	CbD, mini-CEX, MSF, PS	1,3
Inform parents about the agencies, both statutory and voluntary, that can provide support to children and their families	CbD, mini-CEX, PS	
Develop strategies to help children/young people and their families to follow agreed management and treatment plans	CbD, mini-CEX	1,3
Work with colleagues in multi-disciplinary teams, both within the hospital and within the community, to ensure consistency and continuity and an holistic approach to the treatment and care of children and young people	CbD, MSF	1,3
Behaviours		
To demonstrate:		
Understanding of the principle that all decisions are to be made in the best interests of the child or young person in their care	CbD, mini-CEX, MSF, PS	1,4
Compassion and respect for children and young people and their families and adopt an empathetic, tactful and positive approach	CbD, mini-CEX, MSF, PS	1
Placing value on the child's contribution to the history	CbD, mini-CEX, PS	1,3,4
Respect for the child's views in accordance with their age and maturity	CbD, mini-CEX, PS	1,3,4
The sharing of information with the child, with their parents or their carers	CbD, mini-CEX, PS	1,3

An understanding of the value of voluntary agencies in supporting the patient with disorders of hearing, balance and speech & language and their family/carers	CbD, mini-CEX	1
An understanding of the importance of cultural diversity and the difficulties where religious and cultural beliefs that parents might hold about the treatment of their children are in conflict with good medical practice	CbD	1,3,4
An understanding that young people may have or may develop health care beliefs which are in conflict with those of parents or professionals	CbD	1,3,4
An understanding of the factors which influence children/young people and parents or carers in their approach to following prescribed management and treatment plans	CbD	1
Respect for a child's need for confidentiality	CbD	1,4

Level Descriptor

1 Some experience of dealing with children in an outpatient setting

2 Demonstrates good skills in managing children and their parents in clinic.
Communicates well with children of all ages

3 Demonstrates good skills in managing difficult clinical situations
Aware of complex issues and their impact on the child and demonstrates a proactive and practical approach to resolving or relieving these issues where possible

B.2. Emotional and Social Development of the Child/ Safeguarding Children

To identify abnormal emotional and social development of a child

To identify emotional and social factors that may affect a child's development and know how to manage them

To recognise the child at risk of neglect or abuse and know what action to take

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The signs and symptoms of child abuse and neglect and how that might affect a child's development	CbD	1
The effect of poverty, poor housing, smoking, gambling, alcohol or drug abuse, violence and mental illness on child development and the ability of the family to take up health care	CbD	1
The need for good parenting skills and the effect poor parenting skills may have on the management of audiovestibular problems	CbD, mini-CEX	1
The principles of managing common behavioural problems particularly where these impact on the management of disorders of hearing, balance and speech & language	CbD, mini-CEX	1
A child's need for opportunities to play and to learn	CbD, KBA, mini-CEX	1
The need for specialised input in cases of serious emotional distress or mental illness	CbD	1
The local protocol to follow when child neglect or abuse is suspected	CbD, mini-CEX	1,2
The effect of audiovestibular disorders on the emotional and social development of the child, and the different presentation of difficulties at different ages	CbD, KBA	1
The range of emotional reactions that parents go through when	CbD	1

informed of their child's deafness and the effect this may have on their mental wellbeing and ability to parent effectively		
How to share difficult news with parents	CbD	1,3,4
Cultural differences in parenting	CbD, mini-CEX	1,3,4
Skills		
To demonstrate the ability to:		
Sensitively take a history about socio-economic status, home environment and family relationships	CbD, mini-CEX	1,3,4
Determine where social services or other agencies would be of value in supporting the child and family	CbD	1
Recognise the child at risk and report concerns appropriately to the parents and to the responsible professionals locally	CbD, mini-CEX	1,2,3
Recognise indications of unsatisfactory or unsafe parenting	CbD, mini-CEX	1,2
Share uncertainty with parents sensitively	CbD, mini-CEX	1,3,4
Be able to recognise features in the clinical assessment that might suggest non organic disease	CbD, mini-CEX	1,2
Behaviours		
To demonstrate:		
Openness and honesty with the family about the risks posed by life style choices and advise where changes are in the child's best interest i.e. smoking, alcohol abuse	CbD, mini-CEX	1,2,3,4
Being alert to the possibility of child abuse	CbD, mini-CEX	1,2
Being alert to the need for parental education in child care	CbD, mini-CEX	1,2,3
Awareness of and sensitivity to the variety of emotional grief reactions that can affect parents of a newly-diagnosed deaf child	mini-CEX	1

Level Descriptor

1 Have completed a child protection course and demonstrates awareness of child safeguarding issues

2 Able to identify stresses within a family situation.

Demonstrates an understanding of the effect of poor parenting on the management of hearing disorders

3 Demonstrates the ability to recognise a child with behavioural difficulties and to understand the possible causes.

Demonstrates the ability to share difficult news with parents in an effective and sensitive way

Identifies non-organic presentation of audiovestibular disorders in children.

C. Paediatric Audiological Medicine

C.1. Congenital and Prelingual Deafness

To be able to suspect, identify, diagnose and manage congenital and prelingual deafness in children		
Knowledge	**Assessment Methods**	**GMP**
To demonstrate knowledge of::		
The signs, symptoms and presentation of deafness in babies and young children	CbD, KBA, mini-CEX	1
The aetiology of hearing disorders and the likelihood of involvement of other systems	CbD, KBA, mini-CEX	1
Evidence based and appropriate aetiological investigations	CbD, KBA, mini-CEX	1
The impact of deafness on speech and language development, education, social and emotional development of the child	CbD, KBA, mini-CEX	1
The management of a deaf child including alternative modes of communication, educational needs and amplification	CbD, KBA, mini-CEX	1
Psychological and cultural issues surrounding deafness, its diagnosis and management	CbD, KBA, mini-CEX	1
The principles and practice of newborn hearing screening and management of the child referred through this programme	CbD, KBA, mini-CEX	1
Local and national protocols and guidelines for identification, investigation and management of congenital and prelingual deafness	CbD, KBA, mini-CEX	1,2
The epidemiology of permanent childhood hearing impairment (PCHI)	CbD, KBA,	1,2
Amplification methods including conventional hearing aids, Implantable devices such as bone anchored hearing aids (BAHA) and cochlear implantation (see 4.3)	CbD, KBA, mini-CEX	1
Methods of assessing benefit and problems with amplification (see 4.3)	CbD, KBA, mini-CEX	1,2
The range of emotional reactions experienced by parents following identification of deafness in a child and how to recognise this and refer appropriately	CbD, KBA, mini-CEX	1
The roles of the various team members in care of the deaf child	CbD, mini-CEX	1,3
Skills		
To demonstrate the ability to:		
Take an accurate history including pre-, peri- and post-natal history and family history	CbD, mini-CEX	1
Elicit sensitive information from the parents/patient that are relevant to management	CbD, mini-CEX, PS	1,3,4
Undertake an accurate and reliable clinical examination	CbD, mini-CEX	1
Recognise features indicative of syndromic deafness	CbD, KBA, mini-CEX	1
Select and interpret the appropriate audiovestibular tests and aetiological investigations that are required to assess and manage the child	CbD, KBA, mini-CEX	1
Communicate the results of diagnostic testing following newborn	CbD, mini-CEX,	1,3

hearing screening, or identification at other times in childhood, and counsel the child/parents/carers about management and prognosis	MSF, PS	
Assess benefits and problems of intervention and effectively communicate this to parents.	CbD, mini-CEX	1,2
Refer appropriately to other professionals e.g. genetics, ophthalmology, education, social services	CbD, mini-CEX	1,3
Behaviours		
To demonstrate:		
Recognition of the anxiety and stress caused by suspected deafness and the possible natural reactions surrounding the diagnosis	CbD, mini-CEX, PS	1
Recognition of the effect of audiological and aetiological uncertainty following identification of significant deafness in the newborn period	CbD, mini-CEX, PS	1
Recognition of the cultural issues and parental views with regards to deafness and its management	CbD, mini-CEX, PS	1
Recognition of the importance of multi-disciplinary management of deaf children	CbD, mini-CEX, MSF	1,3
Recognition of the importance of the local pathways, protocols and guidelines for identification and management of the deaf child	CbD, mini-CEX	1,2
Recognition of the importance of giving written information to families	CbD, mini-CEX, PS	1,3
Level Descriptor		
1	Some experience of managing deafness in children over the age of five years	
2	Review of established and uncomplicated deafness in children over the age of five years	
3	Identification, diagnosis and management of deafness in children of all ages including children with complex developmental and medical profiles.	

C.2. Progressive, Sudden or Late Onset Deafness

To be able to detect, investigate, diagnose and manage progressive or sudden deafness in children

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The signs, symptoms, aetiology and management of progressive or sudden deafness	CbD, KBA, mini-CEX	1
The psychological sequelae of progressive or sudden deafness	CbD, KBA, mini-CEX	1
The impact of progressive, sudden or late onset hearing loss on speech and communication skills, education and school performance	CbD,-CEX	1
The changing educational needs of the child	CbD, mini-CEX	1
The appropriate audiovestibular and aetiological investigations	CbD, KBA, mini-CEX	1
When to refer for further medical opinions and to other healthcare professionals	CbD, mini-CEX, MSF	1
Local and national guidelines covering the identification, management and investigation of progressive or sudden hearing loss	CbD, mini-CEX	1,2
The indications, benefits , limitations and side effects of any medication used for progressive or sudden hearing loss	CbD, KBA, mini-CEX	1,2
Skills		

To demonstrate the ability to:		
Take an accurate history and undertake an accurate and reliable audiovestibular and general clinical examination	CbD, mini-CEX	1
Select and interpret appropriate investigations including speech and language assessment and vestibular assessment	CbD, mini-CEX	1
Select and interpret appropriate aetiological investigations	CbD, KBA, mini-CEX	1
Assess benefits and problems of intervention correctly and communicate this effectively to the family and the child	CbD, mini-CEX	1
Behaviours		
To demonstrate:		
Recognition of the anxiety and stress caused by progressive or sudden deafness and the possible natural reactions surrounding the diagnosis for both the child and parents	CbD, mini-CEX, MSF, PS	1
Recognition of the importance of involvement of other professionals in the management of such children and the value of voluntary organisations	CbD, mini-CEX, MSF	1
Level Descriptor		
1 Some experience		
2 Review of established case.		
3 Diagnosis and management in children of all ages including children with complex developmental and medical profiles		

C.3. Fluctuating Deafness, Including Otitus Media with Effusion

To be able to detect, investigate, diagnose and manage fluctuating deafness, including otitis media with effusion, in children		
Knowledge	**Assessment Methods**	**GMP**
To demonstrate knowledge of::		
The signs and symptoms of fluctuating deafness including otitis media with effusion	CbD, KBA, mini-CEX	1
The aetiology of fluctuating deafness including otopathology and its pathogenesis, immunology and allergy	CbD, KBA, mini-CEX	1
The impact of otitis media with effusion on emerging speech and language skills and behaviour, and its management	CbD, KBA, mini-CEX	1
The impact of fluctuating hearing loss on education, emotional and social development	CbD, KBA, mini-CEX	1
Evidence based and appropriate audiovestibular and aetiological investigations of fluctuating deafness including otitis media with effusion	CbD, KBA, mini-CEX	1
Current best evidence for medical, audiological and surgical management of fluctuating deafness, including local and national guidelines	CbD, KBA, mini-CEX	1,2
The indications, benefits, limitations and side effects of medication that can be used for fluctuating deafness	CbD, KBA, mini-CEX	1
When to refer for further medical opinions and to other allied professionals	CbD, mini-CEX, MSF	1

Skills		
To demonstrate the ability to:		
Take an accurate history and undertake an accurate and reliable audiovestibular, developmental and general clinical examination	CbD, mini-CEX	1
Select and interpret appropriate audiovestibular and aetiological investigation	CbD, KBA, mini-CEX	1
Identify underlying aetiological factors, either from the history or investigation	CbD, mini-CEX	1
Counsel the child and parents on lifestyle changes required	CbD, mini-CEX, PS	1,3
Assess benefits and problems of intervention correctly	CbD, mini-CEX	1
Behaviours		
To demonstrate:		
Recognition that some families seek complementary medicine approaches to otitis media with effusion	CbD, mini-CEX, PS	1
Recognition of the value and limitations of national and local guidelines, pathways and protocols	CbD, mini-CEX	1,2
Recognition of the impact of fluctuating deafness on the child's development	CbD, mini-CEX	1
Recognition of the value of multidisciplinary management	CbD, KBA, mini-CEX, MSF	1,3

Level Descriptor	
1	Some experience
2	Diagnosis and management of uncomplicated cases of otitis media with effusion
3	Diagnosis and management of complicated cases e.g. Down syndrome, WVA, endolymphatic hydrops and those with additional developmental and medical needs

C.4. Non-Organic Hearing Difficulties

To be able to detect, investigate, diagnose and manage non-organic hearing difficulties in children

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The developmental/history profile of children who present with non organic hearing difficulties	CbD, KBA, mini-CEX	1
The factors in presentation which are commonly seen in non-organic hearing difficulties	CbD, KBA, mini-CEX	1
Correct management of non-organic hearing difficulties	CbD, KBA, mini-CEX, MSF	1
When to refer for further medical opinions and to other allied professionals	CbD, mini-CEX, MSF	1
Local child protection pathways	CbD, mini-CEX	1,2
Skills		
To demonstrate the ability to:		
Take an accurate history and carry out an accurate audiovestibular,	CbD, mini-CEX	1

development and general examination; to include a clear profile of psychological and educational achievements		
Select and interpret the appropriate tests that are required to assess the child	CbD, KBA, mini-CEX	1
Identify accurately the non-organic presentation and the possible underlying triggers for this behaviour	CbD, mini-CEX	1
Implement appropriate management and refer for educational, psychological or psychiatric input as appropriate	CbD, mini-CEX, MSF	1,3
Assess benefits and problems of intervention correctly	CbD, mini-CEX	1,3
Behaviours		
To demonstrate:		
Recognition of the importance of involvement of other professionals in the management of children with non-organic hearing difficulties	CbD, mini-CEX, MSF	1
Sensitivity towards parents' and patient's response to a 'non-organic' diagnosis	CbD, mini-CEX, MSF, PS	1
Level Descriptor		
1	Some experience and understanding of the presentation of non-organic hearing loss in children	
2	To be able to suspect non-organic hearing loss and request appropriate audiological investigation	
3	To be able to diagnose non-organic hearing loss accurately, including underlying aetiological factors, and manage all cases within a multidisciplinary/multiagency team	

C.5. Children with Complex Medical or Developmental Problems and Others who are "Difficult to Assess"

To be able to carry out an accurate assessment of children with complex medical or developmental problems and also those children who are "difficult to assess"

To be able to suspect and investigate additional medical and developmental problems in children with a diagnosis of deafness

To be able to diagnose and manage deafness in these children

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The signs and symptoms of hearing loss in children with complex medical problems including visual impairment	CbD,-CEX	1
Possible psychological /educational issues for children with additional difficulties and hearing loss, particularly in relation to their special needs, and their immediate and long term management	CbD,-CEX	1
The impact of additional medical and developmental problems for the deaf child and family	CbD, KBA,, mini-CEX	1
Methods of assessing benefit and problems with amplification	CbD, KBA, mini-CEX	1
Possible psychological /cultural issues surrounding deafness, particularly in relation to the child's additional difficulties, and their immediate and long term management	CbD, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take an accurate and sensitive history and perform a reliable	CbD, mini-CEX	1

audiovestibular, developmental and general examination		
Identify the importance of general medical conditions on audiovestibular status	CbD, mini-CEX	1
Select and interpret appropriate audiovestibular tests /assessments and aetiological investigations	CbD, KBA, mini-CEX	1
Assess correctly benefits and problems of intervention and communicate the advantages and disadvantages of these interventions to parents	CbD, mini-CEX	1,3
Behaviours		
To demonstrate:		
Recognition of the anxiety and stress caused by additional medical or developmental problems identified in a deaf child	CbD, mini-CEX, MSF, PS	1
Recognition of the combined effect of deafness with other special needs for the child and family	CbD, mini-CEX	1
Recognition of the importance of involvement of other professionals in the management of children with deafness and additional needs	CbD, mini-CEX, MSF	1
Recognition of the value of identification of hearing loss as an additional difficulty	CbD, mini-CEX	1
Empathy towards the child and parents	mini-CEX, MSF, PS	1,3
Level Descriptor		
1 Some experience of management of children with complex medical needs as review cases		
2 To be able to identify complex needs in a child and understand the effects of these needs on diagnosis and management		
3 To be able to diagnose and to manage children with deafness and moderately complex needs within a multidisciplinary/multiagency setting		

C.6. Children with Speech and Language Problems (ST6 & ST7)

To be able to identify speech/language disorder/delay in children and participate in joint assessment with a specialist speech and language therapist

To perform appropriate medical investigation of children who present with speech and language disorders.

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The signs, symptoms and pathologies associated with speech, language and communication disorder/delay in children	CbD,-CEX	1
The difference between delayed and disordered speech development	CbD, KBA, mini-CEX	1
The difference between delayed and disordered language development	CbD, KBA, mini-CEX	1
The association of developmental disorders of speech and language with other developmental and processing disorders	CbD, KBA, mini-CEX	1
The educational needs of children with speech and language disorder/delay and statutory assessment of educational needs	CbD, KBA, mini-CEX	1
The specialist provision and range of educational provision for children with speech language and communication disorders	CbD, mini-CEX	1

Voluntary organisations that support children with specific speech and language difficulties and their families	CbD, mini-CEX	1
The range of assessments that evaluate the speech, language and communication skills of children	CbD, KBA, mini-CEX	1
The communication options for these children	CbD, KBA, mini-CEX	1
The roles of other relevant professionals in management of these children	CbD, KBA, mini-CEX	1
The impact of speech and language disorders on the child's psychological and social development	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take a detailed history, including pre-, peri- and post-natal history, developmental history and the family history, and carry out an accurate and appropriate clinical examination, including examination of articulation, ENT, neurological and general physical examination	CbD, mini-CEX	1
Work closely with speech and language therapists (SALT) and other professionals to ensure effective multidisciplinary evaluation of the child	CbD, mini-CEX, MSF	1,3
Select and interpret the appropriate aetiological investigations	CbD, KBA, mini-CEX	1
Interpret appropriate multidisciplinary assessments in the light of clinical presentation	CbD, mini-CEX	1,3
Formulate, in conjunction with a SALT, and the parents, an appropriate management plan	CbD, mini-CEX, MSF, PS	1,3
Assess correctly benefits and problems of intervention	CbD, mini-CEX	1
Behaviours		
To demonstrate:		
Recognition of cultural issues and parental views with regards to speech and language difficulties and management thereof	CbD, mini-CEX, PS	1
Recognition of the anxiety and stress caused by speech and language difficulties and the possible natural reactions surrounding these diagnoses	CbD, mini-CEX	1
Recognition of the importance of involvement of other professionals in the management of children with speech and language difficulties	CbD, mini-CEX	1,3
Recognition of the importance of enabling parents to access scarce specialist resources	CbD, mini-CEX, PS	1

Level Descriptor

1 Some experience

2 To be able to recognise speech and language delay/disorder accurately.
To be able to identify the causes of speech and language delay.

3 To be able to diagnose and manage speech and language disorders as part of a MDT as per curriculum

C.7. Auditory Processing Disorders (APD)

To be able to suspect, diagnose and manage auditory processing problems in children

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The signs and symptoms of APD and how it can affect the child's educational progress and behaviour	CbD, KBA, mini-CEX	1
The conditions that may cause or be associated or co-existent with APD	CbD, KBA, mini-CEX	1
Central neural processing of information presented through auditory and other domains, including interactions and influence of higher level processes such as attention, concentration and long and short-term memory (i.e. information storage and retrieval)	CbD, KBA, mini-CEX,	1
The importance of multidisciplinary assessment of children with suspected APD	CbD, KBA, mini-CEX, MSF	1
The indications, application, difficulties and interpretation of audiological test batteries for APD	CbD, KBA, mini-CEX	1
Methods of habilitation of children with APD	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take a detailed history including reports of educational attainment	CbD, mini-CEX	1
Undertake a reliable clinical examination including neurological assessment	CbD, mini-CEX	1
Select and interpret the appropriate tests and aetiological investigations that are required to assess the child	CbD, KBA, mini-CEX	1
Refer appropriately to other multidisciplinary team members e.g. specialist teacher, speech & language therapist, clinical/educational psychologist	CbD, mini-CEX	1,3
Assess correctly the benefits and problems of intervention	CbD, mini-CEX	1
Explain the nature of the problem to parents and child in a way that they are able to understand the complexity of the problem	CbD, mini-CEX, PS	1,3
Behaviours		
To demonstrate:		
Recognition of the importance of the history to diagnosis	CbD, mini-CEX	1
Recognition of the importance of a team approach and involvement of other professionals in the assessment and management of children with APD	CbD, mini-CEX, MSF	1
Recognition of the impact of APD on a child's self esteem and ability to succeed in an educational environment	CbD, mini-CEX	1

Level Descriptor

1 Some experience of APD

2 Correctly suspect APD

3 Diagnosis and management of APD in children without additional needs such as ADHD, deafness or ASD

C.8. Auditory Neuropathy Spectrum Disorder (ANSD)

To be able to suspect, diagnose and manage auditory neuropathy spectrum disorder in children

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The presentation, natural history and diagnosis of ANSD	CbD, KBA, mini-CEX	1
Diagnostic tests for ANSD	CbD, KBA, mini-CEX	1
How ASND can affect the child's language development and educational progress	CbD, KBA, mini-CEX	1
How to use tests to investigate the site of the lesion with regard to predicting the outcome of interventions such as cochlear implantation	CbD, KBA, mini-CEX	1
The conditions that may cause or be associated with ANSD	CbD, KBA, mini-CEX	1
Methods of rehabilitation of children with ANSD including the value of cochlear implant	CbD, KBA, mini-CEX	1
The educational needs of children with ANSD	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take an accurate history and perform a thorough examination, including neurological and developmental assessment	CbD, mini-CEX	1
Select and interpret appropriate diagnostic audiological tests and aetiological investigations	CbD, KBA, mini-CEX	1
Share sensitively with parents the uncertainties about management and prognosis of ANSD	CbD, mini-CEX, MSF	1
Explain clearly to the parents the nature of the condition	CbD, mini-CEX, MSF, PS	1,3,4
Assess correctly the benefits and problems of intervention and discuss these with parents	CbD, mini-CEX	1
Behaviours		
To demonstrate:		
Recognition of the importance of accurate electrophysiological testing in making a diagnosis	CbD, mini-CEX	1
Recognition of the importance of involvement of other professionals in the management of children with ANSD	CbD, mini-CEX	1
Recognition of the effect on the parents of audiological and prognostic uncertainty especially following identification in the newborn period	CbD, mini-CEX	1
Recognition of the effect on the child of an inconsistent auditory input and the effect this will have on education and psychosocial development	CbD, mini-CEX	1

Level Descriptor	
1	Some experience of children with ANSD
2	To be able to suspect ANSD correctly.
3	Diagnosis and management of uncomplicated ANSD

C.9. Tinnitus, Dysacusis and Hyperacusis in Children

To be able to suspect, diagnose and manage tinnitus, dysacusis and hyperacusis in children

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
How tinnitus, dysacusis and hyperacusis may present in children	CbD, KBA, mini-CEX	1
The prevalence of tinnitus, dysacusis and hyperacusis and the natural history of habituation	CbD, KBA, mini-CEX	1
The different conditions which can cause or trigger tinnitus, dysacusis or hyperacusis	CbD, KBA, mini-CEX	1
Current pathophysiological theories about tinnitus, dysacusis and hyperacusis generation	CbD, KBA, mini-CEX	1
The psychological effects of tinnitus, dysacusis and hyperacusis on the child and family and how these can be managed	CbD, KBA, mini-CEX	1
The possible effects of tinnitus, dysacusis or hyperacusis on education	CbD, KBA, mini-CEX	1
How to manage a child with tinnitus, dysacusis or hyperacusis in the context of the multi-disciplinary team	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Elicit the history of tinnitus in a child	CbD, mini-CEX	1
Take an accurate history and perform a detailed examination	CbD, mini-CEX	1
Select and interpret appropriate audiometric and aetiological investigations	CbD, KBA, mini-CEX	1
Select and implement appropriate management strategies including referral to other specialists if indicated	CbD, mini-CEX	1,3
Explain the condition to the child and family in terms they understand	mini-CEX, MSF, PS	1,3,4
Behaviours		
To demonstrate:		
Recognition of the possible psychological impact of tinnitus, dysacusis and hyperacusis on the child and family and of the child and family's attitude on these symptoms	CbD, mini-CEX	1
Recognition of the importance of involvement of other professionals in the management of children with tinnitus, dysacusis or hyperacusis	CbD, mini-CEX, MSF	1
Recognition of the value of complementary medical approaches to holistic management of tinnitus	CbD, mini-CEX	1

Level Descriptor

1 Some experience

2 To be able to identify tinnitus, dysacusis and hyperacusis in a child and to initiate appropriate investigations

3 Diagnosis and management of moderately complex cases

C.10. Transition and Transfer of Adolescents

To be able to manage a young person with audiovestibular problems through the process of transition and transfer

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The process of transition	CbD, KBA, mini-CEX	1
The needs of deaf teenagers and their approach to their need for care	CbD, KBA, mini-CEX	1
The need to provide a seamless transfer of care from the paediatric to the adult services for children with long-standing disorders of hearing and balance	CbD, KBA, mini-CEX	1
The needs of the learning disabled child during transition and transfer into adult services	CbD, mini-CEX	1
Skills		
To demonstrate the ability to:		
Discuss the young person's hearing or balance difficulties with them and enable them to make decisions regarding their future care through transition	CbD, mini-CEX, PS	1,3,4
Provide a supportive and informative clinical atmosphere in which the young person can raise sensitive issues about their audiovestibular problems, and associated issues, in their own right	CbD, mini-CEX, PS	1,3
Offer and explain the value of additional investigation into the aetiology of their hearing and balance problems, if appropriate	CbD, mini-CEX	1,3,4
Facilitate seamless and appropriate transfer to adult services at the right time for the young person	CbD, mini-CEX, PS	1,4
Communicate effectively with the adult services about transfer of care	mini-CEX, CbD, MSF	1,3
Behaviours		
To demonstrate:		
Recognition of the young person's need for advice and information about their own hearing and balance difficulties, including advice on the genetic aspects of the condition.	CbD, mini-CEX, PS	1,3,4
Recognition of the difficulties young people face with engaging in health care at the time of transfer and seek to ensure seamless transfer of care	CbD, mini-CEX,	1,3,4
Recognition of the young person's desire to be autonomous and to be involved in decision making	CbD, mini-CEX, PS	1,4
Recognition of the parents' role in supporting their child at the time of transfer and transition	CbD, mini-CEX	1,4

Level Descriptor

1 Some experience of transition and transfer

2 Management of uncomplicated cases

3 Management of complex cases: children with unstable deafness or additional needs

C.11. Practical Procedures in Paediatric Audiological Medicine

To gain a comprehensive knowledge of audiological testing in children
To gain practical skills in testing children.
To gain a critical appreciation of the value and limitations of audiological tests in children

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of:		
The anatomy and physiology of the ear and auditory pathways including central connections	CbD, KBA, mini-CEX Modular assessment	1
The theoretical basis of audiological testing including physics, acoustics and psychoacoustics	CbD, KBA, mini-CEX Modular assessment	1
The normal development of behavioural responses to sound in children	CbD, KBA, mini-CEX	1
The indications for the various audiological tests in children	CbD, KBA, mini-CEX	1
The values, limitations and practical difficulties of audiological testing in children	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Select appropriately and interpret correctly in the context of the clinical picture, all the audiological tests mentioned below	CbD, KBA, mini-CEX	1
Identify inaccurate, artefactual or spurious results, understand why these might have occurred and, in discussion with the multi disciplinary team, suggest remedial or alternative action.	CbD, KBA, mini-CEX	1
Perform competently: • Distraction testing on normal and 'difficult to test' children • Behavioural observation of hearing responses in an infant • Clinical speech perception tests	mini-CEX, PPS	1
Have performed under supervision: • Visual reinforcement audiometry • Conditioning techniques for soundfield and ear specific audiometry • Pure tone audiometry (air conduction, bone conduction with or without masking) • Acoustic immittance measures • Otoacoustic emissions (transient evoked, spontaneous, distortion product and contralateral suppression) • Middle ear reflex measures • Speech audiometry including speech in noise • Auditory brainstem responses (ABR)	PPS	1
Have observed: • Tests of auditory processing • Evoked responses (electro-cochleography, middle latencies, cortical responses) • ASSR (Auditory Steady State Responses) if possible	PPS	1
Behaviours		
To demonstrate:		
Appreciation of the value of a battery of tests	CbD, mini-CEX	1

Recognition of the difficulties of performing tests and interpreting test results in children	CbD, mini-CEX	1
Recognition of the value of working with other relevant skilled healthcare professionals in the performance and interpretation of audiological tests in children	CbD, mini-CEX, MSF	1

D. Paediatric Vestibular Medicine

D.1. Imbalance in Children

To recognise when a child may have vestibular dysfunction
To determine the cause of imbalance in a child,
To perform a developmentally appropriate balance assessment of a child
To instigate an appropriate test protocol and interpret the results
To implement an appropriate management plan

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of:		
The detailed anatomy and physiology of the vestibular system and its central connections	CbD, KBA, modular assessment,	1
The embryology and development of the vestibular system	CbD, KBA, modular assessment,	1
The sensori-motor physiology maintaining balance	CbD, KBA,	1
The development of postural control and locomotor skills in childhood	CbD, KBA,	1
The association between sensorineural hearing loss and abnormal vestibular function	CbD, KBA,	1
The ways in which a child may express their symptoms of imbalance	CbD, mini-CEX	1,3
The causes of imbalance in a child including neurological, musculo-skeletal, developmental and vestibular causes	CbD, KBA, mini-CEX	1
The impact of imbalance on a child particularly with regard to education, social integration and psychology	CbD, KBA, mini-CEX	1
Techniques available to investigate balance disorders in children of different ages	CbD, KBA, mini-CEX	1
Diagnostic investigations to establish aetiology and how to interpret the results in the light of age related changes	CbD, KBA, mini-CEX	1
The treatment options and vestibular habilitation/rehabilitation approaches for children	CbD, KBA, mini-CEX	1
When to refer to a paediatrician, paediatric neurologist, ENT surgeon, geneticist, physiotherapist, occupational therapist or psychologist for an opinion	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take an appropriate neuro-otological and developmental history from a child and their parent or carer	CbD, mini-CEX	1,3
Perform a developmentally-appropriate balance assessment of the child including an eye movement examination and full neurological examination	CbD, mini-CEX	1
Request an appropriate range of vestibular tests and be able to recognise abnormalities on those tests as distinct from age-related irregularities	CbD, mini-CEX	1
Differentiate accurately between peripheral and central vestibular disorders	CbD, mini-CEX	1
Request appropriate audiological, cardiological and aetiological tests	CbD, mini-CEX	1

and investigations and specialist opinions		
Recognise different causes of childhood imbalance	CbD, mini-CEX	1
Discuss causes, prognosis and management strategies in a sensitive way with both the child and parent or carer	CbD, mini-CEX, PS	1,3
Recognise effective and holistic management options and refer to members of the team as appropriate	CbD, mini-CEX, MSF	1,3
Behaviours		
To demonstrate:		
Recognition of the impact of imbalance on the child and family, including the effect of imbalance on education and psychosocial development	CbD, mini-CEX, PS	1
Level Descriptor		
1 Some experience		
2 Recognition of the presence of a balance problem on the basis of history and examination		
3 Diagnosis and management of uncomplicated cases e.g. vestibular hypofunction		

D.2. Dizziness in Children

To differentiate between vertigo and other causes of dizziness or 'funny turns' in children
To determine the cause of episodes of dizziness in children
To instigate and interpret an appropriate set of investigations and define a management plan
To assess the impact of the attack on the individual and family and manage appropriately

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The various otological, neurological, general medical and psychological causes of acute and recurrent dizziness and 'funny turns' in children and how to differentiate between them	CbD, KBA, mini-CEX	1
The different causes and pathomechanisms of acute and recurrent attacks of vertigo/dizziness in a child	CbD, KBA, mini-CEX	1
The ways in which a child may express their symptoms of dizziness in sign, gesture and spoken language and how parents may interpret these symptoms second hand when the child has inadequate vocabulary to describe the episode	CbD, KBA, mini-CEX	1,3
The impact of recurrent vertigo/dizziness on a child particularly with regard to education, social integration and psychology	CbD, KBA, mini-CEX	1
The eye movement abnormalities that may be associated with vestibular disorders	CbD, KBA, mini-CEX	1
Appropriate audiovestibular tests and aetiological investigations for acute and recurrent vertigo/dizziness	CbD, KBA, mini-CEX	1
The techniques available to investigate vestibular disorders, which are suitable for children of different ages	CbD, KBA, mini-CEX	1
The age related changes in balance function and how this is expressed in investigative results.	CbD, KBA, mini-CEX	
The treatment options and vestibular rehabilitation approaches for children	CbD, KBA, mini-CEX	1

The life style changes and pharmacological options available to treat acute and recurrent vertigo including the role of diet and the place of prophylaxis in patients with migraine, and specific treatment of episodic ataxia type 2	CbD, KBA, mini-CEX	1
When to refer the patient to a paediatrician, paediatric neurologist, cardiologist, ENT surgeon, geneticist, occupational therapist or psychologist for advice on management	CbD, mini-CEX	1
The natural history of acute and recurrent vertigo in children	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take an appropriate and detailed history of the dizzy episodes from the child and parent or carer, including a developmental, psychosocial and family history	CbD, mini-CEX	1
Carry out an accurate and developmentally appropriate neuro-otological examination including examination of the eye movements, characterising any nystagmus	CbD, mini-CEX	1
Perform an accurate neurological, cardiovascular and general examination of the child and identify any general medical causes of vertigo/dizziness	CbD, mini-CEX	1
Determine the cause of dizziness in children and correctly distinguish peripheral from central vestibular causes of acute and recurrent vertigo	CbD, mini-CEX	1
Identify any associated psychological factors, whether as the precipitant or consequence of the dizziness, and refer as appropriate	CbD, mini-CEX	1,3
Request and interpret the appropriate range of vestibular tests and be able to recognise abnormalities on those tests as distinct from age-related irregularities	CbD, mini-CEX	1
Request and interpret appropriate audiological, cardiological and aetiological tests and investigations & opinions	CbD, mini-CEX	1
Judge correctly as to when fitness to drive is affected and counsel the adolescent appropriately	CbD, mini-CEX	1,2
Discuss causes, prognosis and management strategies in a sensitive way with both the child and parent or carer	CbD, mini-CEX, PS	1,3
Behaviours		
To demonstrate:		
Recognition of the impact of acute and recurrent vertigo on the child and family, including the effect on education and psychosocial function	CbD, PS	1
Recognition that anxiety can present as dizziness, make sensitive enquiries about possible worries including bullying or child abuse	CbD, mini-CEX	1,2

Level Descriptor

1 Some experience

2 Recognition of the presence of a balance problem on the basis of history and examination.

3 Diagnosis and management of uncomplicated cases e.g. migrainous vertigo, BPVC, vestibular neuritis.

Recognition of non-vestibular causes of dizziness or ‘funny turns’

D.3. Practical Procedures in Paediatric Vestibular Medicine

To gain a comprehensive knowledge of vestibular testing in children

To gain practical skills in testing children

To gain a critical appreciation of the value and difficulties of vestibular tests in children

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The detailed anatomy and physiology of the vestibular system and the central vestibular pathways	CbD, KBA, modular assessment	1
The theoretical basis of vestibular testing	CbD, KBA, Modular assessment	1
The indications, value, limitations and practical difficulties of vestibular testing in children	CbD, KBA, mini-CEX	1
Age-related changes in postural control and responses to visuo-vestibular stimulation	CbD, KBA,	1
Skills		
To demonstrate the ability to:		
Select appropriately and interpret correctly all the vestibular tests listed below in children	CbD, mini-CEX	1
Adopt a flexible approach to testing and be prepared to adapt strategies in order to obtain the information required	mini-CEX	1
Integrate the results of history and examination with audiological, vestibular and aetiological tests to formulate a diagnosis and a management plan	CbD, KBA, mini-CEX	1
Explain the results of testing to patient and parents	mini-CEX, MSF, PS	1
Identify spurious results and those due to immaturity, lack of concentration or poor testing technique and know how to obtain optimal testing conditions (troubleshooting)	CbD, mini-CEX	1
Be able to perform competently and independently: • Hallpike testing • Examination of eye movements using nystagmoscopy or Frenzel's glasses • Halmagyi head thrust testing	mini-CEX	1
Have performed under supervision • Caloric irrigations • ENG/EOG recordings during visuo-vestibular stimulation including rotational tests • Posturography	DOPS, mini-CEX, PPS	1
Have observed (where possible) • Vestibular evoked myogenic potentials (VEMPs)	PPS	1
Behaviours		
To demonstrate:		
Understanding of a child's and/or parents' anxiety about tests and investigations	CbD, mini-CEX	1
Understanding of a child's anxiety about tests and investigations	CbD, mini-CEX, PS	1
Appreciation for the need for scientific rigour when testing	CbD, mini-CEX	

Understanding of the need to communicate effectively during testing with children who use BSL	mini-CEX, MSF, PS	1,3

E. Additional Fundamental Competences for Practice Specifically in Adult Audiovestibular Medicine

E.1. Clinical Encounter

To develop good clinical skills when managing adults with audiovestibular difficulties		
Knowledge	**Assessment Methods**	**GMP**
To demonstrate knowledge of::		
The impact of audiovestibular disorders on patients and their families	CbD, KBA, mini-CEX	1
The impact of multi-sensory impairment	CbD, KBA, mini-CEX	1
The effect of hearing impairment and auditory perception on language and communication skills	CbD, KBA, mini-CEX	1
The impact of hearing loss and vestibular impairment on activity and participation	CbD, KBA, mini-CEX	1
The problems of hearing impaired adults in a hearing world of work and education	CbD, KBA, mini-CEX	1
That audiovestibular pathology may be isolated or associated with other conditions, including visual impairment	CbD, KBA, mini-CEX	1
The range of reasons why adults with audiovestibular impairment may not make expected progress following interventions	CbD, KBA, mini-CEX	1
The need for support and the early introduction of communication/rehabilitation strategies for the adult with audiovestibular problems and their families	CbD, KBA, mini-CEX	1
The importance of a detailed clinical history including psychological, social, educational and occupational factors as well as the family history	CbD, KBA, mini-CEX	1
The impact of the mental health components of hearing and balance disorders and disability	CbD, KBA, mini-CEX	1
The effects that work and other social settings may have on a patient's disability and vice versa	CbD, KBA, mini-CEX	1
The patient's anxiety surrounding assessment, investigation and treatment	CbD, mini-CEX	1
The different factors that have an influence on the patient's journey including cultural and social differences	CbD, mini-CEX	1
The agencies, both statutory and voluntary, that can provide support to patients and their families in coping with their health problems	CbD, KBA, mini-CEX	1
Possible medical and psychosocial reasons which might lie behind a patient's difficult behaviour	CbD, mini-CEX	1
How to access information for patients and families about support group	CbD, mini-CEX	1
The value of manual communication for adults with deafness and	CbD, KBA, mini-CEX	1,3

speech and language disorders		
The need to conduct a consultation in such a way that the patient feels able to talk about difficult or emotional issues	CbD, mini-CEX	1,2,3,4
The grief process the patient experiences when developing a hearing loss	CbD, KBA, mini-CEX	1
The range of agencies that can support the disabled worker and the disabled job-seeker.	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take an accurate, relevant and detailed history of auditory, vestibular and speech & language disorders and associated problems from the patient or their carer including a psychosocial history	CbD, mini-CEX	1
Perform a relevant and detailed full general clinical examination, including ENT, neuro-otological, oculomotor and neurological examination	CbD, mini-CEX	1
Assess the mental state of the adult	CbD, mini-CEX	1
Identify additional medical problems which may be causative or may adversely affect rehabilitation e.g. visual defects, neurological disease, endocrine disease, cardiac disease, musculoskeletal or psychiatric problems	CbD, mini-CEX	1
Identify psychological problems needing psychological or psychiatric referral	CbD, mini-CEX	1
Select and interpret appropriate multidisciplinary assessments including speech and language assessment, psychological assessment and occupational therapy assessment	CbD, mini-CEX, MSF	1
Select appropriate management strategies through multidisciplinary team discussion and discussion with the patient and carers; e.g. hearing aids, pharmacological options, psychology, physiotherapy, occupational therapy, educational strategies, surgical options - depending on the cause and impact of the problem and the age and additional disabilities of the patient	CbD, mini-CEX, MSF, PS	1,3
Manage emotionally complex consultations and be alert to one's own safety during a consultation	CbD, mini-CEX	1
Adopt strategies to manage the patient's anxiety around the clinical situation	CbD, mini-CEX	1
Explain clearly to patients, their significant others or carers the rationale of investigation, results of investigations (both audiological and aetiological), the management options and the prognosis of audiovestibular problems so that they understand and can make informed decisions, where able to do so	CbD, mini-CEX, MSF, PS	1,3
Show patience and sensitivity in communication with the patient and an ability to explore the individual perspectives of a problem	CbD, mini-CEX, MSF, PS	1,3,4
Share difficult information (i.e. new diagnosis) in a sensitive and constructive way	mini-CEX, MSF, PS	1,3
Work with colleagues in multi-disciplinary teams, both within the hospital and within the community, to ensure consistency and continuity and a holistic approach to the treatment and care of the adult	CbD, mini-CEX, MSF	1,3
Behaviours		

To demonstrate:		
Recognition of the importance of sharing information with the adult	CbD, mini-CEX	1,3
Recognition of the need for patient confidentiality and obtain consent before sharing information with others	CbD, mini-CEX	1,3
Recognition of the value of voluntary agencies in supporting the patient with disorders of hearing and balance and their family	CbD, mini-CEX	1
Recognition of the need for compassion and respect for the patient and their families and adopt an empathetic, tactful and positive approach	CbD, mini-CEX	1,3
Recognition of the importance of cultural diversity and how beliefs may affect the decisions a patient makes about their care	CbD, mini-CEX	1,4
Recognition of those factors which influence the patient in following prescribed management and treatment plans	CbD, mini-CEX	1
Recognition of the value of multidisciplinary and multiagency working	CbD, mini-CEX, MSF	1,3
Level Descriptor		
1 Some experience of dealing with adults in an outpatient setting		
2 Demonstrates good skills in managing adults in clinic. Communicates well with patients		
3 Aware of complex issues and their impact on the patient and demonstrates a practical approach to resolving or relieving these issues where possible		

E.2. Emotional and Social Aspects

To understand the effect of emotional and social problems on a patient's ability to access care and to participate in management of audiovestibular difficulties		
Knowledge	**Assessment Methods**	**GMP**
To demonstrate knowledge of::		
The effect of poverty, poor housing, smoking, alcohol or drug abuse, violence and mental illness on the patient and how this may affect their ability to access and to engage in health care	CbD, mini-CEX	1
The need for specialised input in cases of serious emotional distress or mental illness	CbD, mini-CEX	1
The effect of audiovestibular disorders on the emotional wellbeing of the patient	CbD, mini-CEX, PS	1
The impact of audiovestibular problems on the patient's ability to communicate, to work and to participate and how this will affect social standing and independence	CbD, mini-CEX, PS	1
Skills		
To demonstrate the ability to:		
Sensitively take a history about socio-economic status, home environment and family relationships	CbD, mini-CEX	1
Determine where social services would be of value in supporting the adult	CbD, mini-CEX	1
Behaviours		
To demonstrate:		

Openness and honesty about the risks posed by life style choices and advise where changes are in the adult's best interest i.e. smoking, alcohol abuse, diet	CbD, mini-CEX	1,3,4
Alertness with regards to the possibility of abuse in vulnerable adults	CbD, mini-CEX	1,2

Level Descriptor

1	Understanding of stressors within modern life and the possible effects on the patient.
2	Able to identify stresses within a social or work situation. Able to identify the impact of audiovestibular problems upon the patient.
3	Correctly identifies emotional and social difficulties. Identifies non-organic presentation of audiovestibular disorders. Able to offer practical advice on life style choices where this affects audiovestibular function

F. Adult Audiological Medicine

F.1. Tinnitus, Dysacusis and Hyperacusis

To determine, by careful history taking, examination, selection and interpretation of audiological and aetiological investigations, the cause of tinnitus, dysacusis and hyperacusis and define a management plan

To determine the cause of pressure sensations, phonophobia (hyperacusis), echoing and other dysacuses

To determine the effects of tinnitus, dysacusis and hyperacusis on the individual and devise a management plan

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The different conditions which can cause or trigger tinnitus, dysacusis and hyperacusis	CbD, KBA, mini-CEX	1
Current pathophysiological theories of generation of tinnitus, dysacusis and hyperacusis	CbD, KBA, mini-CEX	1
The prevalence of tinnitus and hyperacusis and the natural history of habituation	CbD, KBA, mini-CEX	1
How to select and interpret appropriate audiometric and aetiological (including vestibular and imaging) investigations	CbD, KBA, mini-CEX	1
The psychological effects of tinnitus, dysacusis and hyperacusis on the patient and how these can be managed	CbD, KBA, mini-CEX	1
The indications for, benefits of and problems with rehabilitative instruments such as hearing aids, tinnitus instruments (including WNG, sound ball etc.) and environmental modification	CbD, KBA, mini-CEX	1
Various retraining and relaxation techniques	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take a relevant history and perform an appropriate examination	CbD, mini-CEX	1
Counsel the patient on the cause, test results and consequences of tinnitus, dyacusis and hyperacusis	CbD, mini-CEX, PS	1
Select and interpret the results of audiological investigations	CbD, KBA, mini-CEX	1
Select and interpret appropriate aetiological investigations including imaging	CbD, KBA, mini-CEX	1
Select appropriate management strategies such as hearing aids, rehabilitative instruments, cognitive therapy, relaxation, pharmacological options	CbD, mini-CEX	1
Identify psychological problems needing referral to a psychologist or psychiatrist	CbD, mini-CEX	1
Select and interpret appropriate outcome measure	CbD, mini-CEX	1
Work effectively within the multi-disciplinary team and liaise effectively with audiologists, hearing therapists, clinical psychologists, psychiatrists and GPs about the appropriate management of the patient	CbD, mini-CEX, MSF	1,3
Behaviours		

To demonstrate:		
Recognition of the psychological impact of tinnitus, dysacusis or hyperacusis on the patient and of the patient's psychological attitude on these symptoms	CbD, mini-CEX, PS	1
Recognition of the need for an empathetic, supportive and positive approach to the patient and his/her concerns	CbD, mini-CEX, PS	1,4
Recognition of the importance of effective multidisciplinary team work and effective communication with colleagues both verbally and in writing	CbD, mini-CEX, MSF	1,3
Recognition of the value of complementary medical approaches to holistic management of tinnitus, dysacusis and hyperacusis	CbD, mini-CEX, PS	1,4

Level Descriptor	
1	Some experience of patients with tinnitus, dysacusis and hyperacusis
2	Diagnosis and management of uncomplicated cases of non-pulsatile, subjective and objective tinnitus ± mild/moderate hearing loss including management of moderate psychological distress Diagnosis and management of uncomplicated cases of dysacusis and hyperacusis ± mild/moderate hearing loss including management of moderate psychological distress
3	Diagnosis and management of all tinnitus, dysacusis and hyperacusis in patients both with and without complex medical needs, including severe deafness and psychological distress

F.2. Sudden Hearing Loss

To be able to assess, investigate and identify the aetiological diagnosis of sudden hearing loss

To be able to advise on treatment and, where necessary, refer for surgery or auditory rehabilitation

Knowledge	**Assessment Methods**	**GMP**
To demonstrate knowledge of::		
The various causes of sudden hearing loss	CbD, KBA, mini-CEX	1
How to differentiate the site and nature of the pathology giving rise to the hearing loss	CbD, KBA,	1
The indications for, and limitations of the relevant audiovestibular, serological and imaging investigations	CbD, KBA, mini-CEX	1
The psychological impact of sudden hearing loss particularly if permanent and bilateral	CbD, KBA, mini-CEX	1
Current evidence based management for both the acute presentation and subsequent care	CbD, KBA, mini-CEX	1
The indications for surgery in both conductive and sensorineural hearing loss, including perilymph fistula and implantable devices	CbD, KBA, mini-CEX	1
Communication strategies and hearing tactics	CbD, KBA, mini-CEX	1
The concurrence of tinnitus and vertigo with sudden hearing loss	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take a relevant history and perform appropriate clinical examination	CbD, mini-CEX	1
Select and interpret results of appropriate audiovestibular and aetiological investigations	CbD, KBA, mini-CEX	1

Select appropriate and evidence based management strategies for both acute and subsequent care e.g. pharmacological, surgical, psychological and rehabilitative	CbD, mini-CEX	1
Liaise effectively with Otologists, Neurosurgeons, Hearing Therapists, Psychologists and Counsellors about the appropriate management of the patient	CbD, mini-CEX, MSF	1,3
Work effectively within the multi-disciplinary team	CbD, mini-CEX, MSF	1,3
Behaviours		
To demonstrate:		
An appreciation of the value of listening sympathetically and positively to the problems and fears of the patient and significant others	CbD, mini-CEX, PS	1,3
Recognition of the impact of sudden hearing loss on the patient and his/her ability to work, socialise and communicate	CbD, mini-CEX, PS	1
Recognition of the impact of sudden hearing loss on patients with additional medical needs, particularly those with visual impairment	CbD, mini-CEX, PS	1
Recognition of the importance of third sector organisations such as LINK and RNID	CbD, mini-CEX	1,3
Level Descriptor		
1 Some experience		
2 Review of established case.		
3 Diagnosis and management of all cases		

F.3. Unilateral Hearing Loss

To be able to assess, investigate and diagnose the cause of unilateral hearing loss

To be able to advise on treatment and, where necessary, refer for surgery or auditory rehabilitation

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The causes of unilateral hearing loss	CbD, KBA, mini-CEX	1
The indications for and limitations of relevant audiovestibular, serological and imaging investigations	CbD, KBA, mini-CEX	1
The effects that unilateral hearing loss may have on the patient, including issues of safety	CbD, KBA, mini-CEX	1
The effects of associated tinnitus and dizziness	CbD, KBA, mini-CEX	1
Current evidence based management of unilateral hearing loss, including pharmacological, surgical and rehabilitative management	CbD, KBA, mini-CEX	1
The indications for referral to other specialists i.e. ENT surgeon, neurosurgeon, neurologist or general physician	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take a relevant history and perform appropriate clinical examination	CbD, mini-CEX	1
Select and interpret results of appropriate site of lesion and aetiological investigations	CbD, KBA, mini-CEX	1

Define an appropriate management plan	CbD, mini-CEX	1
Discuss the diagnosis and management options with the patient, including implantable devices and CROS/BICROS systems	CbD, mini-CEX, PS	1,3
Behaviours		
To demonstrate:		
Recognition of the impact of the hearing loss and its cause on the patient and the immediate family	CbD, mini-CEX, PS	1
Recognition of the importance of effective multidisciplinary team work	CbD, mini-CEX, MSF	1,3
Level Descriptor		
1 Some experience		
2 Diagnosis and management of uncomplicated unilateral cochlear hearing loss		
3 Diagnosis and management of complicated unilateral cochlear hearing loss, e.g. WVA, retrocochlear pathology, middle ear pathology, patients with additional medical needs		

F.4. Hearing Problems in Younger Adults

To determine the cause and types of hearing problems
To specify appropriate investigations
To determine the consequences of the hearing impairment for the individual
To define appropriate management and rehabilitation
To discuss the cause, effect and prognosis with the patient

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The conditions which can result in hearing problems in younger adults	CbD, KBA, mini-CEX	1
Audiovestibular and aetiological investigations which can be used to specify the type of impairment and its cause	CbD, KBA, mini-CEX	1
Current evidence-based management of hearing loss including pharmacological and surgical	CbD, KBA, mini-CEX	1
The possible impact of the hearing problems on the individual's life and the effect on immediate family members, including psychosocial and speech & language issues	CbD, KBA, mini-CEX	1
The importance of education of the young adult and of significant others to aid rehabilitation	CbD, KBA, mini-CEX	1
The manifestations of auditory processing disorder (also called Obscure Auditory Dysfunction, King Kopetzky Syndrome) and auditory neuropathy	CbD, KBA, mini-CEX	1
About external support agencies and policies e.g. social workers, RNID, Access to work etc	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take an appropriate history and perform a detailed clinical examination	CbD, mini-CEX	1
Select and interpret appropriate audiometric tests including more sophisticated measures such as tests of central auditory function	CbD, KBA, mini-CEX	1

Select and interpret appropriate aetiological investigations including genetic testing	CbD, KBA, mini-CEX	1
Suggest and refer for appropriate rehabilitation which may include a hearing aid or other instrumental fitting including implantable devices, if appropriate	CbD, mini-CEX	1
Determine and interpret relevant outcome measures	CbD, mini-CEX	1
Liaise with ENT Surgeons about surgery for those with appropriate hearing losses	CbD, mini-CEX, MSF	1,3
Explain the results of the investigations and discuss management options with the patient and significant others	CbD, mini-CEX, PS	1,3
Behaviours		
To demonstrate:		
An appreciation the patient's concerns about the effects of their hearing problems including cosmetic effects	CbD, mini-CEX, PS	1,4
Recognition of the impact of hearing loss on the individual's ability to work and socialise	CbD, mini-CEX, PS	1
An appreciation of the impact of hearing loss on immediate family members	CbD, mini-CEX	1
Level Descriptor		
1	Some experience	
2	Diagnosis and management of uncomplicated long-standing or mild hearing loss.	
3	Diagnosis and management of complicated hearing loss in a young adult e.g. progressive, fluctuating, or associated with additional problems such as vertigo or additional medical needs	

F.5. Congenitally Deaf Adult

To determine the aetiology, severity and progression of the deafness

To assess the impact of the deafness in the individual

To elucidate the previous management, education and communication skills (including signing) of the patient

To identify needs and initiate further rehabilitative management

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The causes of congenital deafness and aetiological investigations	CbD, KBA, mini-CEX	1
The effects of congenital deafness on speech & language and communication	CbD, KBA, mini-CEX	1
About the impact of such deafness on individuals concerned and significant others, including psychosocial effects	CbD, KBA, mini-CEX	1
About associated symptoms such as tinnitus or balance difficulties	CbD, KBA, mini-CEX	1
About alternative communication systems	CbD, KBA, mini-CEX	1
About deaf culture and the local support facilities for deaf people	CbD, KBA, mini-CEX	1
About appropriate rehabilitation, i.e. hearing aids and environmental aids to support the individual socially, within the family and at work	CbD, KBA, mini-CEX	1
About the rapid advances in the research of deafness, including genetics, and its impact on patient management	CbD, KBA,	1

About the needs of the young deaf adult at the time of transfer from paediatric services	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take a relevant history, including family history, and perform an appropriate examination using a sign language interpreter where necessary	CbD, mini-CEX	1
Investigate aetiological factors and manage the consequences	CbD, mini-CEX	1
Determine the communication abilities and needs of the individual	CbD, mini-CEX	1
Suggest appropriate environmental and other aids, including implantable devices, for the patient	CbD, mini-CEX	1
Initiate further rehabilitative management, in conjunction with the social worker for the deaf and disability employment advisor where relevant	CbD, mini-CEX, MSF	1,3
Work effectively within the multi-disciplinary team	CbD, mini-CEX, MSF	1,3
Liaise effectively with the social worker for the deaf about ongoing support	CbD, mini-CEX	1, 3
Behaviours		
To demonstrate:		
An appreciation of the attitudes of those within the Deaf Community	CbD, mini-CEX	1,4
Recognition of the needs of the deaf adolescent	CbD, mini-CEX	1,4
Level Descriptor		
1 Some experience of managing deaf adults		
2 Review of previously diagnosed uncomplicated case.		
3 Diagnosis and management of a deaf adult with a complicated hearing loss e.g. new presentation, progression, additional needs, additional medical problems		

F.6. Hearing Problems in the Elderly

To determine the aetiology, and impact of hearing problems in the elderly

To instigate and interpret appropriate investigations and initiate management relevant to the patient within their environment

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The different conditions which may cause hearing impairment in the elderly	CbD, KBA, mini-CEX	1
The effects of general ageing process on the auditory system including the complex interplay between hearing and cognition	CbD, KBA	1
The different rehabilitative approaches that are available	CbD, KBA, mini-CEX	1
Other relevant services, e.g. social worker for the hearing impaired, who can provide help for such individuals	CbD, KBA, mini-CEX	1
Other impairment e.g. loss of tactile sensitivity or blindness which might impair the individual's ability to cope with more routine rehabilitative approaches	CbD, KBA, mini-CEX	1

Psychosocial issues associated with hearing loss in the elderly including feelings of isolation and avoidance	CbD, KBA, mini-CEX	1
Common general medical problems in the elderly which may affect rehabilitation	CbD, KBA, mini-CEX	1
Associated problems such as balance disturbance and falls	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take a relevant history and perform a relevant clinical examination	CbD, mini-CEX	1
Select and interpret appropriate audiological tests and relevant aetiological investigations	CbD, KBA, mini-CEX	1
Identify additional medical problems which may adversely affect rehabilitation e.g. hypothyroidism, arthritis, Parkinson's disease, mild cognitive impairment or dementia and refer appropriately to geriatrician or specialist	CbD, mini-CEX	1,3
Refer appropriately for instrumental devices e.g. hearing aids, environmental aids	CbD, mini-CEX, MSF	1
Select and interpret appropriate outcome measures	CbD, mini-CEX	1
Liaise effectively with hearing therapist and social worker for the hearing impaired regarding optimal approaches to management of the individual's problems	CbD, mini-CEX, MSF	1,3
Discuss management options with the patient	CbD, mini-CEX, PS	1,3
Behaviours		
To demonstrate:		
Recognition of the impact of hearing loss on individuals and their significant others	CbD, mini-CEX	1
An appreciation of the importance of education to aid rehabilitation	CbD, mini-CEX	1
Recognition of the need for an empathetic approach	CbD, mini-CEX, PS	1,4
An appreciation of the effect of additional health and cognitive needs on management of hearing loss in the elderly	CbD, mini-CEX	1
Level Descriptor		
1 Some experience of managing elderly patients with hearing loss		
2 Diagnosis and management of uncomplicated cases of mild to moderate hearing problems		
3 Diagnosis and management of complicated cases e.g. severe to profound hearing loss, progressive loss, additional medical needs		

F.7. Central Auditory Dysfunction and Auditory Processing Disorder

To appropriately evaluate and diagnose central auditory dysfunction or auditory processing disorder (APD) by careful history taking, examination, selection and interpretation of audiological and aetiological investigations

To define a management plan and initiate rehabilitative management

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The anatomy of the central auditory pathways and methods of testing the function of the different parts	CbD, KBA	1

The various presentations of central auditory dysfunction and APD and the aetiological factors involved	CbD, KBA, mini-CEX	1
How to select and interpret appropriate audiometric, aetiological and ancillary investigations	CbD, KBA, mini-CEX	1
The current limitations in our knowledge of the causes, investigation and treatment	CbD, KBA, mini-CEX	1
The rehabilitative approaches available for such patients including auditory training methods, communication strategies, hearing tactics and listening devices	CbD, KBA, mini-CEX	1
The psychosocial effects of central auditory dysfunction and APD and the impact on the individual's ability to work	CbD, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take an appropriate history and perform a relevant clinical examination	CbD, mini-CEX	1
Select and interpret audiometric tests of central auditory function	CbD, KBA, mini-CEX	1
Select, implement and interpret aetiological and ancillary investigations	CbD, mini-CEX	1
Explain the nature of their disorder to the patient	CbD, mini-CEX	1
Liaise effectively with a hearing therapist and other members of the multidisciplinary team regarding rehabilitative strategies for patients with central auditory dysfunction and APD	CbD, mini-CEX, MSF	1,3
Behaviours		
To demonstrate:		
Recognition of the impact of central auditory dysfunction on the patient's ability to function at home and at work	CbD, mini-CEX	1
Level Descriptor		
1 Some experience		
2 Review of straightforward case of central auditory dysfunction or APD		
3 Diagnosis and management of moderately complex cases of central auditory dysfunction or APD.		

F.8. Learning Disabled Adult

To be able to carry out appropriate hearing assessment, aetiological investigation, treatment and rehabilitation of patients with learning disability.

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The audiovestibular problems that may be associated with learning disability and the specific effects that such problems may have	CbD, KBA, mini-CEX	1
The other disabilities that may be present such as visual, speech and communication problems	CbD, KBA, mini-CEX	1
How acquired audiovestibular problems may present in such patients	CbD, KBA, mini-CEX	1
The rehabilitative approaches available for such patients and how to	CbD, KBA, mini-CEX	1

implement them		
Issues concerning 'consent' in these patients	CbD, mini-CEX	1,2,3
Skills		
To demonstrate the ability to:		
Take a relevant history and perform appropriate examination	CbD, mini-CEX	1
Select appropriate audiovestibular and aetiological tests and interpret results accurately	CbD, mini-CEX	1
Manage the patient's audiological or neuro-otological problems appropriately and effectively	CbD, mini-CEX	1
Communicate the diagnosis, results of investigations and management plan effectively to the patient and their carer	CbD, mini-CEX	1,3
Use appropriate hearing testing procedures	CbD, mini-CEX	1
Liaise effectively with other professionals involved including social workers, speech and language therapists, nursing staff and carers	CbD, mini-CEX, MSF	1,3
Behaviours		
To demonstrate:		
Sympathetic and positive listening skills with regards to the problems and fears of the patient	CbD, mini-CEX	1,3,4
An appreciation of the need to consider carefully the aetiology of hearing loss in these patients and investigate appropriately	CbD, mini-CEX	1,4
Respect for issues of confidentiality and informed consent	CbD, mini-CEX	1,3,4
Level Descriptor		
1 Some experience		
2 Review of adults with mild to moderate learning difficulties and uncomplicated hearing loss.		
3 Identification of hearing difficulties in patients with learning disability. Diagnosis and management of hearing loss in adults with moderate learning difficulty.		

F.9. Practical Procedures in Adult Audiological Medicine

To gain a comprehensive knowledge of audiological testing in adults
To gain practical skills in performing and know how to interpret audiological tests
To gain a critical appreciation of the value and difficulties of audiological tests in adults

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The anatomy and physiology of the auditory pathway	CbD, KBA, Modular assessment	1
The theoretical basis of audiological testing including physics, acoustics and psychoacoustics	CbD, KBA, Modular assessment	1
The indications for the various audiological tests	CbD, KBA, Modular assessment.	1
The values, limitations and practical difficulties of audiological testing	CbD, KBA, Modular assessment	1

Skills		
To demonstrate the ability to:		
Select appropriately and interpret correctly all the audiological tests listed below, in the context of the clinical picture working with other relevant skilled healthcare professionals	CbD, mini-CEX	1
Identify false or erroneous results and how to ensure testing accuracy (trouble shooting).	CbD, mini-CEX	1,2
Perform under supervision: • Pure tone audiometry (air conduction, bone conduction with or without masking) • Acoustic immitance measures • Clinical speech perception tests • Otoacoustic emissions (transient, distortion product, spontaneous, contralateral suppression) • Middle ear reflex measures • Speech audiometry including speech in noise • Auditory brainstem responses • Tests of auditory processing	PPS	1
Have observed: • Middle latency and cortical evoked responses • Electro-cochleography • Tests of central auditory function	PPS	1
Behaviours		
To demonstrate:		
Recognition of the value of stringency with regards to good scientific measurements	CbD, MSF	1,3
Recognition of the value of effective multidisciplinary team work	CbD, MSF	1,3
An appreciation of the value of the test battery	CbD, mini-CEX, MSF	1,3

G. Adult Vestibular Medicine

G.1. Acute Vertigo

To determine the cause of the acute attack of vertigo

To instigate and interpret an appropriate set of investigations

To define a management plan

To assess the impact of the attack on the individual and identify those patients for whom the attacks affect their fitness to drive

To explain to the patient the likely cause and outcome of the acute vertigo

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The different pathomechanisms of an acute attack of vertigo	CbD, KBA	1
The various otological, neurological and general medical causes of acute vertigo	CbD, KBA	1
The different clinical presentations of acute vertigo, e.g. benign paroxysmal positional vertigo, vestibular neuronitis, Ménierè's disease	CbD, KBA, mini-CEX	1
The eye movement abnormalities that may be associated with acute vertigo	CbD, KBA, mini-CEX	1
How to investigate each of the causes of acute vertigo	CbD, KBA, mini-CEX	1
The pharmacological options available to treat acute vertigo including the role of the low salt diet in patients with Meniere's Disease, and the place of prophylaxis in migraine	CbD, KBA, mini-CEX	1
The natural history of acute vertigo	CbD, KBA, mini-CEX	1
How eye movement disorders may impact on balance	CbD, KBA, mini-CEX	1
The management options for acute vertigo including particle repositioning and customised vestibular rehabilitation	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Distinguish peripheral from central vestibular causes of acute vertigo by an accurate history, examination and investigation	CbD, mini-CEX	1
Carry out a complete neuro-otological examination including an accurate examination of the eye movements, characterising any nystagmus	CbD, mini-CEX	1
Identify any general medical causes of acute vertigo by a good history and examination	CbD, mini-CEX	1
Identify pathology in the other stabilising sensory and effector motor systems by a good history and examination	CbD, mini-CEX	1
Assess any associated psychological factors and refer as necessary	CbD, mini-CEX	1
Carry out particle repositioning manoeuvres e.g. Epley, Semont	CbD, mini-CEX	1
Instruct the patient in appropriate vestibular rehabilitation e.g. Cawthorne-Cooksey, Brandt-Darroff and visual exercises	CbD, mini-CEX, PS	1,3
Interpret a full battery of audiovestibular tests	CbD, mini-CEX	1
Discuss management options with the patient	CbD, mini-CEX, PS	1,3
Implement appropriate management including referral to other	CbD, mini-CEX	1,3

Specialities (e.g. ENT, neurology and general medicine) when required		
Work effectively within a multi-disciplinary framework/team	CbD, mini-CEX, MSF	1,3
Judge correctly as to when fitness to drive/work is affected and counsel the patient appropriately	CbD, mini-CEX	1,2
Attitude		
To demonstrate:		
An empathetic approach to the dizzy patient and recognise the impact and psychological sequelae of acute vertigo	CbD, mini-CEX, PS	1
Level Descriptor		
1 Some experience		
2 Diagnosis and management of uncomplicated common vestibular disorders such as vestibular neuritis, BPPV, Menière disease, ototoxicity and migraine associated vertigo		
3 Diagnosis and management of complicated cases e.g. central vestibular disorders, migraine/ Menière overlap, eye-movement disorders, mixed pathologies, Tullio phenomenon, atypical BPPV and patients with additional medical needs.		

G.2. Recurrent Vertigo/Dysequilibrium

To determine the cause of the recurrent dysequilibrium
To identify and address factors hindering vestibular compensation
To determine any disability conferred by symptoms
To select appropriate investigations
To instigate appropriate management and refer when necessary

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The sensorimotor physiology involved in balance maintenance	CbD, KBA	1
The causes of peripheral and central vestibular disorders with remitting and relapsing courses	CbD, KBA, mini-CEX	1
The types of pathology possible in other stabilising sensory and motor effector systems	CbD, KBA, mini-CEX	1
The various factors hindering vestibular compensation	CbD, KBA, mini-CEX	1
The psychological impact of recurrent disequilibrium	CbD, KBA, mini-CEX	1
Local and national protocols and guidelines for audiovestibular test and aetiological investigation	CbD, KBA, mini-CEX	1
The pharmacological options, physical rehabilitation and psychological/psychiatric interventions	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take an accurate history and perform clinical examination to correctly identify cause of disorder and any factors hindering compensation	CbD, mini-CEX	1
Distinguish peripheral from central vestibular causes of recurrent vertigo	CbD, KBA, mini-CEX	1
Assess any associated psychiatric symptoms / avoidance behaviour	CbD, mini-CEX	1

Identify any general medical causes of recurrent vertigo by a good history and examination and refer as appropriate	CbD, mini-CEX	1
Select and interpret appropriate audiovestibular tests and understand their limitations	CbD, KBA, mini-CEX	1
Carry out particle repositioning manoeuvres e.g. Epley, Semont	DOPS, mini-CEX, PPS	1
Instruct the patient in appropriate vestibular rehabilitation e.g. Cawthorne-Cooksey, Brandt-Darroff and visual exercises	CbD, mini-CEX	1
Discuss and implement therapeutic options	CbD, mini-CEX	1,3
Refer appropriately to other members of the multi-disciplinary team for effective management	CbD, mini-CEX, MSF	1,3
Judge correctly as to when fitness to drive/work is affected and counsel the patient appropriately	CbD, mini-CEX	1,2
Behaviours		
To demonstrate:		
An appreciation of the distress and disability caused by recurrent disequilibrium and demonstrate a sensitive approach to the patient	CbD, mini-CEX, PS	1
Recognition of the impact of recurrent disequilibrium in a patient with additional medical needs.	CbD, mini-CEX	1
Recognition of the value the multidisciplinary approach to patient assessment and management	CbD, mini-CEX, MSF	1,3
Level Descriptor		
1 Some experience		
2 Diagnosis and management of uncomplicated cases of Menière's disease, bilateral vestibular failure and decompensation of PVD etc.		
3 Diagnosis and management of complicated cases e.g. central vestibular disorders, migraine, complicated Menière's disease, superior canal dehiscence syndrome, atypical BPPV and secondary endolymphatic hydrops		

G.3. Chronic Imbalance

To identify the cause of chronic imbalance, instigate and interpret appropriate investigations and initiate appropriate management		
Knowledge	**Assessment Methods**	**GMP**
To demonstrate knowledge of::		
The range of peripheral and central vestibular disorders causing chronic imbalance	CbD, KBA, mini-CEX	1
The pathology of the stabilising sensory systems which gives rise to multisensory imbalance	CbD, KBA, mini-CEX	1
Pharmacotherapeutic agents and toxic substances which can cause chronic imbalance	CbD, KBA, mini-CEX	1
The appropriate aetiological and audiovestibular investigations	CbD, KBA, mini-CEX	1
The effect on balance of recurrent and untreated dizziness of peripheral or central origin	CbD, KBA, mini-CEX	1
The psychological effects of chronic imbalance	CbD, KBA, mini-CEX	1

Effective rehabilitative strategies for patients with chronic imbalance	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take an accurate history of balance impairment in order to determine pathology, aetiology, associated difficulties and extent of disability	CbD, mini-CEX	1
Perform an accurate eye movement examination, clinical balance assessment and full general medical examination	CbD, mini-CEX	1
Assess accurately musculoskeletal, visual and other medical conditions likely to limit rehabilitation	CbD, mini-CEX	1
Select and interpret appropriate audiovestibular and aetiological investigations	CbD, mini-CEX	1
Assess accurately disability and make appropriate physiotherapy referral	CbD, mini-CEX	1
Disentangle correctly psychological components from peripheral vestibular components in balance disorders	CbD, mini-CEX	1
Work effectively within the multi-disciplinary team	CbD, mini-CEX, MSF	1,3
Behaviours		
To demonstrate:		
Recognition of the impact of chronic imbalance on employment and activities of daily living	CbD, mini-CEX	1
Recognition of the impact and psychological effects of chronic imbalance on the patient and family or carers	CbD, mini-CEX	1
Level Descriptor		
1	Some experience	
2	Diagnosis and management of uncomplicated cases e.g. uncompensated PVD, bilateral vestibular failure	
3	Diagnosis and management of complicated cases e.g. multisensory imbalance, visual vertigo, complicated decompensation of PVD and central vestibular pathologies	

G.4. Blackouts / Drop Attacks

To distinguish between blackouts and drop attacks

To determine the cause of the blackout and/or drop attack

To ensure that appropriate management is instigated

To determine the significance of the episode from the perspective of fitness to drive/work

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The mechanisms of epilepsy, pseudo-epilepsy, syncope, vasovagal attacks, and how they present.	CbD, KBA, mini-CEX	1
How to differentiate vestibular pathology from the above conditions	CbD, KBA, mini-CEX	1
The aetiological factors of the above conditions	CbD, KBA, mini-CEX	1
The investigations of value in differentiating between the above pathologies, and types of abnormalities found for each	CbD, KBA, mini-CEX	1
The pharmacotherapeutic options available for treating each cause	CbD, KBA, mini-CEX	1

Detailed investigation and management of vestibular disorders presenting with a history in which the patient describes 'blackouts' and 'drop attacks'	CbD, KBA, mini-CEX	1
The law regarding black-outs and syncope and fitness to drive	CbD, KBA, mini-CEX	1,2
Skills		
To demonstrate the ability to:		
Recognise and differentiate between the different clinical presentations of epilepsy, syncope, vasovagal episodes and drop attacks	CbD, mini-CEX	1
Distinguish hyperventilation and pseudo-seizures from the above	CbD, mini-CEX	1
Take a good cardiological and neurological history and perform an appropriate clinical examination	CbD, mini-CEX	1
Assess any psychological factors involved	CbD, mini-CEX	1
Interpret appropriate cardiological, neurological, imaging and blood test abnormalities that serve to differentiate between conditions presenting as blackouts or drop attacks	mini-CEX	1
Refer the patient appropriately when indicated	CbD, mini-CEX	1
Behaviours		
To demonstrate:		
Recognition of the impact of attacks which may be unpredictable and may stop the patient driving	CbD, mini-CEX	1,2
An understanding approach when discussing psychological factors with the patient	CbD, mini-CEX, PS	1, 3,4
Level Descriptor		
1 Some experience		
2 Diagnosis and management of uncomplicated cases		
3 Diagnosis and management of complicated cases e.g. patients with multiple pathology or additional medical needs.		

G.5. Falls in the Elderly

To identify the cause of falls in the elderly

To make a holistic assessment of balance and gait in the patient

To instigate appropriate battery of investigations

To manage falls appropriately making specialist referrals as necessary

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The sensori-motor physiology involved in balance maintenance	CbD, KBA	1
The effects of ageing and neurological disorder on the postural and righting reflexes	CbD, KBA	1
The causes of black-outs and drop attacks including cardio- and cerebrovascular pathology	CbD, KBA, mini-CEX	1
The musculo-skeletal disorders impairing maintenance of the upright posture and locomotion	CbD, KBA	1

The investigation options available to identify aetiological factors	CbD, KBA, mini-CEX	1
The full battery of audiovestibular tests, their indications and limitations in this age group	CbD, KBA, mini-CEX	1
The pharmacological, physiotherapeutic and psychological management options	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take a complete history and to understand the effects of ageing and hearing loss on cognitive function and the consequent ability to give an accurate history	CbD, mini-CEX	1
Perform an accurate neuro-otological, neurological, cardiological and musculoskeletal examination	CbD, mini-CEX	1
Select and interpret appropriate neuro-otological tests	CbD, mini-CEX	1
Determine an appropriate differential diagnosis	CbD, mini-CEX	1
Refer appropriately to geriatrician, ophthalmologist, neurologist, rheumatologist or general physician and to multidisciplinary team	CbD, mini-CEX	1,3
Apply pharmacological interventions, or recommend physiotherapeutic options	CbD, mini-CEX	1
Behaviours		
To demonstrate:		
An awareness of the effects on gait of both loss of confidence and other psychological factors	CbD, mini-CEX	1
Appropriate high standards of tact, empathy, respect and concern for the elderly and their families	CbD, mini-CEX, PS	1,3,4
An awareness of balance problems as part of multisystem disease in the elderly	CbD, mini-CEX	1
An awareness of the voluntary sector in care of the elderly	CbD, mini-CEX	1

Level Descriptor

1 Some experience

2 Diagnosis and management of simple cases e.g. orthostatic hypotension, musculoskeletal/ visual impairment and vasovagal syncope.
Recognise environmental risk factors and implement prevention

3 Diagnosis and management of complicated cases e.g. multisensory imbalance, patients with additional medical needs.

G.6. Practical Procedures in Vestibular Medicine

To gain a comprehensive knowledge of vestibular testing in adults

To gain practical skills in testing adults

To gain a critical appreciation of the indications, values, limitations and difficulties of vestibular tests in adults

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The detailed anatomy and physiology of the vestibular system and its central connections	CbD, KBA, Modular assessment	1

The theoretical basis of vestibular testing including recently developed tests which may only be used on a research basis e.g. off-axis rotation and subjective visual vertical and horizontal	CbD, KBA, Modular assessment	1
The indications for vestibular testing	CbD, KBA, Modular assessment mini-CEX	1
The values, limitations and practical difficulties of vestibular testing	CbD, KBA, Modular assessment mini-CEX	1
Age-related changes in postural control and responses to visuo-vestibular stimulation	CbD, KBA, Modular assessment mini-CEX	1
How eye movement disorders may interfere with vestibular testing procedures	CbD, KBA, Modular assessment mini-CEX	1
Skills		
To demonstrate the ability to:		
Select appropriately and interpret correctly all the following vestibular tests, working with other relevant skilled healthcare professionals	CbD, mini-CEX	1
Integrate the results of audiological, vestibular and aetiological tests with the history and examination findings to formulate a diagnosis and a management plan	CbD, mini-CEX	1
Identify inaccurate or spurious results and know how to correct these during testing (troubleshooting)	CbD, mini-CEX	1
Perform competently: • Positional testing including Hallpike testing and roll testing • Examination of eye movements with nystagmoscopy or Frenzel's glasses • Caloric irrigations • Halmagyi head thrust testing	DOPS, mini-CEX, PPS	1
Perform under supervision: • ENG/VNG recordings during visuo-vestibular stimulation, including rotational tests • Vestibular evoked myogenic potentials (VEMPs) • Posturography • Subjective visual vertical and horizontal	PPS	1
Behaviours		
To demonstrate:		
Recognition of the anxiety and distress a patient may display during these tests and seek to reassure and to manage their discomfort appropriately	mini-CEX, MSF, PS	1,2
Recognition of the importance of effective multidisciplinary team work	CbD, mini-CEX, MSF	1,3
Recognition of the value of scientific rigour in performing tests of vestibular function	CbD, mini-CEX	1
Recognition of the value of a battery of tests	CbD, mini-CEX	1

H. Additional Topics

H.1. Basic Sciences – Anatomy and Physiology

To gain a comprehensive knowledge of the detailed anatomy and physiology of the audiovestibular system and related organs

To gain a knowledge of phonetics, speech reception and speech production

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of:		
Basic cell biology as it pertains to the inner ear and central connections: • Basic cell biology • Basic biochemistry • Basic molecular biology • Organisation of cellular structure • Sensory epithelia and their function including connecting neural structures • Neurotransmitters; molecular aspects and function	CbD, KBA, modular examination	1
The detailed anatomy, physiology and biochemistry of the audiovestibular system and related organs, including central pathways and connections: • Gross anatomy of the ear • Histology of the ear • Microscopic anatomy of the inner ear • Cellular organisation of the inner ear • Molecular biology of the inner ear • Fluids in the inner ear and their relationship to cell physiology • Efferent and afferent innervations in the cochlea and vestibular system • Outline of the ascending and descending auditory and vestibular pathways • Detailed structure of cochlear nucleus • Physiology of the peripheral auditory and vestibular system • Physiology of the central auditory pathway • Central auditory processing • Physiology of the central vestibular pathway and reflexes.	CbD, KBA, modular examination.	1
The anatomy and physiology of the speech production system	CbD, KBA, modular examination. Mini-CEX	1
The embryological development of the ear, central nervous system and speech production system	CbD, KBA, modular examination. Mini-CEX	1
About recent advances in molecular biology, repair and regeneration in relation to the cochlea and vestibular system	CbD, KBA, modular examination.	1
The effect of loss of sensory input on the auditory pathway during development and in the adult.	CbD, KBA, modular examination	

Skills		
To be able to:		
Detect abnormalities in the development of the audiovestibular and speech production systems	CbD, mini-CEX	1
Detect abnormalities of speech	CbD, mini-CEX	1
Describe the expected clinical or functional consequence of an identified anatomical abnormality	CbD, mini-CEX	1
Behaviours		
To demonstrate:		
Recognition of psychological issues with regards to abnormalities of anatomy and physiology	CbD, mini-CEX	1
Recognition of the value of research into basic anatomy and physiology in understanding the presentation and effects of audiovestibular pathology	CbD, mini-CEX	1

Level Descriptor	
1	Shows evidence of good basic knowledge of the anatomy, physiology and embryology of the audiovestibular system. Evidence of satisfactory completion of a taught course at MSc level.
2	Shows evidence of understanding of basic sciences in everyday clinical practice with simple cases
3	Shows evidence of understanding of basic sciences in everyday clinical practice with moderately complex cases

H.2. Basic Sciences – Physics, Acoustics and Psychoacoustics

To gain a comprehensive knowledge of the basic sciences related to the audiovestibular system and related organs

To gain a knowledge of room acoustics

To gain a detailed knowledge of British and International standards relating to audiology, audiovestibular medicine and calibration

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
Signals and systems	CbD, KBA, modular examination	**1**
The physics of sound and its measurement	CbD, KBA, modular examination	1
The transfer function of the middle ear and the general concept of impedence	CbD, KBA, modular examination	1
Biophysics and physiological signals in the inner ear	CbD, KBA, modular examination	1
Measurement of hearing function	CbD, KBA, modular examination	1
Basic psychoacoustics	CbD, KBA, modular examination.	1
The working principles of audiovestibular testing equipment	CbD, KBA, modular examination.	1

Standards and calibration of audiovestibular equipment	CbD, KBA, modular examination.	1
Basic acoustics including room acoustics and the requirements for sound proofing	CbD, KBA, modular examination.	1
Skills		
To be able to:		
Describe how we hear sound	CbD, mini-CEX	1
Explain hearing function to a patient	CbD, mini-CEX	1
Ensure room acoustics are appropriate for testing hearing	CbD, mini-CEX	1
Ensure the audiovestibular test equipment is calibrated properly and recognise when it is not	CbD, mini-CEX	1
Use a sound level meter properly	mini-CEX	1
Behaviours		
To demonstrate:		
Recognition of the need for high standards in testing technique and test environment	CbD, mini-CEX	1
Recognition of the need for scientific rigour	CbD, mini-CEX	1
Recognition of the role of various audiological professionals in maintaining the above	CbD, KBA, mini-CEX, MSF	1,3
Recognition of the value of team work in delivering a comprehensive and high standard of testing	CbD, mini-CEX, MSF	1,3
Level Descriptor		
1	Evidence of satisfactory completion of a taught course in basic sciences at MSc level.	
2	Shows evidence of a good understanding of acoustics in clinical practice.	
3	Shows evidence of a good understanding of room acoustics, standards of testing and maintenance of the testing environment in clinic. Shows evidence of a good understanding of psychoacoustics.	

H.3. Clinical Diagnostics

To understand and have a comprehensive knowledge of the theory, methodology, interpretation and applications of audiovestibular tests
To understand the strengths and limitations of audiovestibular tests
To be aware of new developments in audiovestibular testing
To be able to choose the appropriate test battery for site of lesion testing in patients with audiovestibular presentations

To understand the value of radiological investigation

To be able to request appropriate imaging and interpret the results in the light of the clinical picture.

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The theory and methodology of audiovestibular tests including: • Pure-tone audiometry • Middle ear immitance audiometry • Electrophysiology • Tests of balance function - laboratory assessment of eye movements, other vestibulometry, posturography	CbD, KBA, modular examination	

• Paediatric behavioural testing • Speech audiometry • Central auditory tests		
Interpretation of audiovestibular tests.	CbD, KBA, modular examination.	1
The strengths and limitations of audiovestibular tests. Identification of potential problems, pitfalls and artefacts	CbD, KBA, modular examination.	1
The value of a battery of tests in patients with audiovestibular presentations	CbD, KBA, modular examination.	1
New developments in audiovestibular testing and their value	CbD, KBA, modular examination.	1
Skills		
To be able to:		
Choose the appropriate test battery for a patient with an audiovestibular problem	CbD, mini-CEX	1
Interpret the results of audiovestibular testing in the context of history and examination of the patient.	CbD, mini-CEX	1
Behaviours		
To demonstrate:		
Recognition of the value of the battery of tests	CbD, mini-CEX	1
Recognition of the need for high standards in testing technique and test environment	CbD, mini-CEX	1
Recognition of the need for scientific rigour	CbD, mini-CEX	1
Recognition of the role of various audiological professionals in maintaining the above	CbD, mini-CEX, MSF	1,3
Recognition of the value of team work in delivering a comprehensive and high standard of testing and investigation	CbD, mini-CEX, MSF	1,3

Level Descriptor	
1	Evidence of successful completion of taught programme of basic audiological science at MSc level
2	Demonstrates good clinical application of audiological test battery to simple clinical cases in both adult and paediatric practice. Demonstrates appropriate requests for imaging across a range of simple cases.
3	Demonstrates good clinical application of audiological test battery to moderately complex clinical cases in both adult and paediatric practice. Demonstrates appropriate requests for imaging across a range of moderately complex cases.

H.4. Radiological Investigation

To understand the value of radiological investigation in audiovestibular pathology

To be able to request appropriate imaging and interpret the results in the light of the clinical picture.

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The theory of different imaging techniques useful in audiovestibular pathology	CbD, KBA,	1

The value of different imaging techniques and their limitations with respect to audiovestibular presentations	CbD, KBA,	1
Skills		
To be able to:		
Request the appropriate imaging for a patient with an audiovestibular presentation	CbD, mini-CEX	1
Interpret the results of radiological investigation in the context of history and examination of the patient.	CbD, mini-CEX	1
Liaise with colleagues in radiology to ensure the most appropriate investigation for the patient.	CbD, mini-CEX	1
Behaviours		
To demonstrate:		
Recognition of the role of radiologists and their teams in contributing to the diagnosis of audiovestibular problems	CbD, mini-CEX, MSF	1,3
Recognition of the value of team work in delivering a comprehensive and high standard of testing and investigation	CbD, mini-CEX, MSF	1,3

Level Descriptor

1 Demonstrates appropriate requests for imaging across a range of simple cases.

2 Demonstrates integration of radiological information with the history, examination and results of other investigation in simple cases. Demonstrates appropriate requests for imaging across a range of moderately complex cases.

3 Demonstrates integration of radiological information with the history, examination and results of other investigation in moderately complex cases

H.5. Prevention of Audiovestibular Disorders

To know the general principles of primary, secondary and tertiary prevention

To gain a comprehensive knowledge of noise and its effect on the audiovestibular system

To gain a detailed knowledge of ototoxicity and its effect on the audiovestibular system

To understand current interventions and strategies to prevent or ameliorate damage to the auditory system

To understand the epidemiology of audiovestibular pathologies and their prevention

To develop a comprehensive knowledge of screening for hearing loss

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of:		
The general principles of prevention and how these can be applied to the audiovestibular system	CbD, KBA	
Effects of noise on the inner ear	CbD, KBA	
The noise levels that are damaging to hearing, sources of such noise and prevention of exposure including noise surveys, hearing conservation and ear protection	CbD, KBA	1,2
The substances and drugs that affect the audiovestibular system and their effect on both hearing and balance	CbD, KBA	1
The genetics and genomics affecting the individual's predisposition to ototoxic agents	CbD, KBA	1

Repair and regeneration in the inner ear and strategies for protecting sensory cells	CbD, KBA, modular examination.	
The epidemiology of hearing loss, incidence of permanent congenital hearing loss and acquired hearing loss of different causation and their prevention	CbD, KBA, modular examination.	1
Screening principles, methods and dealing with screen failures	CbD, KBA	1
Setting up a screening programme in a district and how to monitor and audit the service	CbD, KBA	1
The role of immunisation in the prevention of hearing and balance disorders	CbD, KBA	1
Skills		
To demonstrate the ability to:		
Detect noise damage early and provide appropriate advice	CbD, mini-CEX	1,2
Advise on prevention of damage from noise	CbD, mini-CEX	1,2
Detect ototoxicity early and advise other clinicians	CbD, mini-CEX	1,2
Manage audiovestibular problems from ototoxicity	CbD, mini-CEX	1
Interpret the results of various screening tests	CbD, KBA, mini-CEX	1
Manage appropriately those who “fail” the screen	CbD, mini-CEX	1
Address the potential anxieties relating to screening	CbD, mini-CEX	1,3
Behaviours		
To demonstrate:		
Recognition of the value of prevention in managing audiovestibular problems globally	CbD, mini-CEX	1
Level Descriptor		
1 Understanding of the concept of preventive audiovestibular medicine		
2 Understanding of screening programmes Understanding of common surdogens e.g. drugs, noise		
3 Able to advise patients on preventive measures Investigation and management of cases referred through screening		

H.6. Hearing Instruments

To gain a comprehensive knowledge of amplification for adults and children, including implantable and assistive listening devices

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
Analogue and digital hearing aids, including body worn, post aural, in the ear, in-the-canal, totally-in-the-canal aids, vibrotactile aids, frequency transposition aids, CROS and BICROS aids, implantable devices including cochlear implants, bone-anchored hearing aids (BAHA), implantable middle ear hearing aids, brainstem implants etc.	CbD, KBA	1
Basic electro acoustic properties of the various hearing aids	CbD, KBA	1

Various hearing aid fitting formulae and real ear measurements in both adult and paediatric practice	CbD, KBA	1
The “plumbing system” (hooks, moulds, tubing etc) and the effect on amplification	CbD, KBA	1
The assistive devices available including the radio aid and FM sound field systems, alarm systems, loop systems	CbD, KBA, mini-CEX	1
Methods of assessing benefit of amplification in children and adults	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Determine appropriateness and type of amplification (including cochlear implant) through discussion with audiological colleagues, patient and parents in the case of children	CbD, mini-CEX	1,3
Discuss the current best technology with both patients, their families, and other professional	CbD, mini-CEX	1,3
Refer appropriately for amplification	CbD, mini-CEX	1
To have observed: • Selection, testing and fitting of hearing aids in both children and adults • Measuring the benefit of amplification • Use of hearing aid test box for testing hearing aids and measuring insertion gain and real ear to coupler difference	PPS	1
To have observed the selection, testing and fitting of BAHA and cochlear implants in both children and adults	PPS	1
Behaviours		
To demonstrate:		
Recognition of the importance of effective multidisciplinary team work and effective communication with colleagues both verbally and in writing	CbD, mini-CEX, MSF	1,3
Sensitivity towards the reaction of patients and their families to amplification or to changes in amplification	CbD, mini-CEX, PS	1
Level Descriptor		
1 Some experience of managing patients with hearing aids		
2 Good understanding of the theory of hearing aid and ear mould technology Understanding of hearing aid fitting, use of test box, RECD and insertion gain		
3 Good understanding of measuring the benefit of amplification Understanding and experience of cochlear implant and BAHA use and fitting		

I. Related Specialties

The following sections of the syllabus are covered as secondments from posts on the rotation. The training programme director is responsible for placement of the trainee in posts where the various secondments can be covered ensuring that the trainee is enabled to cover all within the five year training programme. The suggested time in each secondment is given as guidance for the purposes of planning, but this should not limit the training, neither should it be seen as a goal in itself. The times stated have been agreed by trainers as those most likely to enable trainees to achieve the competences stated, on the understanding that some trainees will require or desire more time and others, because of previous experience, less. Some training centres may prefer to offer this training in blocks rather than weekly attachments; in these cases weekly scheduled and protected contact with the trainer in Audiovestibular Medicine is strongly recommended for the duration of the block, as is attendance at regional and national Audiovestibular Medicine study days. This is in order for the trainee to relate what is learnt to their future practice in their chosen specialty.

It is expected that trainees will cover General Medicine, Otorhinolaryngology and Paediatrics and Developmental Paediatrics, dependent on previous training, in the first year of training as competence in these subjects underpins the rest of the training in Audiovestibular Medicine. If a trainee has evidence of previous training in a field sufficient to meet the competences expected, an additional period of training is not required e.g trainees with MRCPCH will not be required to do a secondment in Paediatrics and Developmental Paediatrics, those who have entered with MRCS(ENT) will not be required to do the secondment in Otorhinolaryngology. Trainees transferring from ENT will need to complete training in General Medicine as a first attachment and those from other disciplines will need to do the attachment in Otorhinolaryngology first.

Satisfactory completion of all secondments will ensure that all trainees have a basic level of competence across the range of medical fields which impact on/underpin everyday practice in Audiovestibular Medicine.

It is expected that trainees will obtain a supervisor's report from a training consultant in each of the secondments below to state that they have attended training and have adequately covered the curriculum. Workplace based assessment of competences can occur within each of the secondments and is particularly recommended for developmental paediatrics and CMT competences. However, as the competences outlined for the related specialties are essential for practice in Audiovestibular Medicine, workplace based assessments conducted by training consultants in Audiovestibular Medicine can provide evidence of competences acquired during these attachments.

I.1. General Medicine

The purpose of this module is to ensure that trainees entering Audiovestibular Medicine training from ENT surgery acquire physicianly competences to underpin training in Audiovestibular Medicine. These competences are taken from the Core Medical Training curriculum. Trainees should be assessed by a consultant who routinely assesses trainees in CMT. The sections of the CMT curriculum referred to in this section appear in full in Appendix 1. It is expected that the trainee will gain competences in all areas of the CMT curriculum listed in Appendix 1 at level 2 before progression.

To gain core medical competences that directly underpin physicianly practice in Audiovestibular Medicine namely:

- **History taking**
- **Clinical examination of the medical patient**
- **Therapeutics and safe prescribing relevant to the medical patient**
- **Decision making and clinical reasoning related to the medical patient**
- **Infection Control**
- **Managing long term conditions and promoting patient self-care**
- **Breaking/Sharing news in relation to the medical patient**
- **Health promotion and public health in relation to the medical patient**

Suggested period of training: 6 to 12 month attachment to a general medical CMT training programme for 2 days a week. Suitable attachments may include cardiology, respiratory medicine, rheumatology, care of the elderly, stroke medicine, neurology and endocrinology. Experience to include outpatient clinics, post take wardrounds, teaching sessions etc.

See Appendix 1 for full details of the competences required

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of:		
The importance of a detailed and holistic medical history	CbD, mini-CEX, MSF, PS	1
The importance of a full and detailed medical examination	CbD, mini-CEX, MSF	1
The importance of effective communication with the patient , the family and with colleagues	CbD, mini-CEX, MSF, PS	1, 3
The importance of safe prescribing	CbD, mini-CEX, MSF	1
Indications, contraindications, side effects, interactions and adverse drug reactions of commonly used drugs	CbD, mini-CEX, MSF	1
The importance of diagnostic reasoning and the value of careful evaluation of the whole patient	CbD, mini-CEX, MSF, PS	1
The principles of infection control	CbD, mini-CEX, MSF	1, 2
Multisystem disease, how it presents and its impact on the patient	CbD, mini-CEX, MSF, PS	1, 3
The importance of breaking bad news sensitively	CbD, mini-CEX, MSF, PS	1, 3
The importance of health promotion	CbD, mini-CEX, MSF, PS	1

Skills		
To demonstrate the ability to:		
Take a good medical history and perform a competent comprehensive examination of a medical patient	CbD, mini-CEX, MSF, PS	1
Communicate effectively with patients, staff and colleagues both verbally and in written correspondence	CbD, mini-CEX, MSF, PS	1, 3, 4
Interpret clinical features, their reliability and relevance to clinical scenarios including recognition of the breadth of presentation of common disorders	CbD, mini-CEX, MSF	1
Formulate an appropriate management plan based on the history, clinical findings and results of tests, both for acute and long term conditions. Discuss this plan with the patient and significant others.	CbD, mini-CEX, MSF, PS	1, 3
Demonstrate good practice in breaking bad news	CbD, mini-CEX, MSF, PS	1, 3, 4
Identify the interaction between mental, physical and social wellbeing in relation to health and identify opportunities to prevent ill health and disease	CbD, mini-CEX, MSF	1
Identify and counsel patients in life-style changes to promote good health	CbD, mini-CEX, MSF, PS	1, 2, 3
Prescribe safely	CbD, mini-CEX, MSF	1, 2, 3
Behaviours		
Shows respect and behaves in accordance with Good Medical Practice	CbD, mini-CEX, MSF, PS	1, 2, 3, 4
Shows behaviours identified in Appendix 1	CbD, mini-CEX, MSF, PS	1, 2, 3, 4

I.2. Otorhinolaryngology

To gain a sound knowledge of embryology, anatomy and physiology of the head and neck

To gain a detailed knowledge of pathology and management of otological conditions

To observe audiology related ENT surgery such as grommet insertion, mastoidectomy, tympanoplasty, surgery for cochlear implantation, bone anchored hearing aids, other implantable devices, vestibular schwannoma and otosclerosis

To learn which patients are appropriately referred to ENT surgeons

To gain a knowledge of rhinological, oropharyngeal, upper airway and other head & neck conditions that may affect the audiovestibular system and speech

Suggested period of training: 2 to 3 sessions a week for 6 months

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The embryology, anatomy, physiology of the ear and head & neck	CbD, KBA, modular examinations	1
The pathology, appropriate investigations (including imaging) and management of congenital, acquired and other conditions of the ear including indications, risks, outcomes and complications of surgery	CbD, KBA, mini-CEX	1
The head and neck conditions that may produce aural symptoms including conductive hearing loss, and their appropriate management	CbD, KBA, mini-CEX	1

Skills		
To demonstrate the ability to:		
Take a full otological/ENT history relevant to the audiovestibular system and speech	CbD, mini-CEX	1
Perform an accurate and comprehensive examination of the ear, nose, oral cavity, pharynx and head & neck including use of otoscope, operating microscope, head mirror	CbD, mini-CEX	1
Examine the ear under the microscope competently and to describe and identify any abnormalities accurately	mini-CEX	1
Identify and treat causes of otalgia, external and middle ear dysfunction	CbD, mini-CEX	1
Refer appropriately to an ENT surgeon or immunologist	CbD, mini-CEX	1
Removal of wax and debris from the external auditory canal using appropriate instruments and /or suction either under direct vision or using the operating microscope as appropriate	DOPS, mini-CEX	1
Perform ear irrigation	DOPS, mini-CEX	1
Behaviours		
To demonstrate:		
An appreciation of the relevance of a good ENT history and examination in managing patients with hearing and balance problems	CbD, mini-CEX	1
Recognition of one's own limitations and when to refer	CbD, mini-CEX	1
An appreciation of the importance of joint working with ENT surgeons in the management of patients with hearing and balance disorders	CbD, mini-CEX, MSF	1

I.3. Paediatrics and Developmental Paediatrics

To develop an appropriate and confident child/family-centred approach when seeing paediatric patients enabling assessment of the whole child

To gain confidence in performing general and developmental examinations of children

To obtain understanding of the roles of different members of the multi-disciplinary child health team

Suggested period of training: 2 to 3 sessions a week for 6 months

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The milestones of normal child development	CbD, KBA, mini-CEX	1
Child health promotion, school health, and educational provision and assessment procedures for children with special needs.	CbD, mini-CEX	1
Child safeguarding policies	CbD, mini-CEX	1,2
Local child health professionals and the service they offer	CbD	1
Issues concerning consent	CbD, mini-CEX	1,3
A broad range of causes of disability	CbD	1
The problems a very premature or sick neonate may encounter	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		

Take a relevant history and perform appropriate examination and developmental assessment on children of all ages	CbD, mini-CEX	1
Use a range of skills to communicate and play with normal and disabled children	mini-CEX	1
Recognise abnormal child development correctly	CbD, mini-CEX	1
Refer appropriately to relevant specialist(s)	CbD, mini-CEX	1,3
Liaise appropriately with members of the multi-disciplinary child health team	CbD, mini-CEX, MSF	1,3
Talk sensitively with parents and child	mini-CEX, PS	1,3
Behaviours		
To demonstrate:		
Recognition of the need for high standards of tact, empathy and confidentiality	mini-CEX, PS	1,3,4
Recognition of the role of the members of the multi-disciplinary child health team in management of the patient	CbD, mini-CEX, MSF	1,3
Recognition of the importance of consistent multi-agency working (social services, education etc.)	CbD, mini-CEX	1,3
Recognition of one's own limitations and when to refer	CbD, mini-CEX, MSF	1,2
An appreciation of the importance of reporting concerns about child safeguarding	CbD, mini-CEX	1,2

I.4. Allergy and Immunology

To recognise the role of allergy and immunological disorders in audiovestibular pathology
Suggested number of clinics: 10

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The physiology, pathomechanism and presentation of allergies and immunological disorders	CbD, KBA	1
Appropriate investigations and management of common allergies and immunological disorders that affect the audiovestibular system	CbD, KBA, mini-CEX	1
When to refer to an allergist or immunologist	CbD, mini-CEX	1
Skills		
To demonstrate the ability to:		
Suspect allergy or immunological disorder in a patient with audiovestibular disease	CbD, mini-CEX	1
Diagnose and manage allergic rhinitis appropriately	CbD, mini-CEX	1
Diagnose and manage allergic otitis externa appropriately	CbD, mini-CEX	1
Investigate for immunological disorder	CbD, mini-CEX	1
Refer appropriately	CbD, mini-CEX	1
Behaviours		
To demonstrate:		
An appreciation of the value of the multi-disciplinary team in	CbD, mini-CEX, MSF	1,3

managing patients with allergy or immunological disorders

I.5. Paediatric Neurology

To perform an accurate neurological assessment of a child

To know when to refer a patient to a paediatric neurologist or a neurosurgeon

Suggested number of clinics: 10

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The causes of paediatric central vestibular disorder	CbD, KBA.	1
The neurological disorders with neuro-otological manifestations e.g. childhood migraine/cyclical vomiting, neurofibromatosis, epilepsy	CbD, KBA, mini-CEX	1
The neurological disorders associated with auditory dysfunction and with speech & language impairment	CbD, KBA, mini-CEX	1
A broad range of causes of global developmental delay, neurodevelopmental regression, motor delay and neuromuscular disease	CbD, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take a paediatric neurological history	CbD, mini-CEX	1
Perform a full neurological examination competently	CbD, mini-CEX	1
Recognise central vestibular disorders correctly	CbD, mini-CEX	1
Recognise common neurological disorders	CbD, mini-CEX	1
Select appropriate investigations	CbD, KBA, mini-CEX	1
Select the appropriate management strategy	CbD, KBA, mini-CEX	1
Refer appropriately to a paediatric neurologist or neurosurgeon	CbD, mini-CEX	1
Talk sensitively to parents	CbD, mini-CEX, PS	1,3
Communicate effectively with paediatric neurologists and neurosurgeons and other members of the multi-disciplinary team	CbD, mini-CEX, MSF	1,3
Behaviours		
To demonstrate:		
Recognition of the need for high standards of tact, empathy and confidentiality	CbD, mini-CEX, PS	1,3
Recognition of the value of the members of the multi-disciplinary child health team in management of the patient	CbD, mini-CEX, MSF	1,3

I.6. Adult Neurology

To perform an accurate neurological assessment of a patient
To know when to refer a patient to a neurologist or a neurosurgeon
Suggested number of clinics: 20

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The causes of central vestibular disorder	CbD, KBA, mini-CEX	1
The neurological disorders with neuro-otological manifestations i.e. multiple sclerosis, posterior circulation ischemic disease, MSA, migraine, epilepsy, NF2	CbD, KBA, mini-CEX	1
The investigation protocols for the above disorders	CbD, KBA, mini-CEX	1
The pharmacological treatments and side-effects of common neurological disorders and those with neuro-otological manifestations	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take a complete neurological history	CbD, mini-CEX	1
Perform competently a full neurological examination	CbD, mini-CEX	1
Recognise central vestibular disorders correctly	CbD, mini-CEX	1
Recognise common neurological disorders i.e. multiple sclerosis, cerebrovascular disease, migraine, epilepsy	CbD, mini-CEX	1
Select appropriate investigations	CbD, KBA, mini-CEX	1
Select the appropriate management strategy	CbD, mini-CEX	1
Refer appropriately to and communicate with a neurologist or neurosurgeon	CbD, mini-CEX	1,3
Behaviours		
To demonstrate:		
Empathy regarding any disability conferred on a patient by a neurological disorder	CbD, mini-CEX, PS	1

I.7. Child and Adolescent Psychiatry

To obtain an overview of child and adolescent psychiatric and behavioural disorders
To enable appropriate referral to specialists
To develop appropriate attitudes to child and family
Suggested number of sessions: 6

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The common psychiatric disorders of children and adolescents, particularly the mental health of the deaf	CbD, mini-CEX	1
How children may present with psychiatric disorders, including those individuals dependent on sign language	CbD, KBA, mini-CEX	1

The pathogenesis of non-organic hearing loss	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take a relevant history and perform appropriate examination	CbD, mini-CEX	1
Assess mood and cognitive function as appropriate and apply this to interpretation of history	CbD, mini-CEX	1
Liaise effectively with local resources and appropriately refer for a specialist opinion	CbD, mini-CEX	1
Behaviours		
To demonstrate:		
Recognition of the need for high standards of tact, empathy and confidentiality when dealing with children and their families, especially in the context of breaking bad news	CbD, mini-CEX, MSF, PS	1
Recognition of the value of the multi-disciplinary team in management of the patient	CbD, mini-CEX, MSF	1

I.8. Child and Adolescent Psychology

To obtain an overview of child and adolescent psychological disorders

To enable appropriate referral to specialists

To develop appropriate attitudes to child and family

To understand the role of the clinical psychologist in the assessment and management of children

Suggested number of sessions: 8

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of:		
The common psychological disorders of children and adolescents, particularly the mental health of the deaf	CbD, mini-CEX	1
The pathogenesis of non-organic hearing loss	CbD, KBA, mini-CEX	1
Behavioural and psychological disorders of children and adolescents that may impact on management of hearing, balance and speech & language disorders	CbD, KBA, mini-CEX	1
The effect of audiovestibular disorders such as sudden or deteriorating hearing loss, tinnitus, hyperacusis and vertigo or imbalance on a child and the family	CbD, KBA, mini-CEX	1
The range of parental reactions which can accompany the new diagnosis of deafness in a child	CbD, KBA, mini-CEX	1
Psychometric assessment of children and its contribution to evaluating the child's learning profile and subsequent specialist input	CbD, KBA, mini-CEX	1
The value of psychological input in management of audiovestibular disorders in children	CbD, KBA, mini-CEX	1
When to prefer to a clinical or educational psychologist	CbD, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take a sensitive and relevant history from the child and family and	CbD, mini-CEX	1

perform appropriate examination		
Identify possible psychological factors within the presentation	CbD, mini-CEX	1
Liaise effectively with local resources and refer appropriately for a specialist opinion	CbD, mini-CEX	1,3
Clarify confidentiality issues with child and family	CbD, mini-CEX	1,3,4
Identify safeguarding concerns	CbD, mini-CEX	1,2
Behaviours		
To demonstrate:		
Recognition of the need for high standards of tact, empathy and confidentiality when dealing with children and their families, especially in the context of breaking bad news	CbD, mini-CEX, PS	1,4
Recognition of the role of the multi-disciplinary team in management of the patient	CbD, mini-CEX, MSF	1,3
Recognition of the need for sensitivity and confidentiality in communicating with other agencies	CbD, mini-CEX	1,3,4

I.9. Adult Psychiatry

To obtain an adequate psychiatric profile of a patient and to recognise common conditions, referring appropriately

To acquire appropriate counselling skills

Suggested number of sessions: 6

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The psychiatric disorders with audiovestibular manifestations	CbD, KBA, mini-CEX	1
The possible psychiatric morbidity of audiovestibular disorders – dizziness, tinnitus, dysacuses, deafness including sudden hearing loss	CbD, KBA, mini-CEX	1
How psychotropic medication may influence audiovestibular disorders	CbD, KBA, mini-CEX	1
The presentation of psychiatric problems in the Deaf	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Identify psychiatric disorder from the clinical presentation	CbD, mini-CEX	1
Assess mood and cognitive function as appropriate and apply this to interpretation of history	CbD, mini-CEX	1
Discuss psychiatric disorder appropriately with patient	CbD, mini-CEX	1,3,4
Refer to psychiatric services appropriately	CbD, mini-CEX	1,3
Behaviours		
To demonstrate:		
Recognition of the need for confidentiality	CbD, mini-CEX	1,4
Recognition of the need for high standards of tact and empathy	CbD, mini-CEX, PS	1,3
Recognition of the value of the multi-disciplinary team in management of the patient	CbD, mini-CEX, MSF	1,3

I.10. Adult Psychology

To obtain an adequate psychological profile of the patient and to recognise common conditions, referring appropriately

To acquire appropriate counselling skills

Suggested number of sessions: 8

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The psychological consequences and conditions associated with audiovestibular disorders – dizziness, tinnitus, dysacuses and deafness, including sudden hearing loss	CbD, KBA, mini-CEX	1
The importance of psychological management, including cognitive behavioural therapy, in the management of audiovestibular pathologies such as tinnitus and vertigo	CbD, KBA, mini-CEX	1
The presentation of psychological problems in the Deaf	CbD, KBA, mini-CEX	1
The pathogenesis and presentation of non-organic hearing loss	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Identify behavioural disturbances and psychological disorder from the clinical presentations	CbD, mini-CEX	1
Discuss psychological disorder appropriately with patient	CbD, mini-CEX, PS	1,4
Refer to psychological services appropriately	CbD, mini-CEX, MSF	1,3
Behaviours		
To demonstrate:		
Recognition of the need for confidentiality	CbD, mini-CEX	1,4
Recognition of the need for high standards of tact and empathy	CbD, mini-CEX, PS	1,3,4
Recognition of the value of the multi-disciplinary team in management of the patient	CbD, mini-CEX, PS	1,3

I.11. Paediatric Ophthalmology

To obtain an overview of ophthalmic conditions affecting children, especially those which are associated with hearing loss and balance disorders

Suggested number of clinics: 10

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The common syndromes affecting vision and the audiovestibular system	CbD, KBA	1
The syndromes affecting vision and speech & language disorders	CbD, KBA	1
The roles of other members of the team e.g. orthoptist	CbD, mini-CEX	1
Common visual difficulties such as refraction errors, their prevalence and presentation in children	CbD	1
The impact of visual disorders on a child's function when they have	CbD, mini-CEX	1

disorders of hearing or balance		
The ways in which children describe visual difficulties	CbD	1
Skills		
To demonstrate the ability to:		
Take a relevant history and perform appropriate examination	CbD, mini-CEX	1
Perform fundoscopy and interpret a cover test correctly	CbD, mini-CEX	1
Recognise eye pathology e.g. colobomata, retinal pigmentation, congenital nystagmus	CbD, mini-CEX	1
Refer appropriately for a specialist opinion	CbD, mini-CEX	1
Behaviours		
To demonstrate:		
Recognition of the value of the multi-disciplinary team in management of a child with hearing loss or balance disorders and visual difficulties	CbD, mini-CEX MSF	1,3
Recognition of the value of voluntary organisations in supporting patients with dual sensory impairments and their families	CbD, mini-CEX	1
Recognition of the effect of additional visual impairment on the deaf child and his family	CbD, mini-CEX	1
Recognition of the need for possible attendant/additional communicative support	CbD, mini-CEX	1

I.12. Adult Ophthalmology

To know how to screen a patient for visual disorder

To know when to refer a patient with visual symptoms

To clinically examine, investigate and diagnose eye movement disorder

Suggested number of clinics: 10, to be divided between general ophthalmology and Neuro-ophthalmology/eye movement disorders clinic

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The common visual disorders with associated neuro-otological manifestations and their treatment	CbD, KBA, mini-CEX	1
How to make an accurate assessment of a strabismus and latent nystagmus	CbD, mini-CEX	1
Refractive errors and astigmatism	CbD, mini-CEX	1
How visual disorders may impact on balance and how they may interfere with vestibular testing procedures	CbD, KBA, mini-CEX	1
The management of strabismus, benign intracranial hypertension and oscillopsia resulting from nystagmus and altered vestibular-ocular reflexes	CbD. KBA.	1
The eye movement disorders with associated neuro-otological manifestations and their treatment	CbD, KBA, mini-CEX	1
How eye movement disorders may impact on balance and how they may interfere with vestibular testing procedures	CbD, KBA, mini-CEX	1
The management of eye movement disorders	CbD	1

Skills		
To demonstrate the ability to:		
Take a history of visual symptoms from a patient	CbD, mini-CEX	1
Perform a full visual examination and correctly recognise optic field defects, papilloedema, conjunctivitis, choroiditis	CbD, mini-CEX	1
Recognise relevant and common visual disorders i.e. altered visual acuity, strabismus, benign intracranial hypertension, glaucoma, presby- and hypermetropia	CbD, mini-CEX	1
Perform a full eye movement examination and correctly recognise abnormalities	CbD, mini-CEX	1
Refer appropriately to and communicate with an ophthalmologist	CbD, mini-CEX	1
Behaviours		
To demonstrate:		
Empathy with patients with temporary or permanent visual disturbance	CbD, mini-CEX	1
Recognition of the value of the multi-disciplinary team in management of the patient	CbD, mini-CEX	1
Recognition of the importance of good vision to a deaf patient	CbD, mini-CEX	1

I.13. Genetics

To obtain an understanding of genetics in audiovestibular disorders

To obtain an understanding of the role of the clinical geneticist and team

Suggested number of clinics: 10

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of:		
The inheritance patterns of hearing loss	CbD, KBA, mini-CEX	1
The molecular basis of genetic deafness	CbD, KBA, mini-CEX	1
Common syndromes associated with hearing loss and how these can be identified	CbD, KBA, mini-CEX	1
Tests available for genetic conditions associated with audiovestibular disorders	CbD, KBA, mini-CEX	1
The psychological impact of genetic disorders	CbD, KBA, mini-CEX	1
Skills		
To demonstrate the ability to:		
Take a relevant history and perform appropriate examination	CbD, mini-CEX	1
Identify relevant symptoms and signs that indicate a syndromic condition	CbD, mini-CEX	1
Elicit and record correctly a detailed family tree of 3 generations	CbD, mini-CEX	1
Interpret correctly a diagnostic DNA report together with its implications	CbD, KBA, mini-CEX	1
Refer appropriately to a clinical geneticist	CbD, mini-CEX	1,3
Liaise effectively with the clinical geneticist about the management of	CbD, mini-CEX	1,3

the patient		
Communicate results of genetic investigations sensitively and in a language that families understand	CbD, mini-CEX, PS	1,3,4
Behaviours		
To demonstrate:		
Recognition of the need for high standards of tact, empathy and confidentiality	CbD, mini-CEX	1,3,4
Recognition of the nature and value of non-directive genetic counselling, so that couples are enabled to make an informed choice about their own reproductive decisions	CbD, mini-CEX	1,3
Recognition of the importance of children and young people having access to good genetic information as distinct from their parents	CbD, mini-CEX	1

I.14. Care of the Elderly

To obtain an overview of the conditions affecting the elderly including falls, multi-system disease, cognitive and visual impairment

To be able to explain the role of audiovestibular services within multi-disciplinary teams caring for the elderly

Suggested number of clinics: 10

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The common causes of falls and imbalance in the elderly	CbD, KBA, mini-CEX	1
Factors affecting the ability of the elderly to access and use services and devices, including audiological services and hearing aids	CbD, KBA.	1
The roles of other members of the multi-disciplinary teams caring for the elderly	CbD, KBA	1
Skills		
To demonstrate the ability to:		
Take a relevant history and perform appropriate examination	CbD, mini-CEX	1
Refer appropriately for a specialist opinion	CbD, mini-CEX	1
Liaise effectively with other members of multi-disciplinary team about the appropriate management of the patient	CbD, mini-CEX	1,3
Behaviours		
To demonstrate:		
Recognition of the need for high standards of tact, empathy and confidentiality	CbD, mini-CEX	1,3,4
Recognition of the impact of hearing and balance disorders on overall function in the elderly	CbD, mini-CEX	1
Recognition of the role of the multi-disciplinary team in care of the elderly	CbD, mini-CEX	1,3
Recognition of the role of family in care of the elderly	CbD, mini-CEX	1,4

J. Complementary Fundamental Competences

J.1. Personal Performance and Development

To develop high standards of personal performance
To demonstrate continuing professional development
To adopt a self-reflective, honest and responsible professional attitude

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The limitations of own professional competence and when to seek help or support	CbD, mini-CEX, MSF	1
How their own beliefs and emotions can affect their judgement and behaviour	CbD	1,2,4
The principles of Continuing Professional Development (CPD), recertification and revalidation and the importance of ensuring valid documentation of training	CbD	1,2
The principles of good time management and the need for good organisation	mini-CEX, MSF, PS	1
Tools and techniques for recognising and managing stress	CbD, mini-CEX,	1,2
Commonly used statistical methodology and the value of evidence-based information	CbD, AA	1
The principles of critical appraisal	CbD	1,2,4
The professional, legal and ethical codes of the GMC e.g. Fitness to Practice	CbD	1
The relevance and roles of professional bodies: Royal Colleges, JRCPTB, GMC, Postgraduate Deanery, BMA, specialist societies (BAAP/BAPA), medical defence organisations	CbD	1
Sources of medico-legal information	CbD	1
The process of discipline in the event of medical malpractice	CbD	1
Skills		
To demonstrate the ability to:		
Act in a courteous, polite and professional manner	MSF, PS	1,4
Maintain a high standard of patient care and adhere to the GMC guidelines for Good Medical Practice	MSF, PS	1,2,3,4
Demonstrate good time management; balancing personal roles and responsibilities: prioritise tasks, with realistic expectations of what can be completed by self and others, and delegate appropriately to ensure patient care is not compromised	mini-CEX, MSF	1,2,3
Recognise when you or others are falling behind and take steps to rectify the situation	MSF	1,2,3
Maintain a training portfolio and ensure that documentation of appraisals and assessments are up to date	CbD	1,2
Use a reflective approach to practice and show ability to critically appraise own abilities and performance, to identify gaps in knowledge and to plan and execute actions to fill them	CbD	1
Be prepared to change behaviour in the light of feedback and	CbD	1

reflection		
Actively seek opportunities and challenges for personal learning and development	CbD	1
Be able to work flexibly and deal with tasks in an effective fashion	MSF CbD	1
Demonstrate good information management particularly with regard to confidential patient data	CbD	1,4
Search and comprehend medical literature to guide reasoning, using critical appraisal to determine the value of data presented	AA, CbD	1
Contribute to the construction, review and updating of local (and national) guidelines of good practice using the principles of evidence based medicine	CbD	1,2
Engender trust so that staff feel confident about sharing difficult problems and feel able to point out deficiencies in care at an early stage	MSF,	1,2,3,4
Demonstrate good verbal and written presentation skills	AA, TO	1,3
Strive to enhance professional competence with active involvement in training and CPD activities	CbD	1
Develop good interview skills	CbD, mini-CEX	1,3
Behaviours		
To demonstrate:		
A patient-focused approach, that acknowledges the right, values and strengths of patients and the public	CbD, mini-CEX, MSF, PS	1,2,3,4
Striving for the best clinical practice (clinical effectiveness) at all times	CbD, mini-CEX, MSF, PS	1,2,3,4
Conscientiousness and flexibility with regards to work	CbD, mini-CEX, MSF	1
Recognition of the limitations of guidelines and the occasional need to practice outside these guidelines	CbD,	1
Willingness to search for evidence to support clinical decision making	CbD	1
Willingness to keep up to date with topical general medical issues, national reviews and guidelines of practice (e.g. NICE)	CbD, mini-CEX	1
Recognition of the need to use all health care resources prudently and appropriately	CbD,	1
Willingness to act as a mentor and educator	CbD, mini-CEX	1,3
Confidence and positivity in one's own professional values	CbD, mini-CEX, MSF	1
An ethical, honest and non-judgemental manner in response to patients	MSF, PS	1,3,4
Appropriate methods of ethical reasoning to come to a balanced decision where complex and conflicting issues are involved	CbD, mini-CEX, MSF	1
An acceptance of uncertainty	CbD, mini-CEX	1
An awareness of one's own behaviour and how it might impact on patients' health issues	CbD	1
Recognition of the importance of maintaining personal health	MSF	1,2
The acceptance of responsibility	CbD, mini-CEX, MSF,	1,2,3,4
Probity and the willingness to be truthful and to admit errors	CbD, mini-CEX,	1,4

	MSF, PS	
Willingness to seek advice from the Healthcare Trust, legal bodies (including defence unions), and the GMC on medico-legal matters	CbD	1

Level Descriptor	
1	Demonstrates understanding of the need to maintain high standards of personal performance and integrity
2	Developing a good and independent professional attitude. Reflective and responsible
3	Attitude towards professional standards and development is at consultant level

J.2. Clinical Governance

To understand and uphold the principles of clinical governance

Knowledge		GMP
To demonstrate knowledge of:		
The importance of ensuring patient and staff safety at all times and be aware of local safety policies	CbD, mini-CEX, MSF,	1,2
The principles of risk management and the local processes for dealing with and learning from clinical errors	CbD,	1,2
Local and national significant event reporting systems	CbD	1,2
The elements of clinical governance	CbD, MSF	1
The principles of infection control defined by the GMC	mini-CEX	1,2
The role of coding in health funding and the local process for clinical coding	mini-CEX	1,2
The local systems for information retrieval, including IT systems	mini-CEX, AA	1
The Data Protection Act and the Freedom of Information Act with regard to patient information	CbD, mini-CEX, MSF	1,4
The importance of evidence based practice in relationship to clinical effectiveness	CbD, mini-CEX	1
The role of the Caldicott Guardian within an institution, and outline the process of obtaining Caldicott approval for audit or research	AA	1,4
The procedures for seeking a patient's consent for disclosure of identifiable information	CbD, mini-CEX, MSF	1,3,4
The importance of adhering to Equality and Diversity legislation	CbD, mini-CEX, MSF	1,4
How health systems can discriminate against patients from diverse backgrounds, and how to minimise this discrimination. For example in respect of age, gender, race, culture, disability, spirituality, religion and sexuality	CbD, mini-CEX, MSF, PS	1,4
How clinical guidelines are produced	CbD	1
The local complaints procedure	CbD	1,2,4
Factors likely to lead to complaints (poor communication, dishonesty etc)	CbD, mini-CEX, MSF	1,2,3,4
How to manage dissatisfied patients or relatives	CbD, mini-CEX, MSF, PS	1,2,3,4,
Where to obtain advice and support in cases of complaint against oneself	CbD, MSF	1

Skills		
To demonstrate the ability to:		
Recognise an unsafe clinical event or an unsafe clinical environment and their possible causes, and report them appropriately	CbD, mini-CEX, MSF	1,2
Explain comprehensibly to the patient when an error has occurred	mini-CEX, MSF, PS	1,3
Maintain a high level of safety awareness and consciousness at all times	MSF	1,2
Counsel patients on matters of infection control	CbD, mini-CEX	1,2,3
Engage actively in local infection control methods	mini-CEX, MSF	1,2
Prescribe antibiotics according to local antibiotic guidelines	CbD, mini-CEX	1,2
Demonstrate good information management with regard to written information and IT systems within the context of the Data Protection Act	CbD, mini-CEX, MSF	1,4
Use and share information with the highest regard for confidentiality, and encourage such behaviour in other members of the team	CbD, mini-CEX, MSF, PS	1,3,4
Counsel patients on the need for information distribution between members of the immediate health care team	CbD, mini-CEX, MSF, PS	1,3
Contribute to processes whereby complaints are reviewed and learned from	CbD, MSF	2,4
Behaviours		
To demonstrate:		
A high level of safety awareness at all times	CbD, mini-CEX, MSF, PS	1,2
The encouragement of feedback from all members of the team on safety issues	MSF	1,2,3,4
Willingness to take action when concerns are raised about performance of member of the healthcare team and act appropriately when these concerns are voiced to you by others	MSF	1,2,3,4
Awareness of one's own limitations and to operate within them competently	CbD, mini-CEX, MSF, PS	1
Co-operation with regards to changes necessary to improve service quality and safety	MSF	1
Continued striving for improved practice and patient safety	CbD, mini-CEX, MSF, PS	1,2
Willingness to contribute to safety improvement strategies	CbD, MSF	1,2
Willingness to engage with an open no-blame culture	MSF	1
The encouragement of other staff in observing infection control principles	mini-CEX, MSF	1,2
Recognition of patient safety and medico-legal impact of poor note keeping	CbD, MSF	1,2,4
Willingness to obtain a second opinion,	CbD, mini-CEX, MSF, PS	1,2,3,4
Willingness to seek the advice of supervising consultant, legal bodies, and the GMC in the event of ethical dilemmas over disclosure and confidentiality	CbD, MSF	1,2,3,4
Respect for patients' requests for information not to be shared,	CbD, mini-CEX,	1,4

unless this puts the patients or others at risk of harm	MSF, PS	
The avoidance of withholding information relevant to proposed care or treatment in a competent adult	CbD, mini-CEX, MSF, PS	1,3
Leadership over complaint issues, recognising the impact on staff and patients	MSF	1,4
Willingness to contribute to a fair and transparent culture around complaints and errors	CbD, MSF, PS	1,2,4
Recognition of the importance of seeking evidence to support actions	CbD, mini-CEX	1
Recognition of the rights of patients, family members and carers to make a complaint	CbD, mini-CEX, MSF, PS	1,4
A questioning nature with regards to the status quo	MSF	1

Level Descriptor

1	Aware of the importance of clinical governance and own contribution to maintaining standards of care
2	Demonstrates good standards of practice and follows local guidelines
3	Good understanding of clinical governance and actively contributes as above.

J.3. Audit and Research

To understand the principles and value of audit and research

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of:		
The GMC guidance on good practice in research	CbD	1,4
The differences between audit and research	AA , CbD	1
Research principles	CbD, modular assessment, TO	1
The value of audit (developing patient care, risk management etc) and how it can be used to improve patient care	AA, CbD	1,2
The value of quality improvement projects to improve patient care	AA, QIPAT, CbD	1,2
Commonly used statistical methodologies	CbD, modular assessment	1
Principal qualitative, quantitative, bio-statistical and epidemiological research methods	CbD, modular assessment	1
The advantages and disadvantages of different study methodologies (randomised control trials, case controlled cohort etc)	CbD, modular assessment	1
The level of evidence and quality of evidence	CbD, modular assessment	1
Research methods and how to evaluate scientific publications including the use and limitations of different methodologies for collecting data	CbD, mini-CEX, modular assessment	1
Skills		
To demonstrate the ability to:		
Demonstrate the ability to write a scientific paper	CbD, mini-CEX	1
Apply for appropriate ethical research approval	CbD, mini-CEX	1

Search the medical literature including use of databases, PubMed, Medline and Cochrane reviews	CbD	1
Obtain valid consent from the patient	mini-CEX	1,3
Respect a patient's withdrawal of consent	CbD, mini-CEX	1,3,4
Articulate the need for change and its impact on people	AA	1,2,4
Design, implement and complete audit cycles	AA	1,2
Model the change expected through service improvement as a consequence of audit or quality improvement projects	AA, QIPAT	1
Contribute to local and national audit projects as appropriate (e.g. NCEPOD)	AA	1,2
Support audit within the multi-disciplinary team	AA, MSF	1,2,3
Demonstrate good verbal and written presentation skills	AA	1,3
Participate actively in a research project or clinical trial	CbD	1

Behaviours

To demonstrate:

Recognition of the ethical responsibilities to conduct research with honesty and integrity, safeguarding the interests and confidentiality of the patients and obtaining ethical approval when appropriate	CbD	2,4
The following of guidelines on ethical conduct in research and consent for research	CbD, mini-CEX	1,2,4
A positive response to outcomes of audit and quality improvement	CbD, mini-CEX	1
Willingness to be involved with research	MSF	1
Willingness to question the current practice, to research and test changes and evaluate impact on clinical practice	MSF	1
Recognition of the need for audit in clinical practice and show willingness to participate fully in audit	AA, CbD	1,2

Level Descriptor

1 Understanding of the value of audit and evidence based practice.
Able to read a scientific paper.

2 Has completed several small audits successfully.
Good understanding of research principles and statistics.

3 Has produced a piece of research.
Has published a scientific paper.
Confident in the use of audit and able to devise own projects.

J.4. Teaching and Training

To understand the principles of effective teaching and training

To demonstrate effective teaching and training skills

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
Adult learning principles relevant to medical education: • Identification of learning styles • Construction of educational objectives • Use of effective questioning technique • Varying teaching format and stimulus	mini-CEX, CbD	1
The structure of the effective appraisal interview	mini-CEX, CbD	1
The difference between appraisal and assessment	mini-CEX, CbD	1
The workplace-based assessments in use	mini-CEX, CbD	1
The appropriate local course of action to assist the failing trainee	mini-CEX, CbD	1
Mentoring	mini-CEX, CbD	1
Own personal optimal learning styles	mini-CEX, CbD	1
Skills		
To demonstrate the ability to:		
Vary teaching format and stimulus, appropriate to situation and subject	TO, mini-CEX	1,3
Demonstrate effective lecture presentation and small group teaching sessions	TO, mini-CEX	1,3
Provide effective feedback after teaching, and promote learner reflection	TO mini-CEX	1,3
Participate in strategies aimed at improving patient education e.g. talking at support group meetings	TO, mini-CEX	1,3
Act as a role model by demonstrating excellence in knowledge, skills and attitudes	MSF	1
Behaviours		
To demonstrate:		
Recognition of the importance of the role of the physician as an educator	MSF	1
Willingness to teach trainees and other health and social workers in a variety of clinical settings	MSF	1
Willingness to encourage discussions in the clinical setting for colleagues to share knowledge and understanding	MSF, TO	1,3
Willingness to participate in workplace-based assessments	MSF	1
Honesty and objectivity during appraisal and assessment	MSF	1,4
Willingness to supervise the work of less experienced colleagues	MSF	1
Level Descriptor		
1 Some teaching experience		
2 Has experience of teaching different groups.		

	Able to give an effective presentation of a case or audit. Has presented at a national conference or meeting.
3	Good teaching experience. Several effective presentations. Actively seeks teaching opportunities

J.5. Management and NHS Structure

The Medical Leadership Competency Framework, developed by the Academy of Medical Royal Colleges and the NHS Institute for Innovation and Improvement, has informed the inclusion of leadership competences in this curriculum.

To understand the management structure within the NHS
To develop skills and participate actively in clinical management

Knowledge	Assessment Methods	GMP
To demonstrate knowledge of::		
The guidance given on Management and Doctors by the GMC	mini-CEX, CbD	1
The principles of: • Clinical coding • European Working Time Directive • National Service Frameworks as applicable to Audiovestibular Medicine • Health regulatory agencies (e.g. NICE) • NHS structure and relationships • NHS finance and budgeting • Consultant contract and the contracting process • Resource allocation • The potential role of the independent sector as providers of healthcare	mini-CEX, CbD	1
The structure and function of the healthcare system as it applies to Audiovestibular Medicine	CbD	1
The principles of appointment procedures and interview techniques	MSF, mini-CEX, CbD	1
The function and responsibilities of national bodies such as DH, HCC, NICE, NPSA, NCAS, Royal Colleges and Faculties, specialty specific bodies, representative bodies, regulatory bodies, educational and training organisations		1
The debates and changes that occur in the NHS including the political, social, technical, economic, organisational and professional aspects that can impact on provision of service		1
The importance of local demographic, socio-economic and health data and its use to improve system performance		1
Business management principles: priority setting and basic understanding of how to produce a business plan		1
The requirements of running of a department or unit relevant to Audiovestibular Medicine		1
Commissioning, funding and contracting arrangements relevant to Audiovestibular Medicine		1
Relevant legislation (e.g. Equality and Diversity, Health and Safety, Employment Law) and local Human Resources policies		1

The duties, rights and responsibilities of an employer, and of a co-worker (e.g. looking after occupational safety of fellow staff)		1
Quality improvement methodologies including a range of methods of obtaining feedback from patients, the public and staff	QIPAT	1
The implications of change on systems and people		1
Project management methodology		1
The responsibilities of the various Executive Board members and Clinical Directors or leaders		1
Effective communication strategies within organisations	MSF	1
Impact mapping of service change		1
Barriers to change		1
Skills		
To demonstrate the ability to:		
Participate in managerial meetings		1
Take an active role in promoting the best use of healthcare resources, especially with regard to audiovestibular services		1
Employ new technologies appropriately, including information technology	AA, CbD, mini-CEX, TO	1
Develop protocols and guidelines and implement these	AA, CbD, MSF,	1,2
Analyse feedback and comments from patients, carers and staff, and integrate them into plans for the service		1,2
Work with clinical and non-clinical managers to develop services and to address the needs of staff and patients		1,2,3
Use clinical audit with the purpose of highlighting resources required and monitoring change	AA	1,2
Manage time and resources effectively in terms of delivering services to patients	CbD, mini-CEX, MSF, PS	1,2
Prepare rotas, delegate, organise and lead teams	MSF	1,2.3
Use and adhere to clinical guidelines and protocols, risk reporting systems, and complaints management systems	CbD, mini-CEX,MSF	1,2
Analyse information from a range of sources about performance		1,2
Take action to improve performance and reputation	MSF	1,2
Take responsibility for tackling difficult issues	CbD, mini-CEX, MSF	1,2
Build learning from experience into future plans		1,2
Report clinical incidents	CbD	1,2,4
Use evidence to identify options	CbD	1,2
Contribute to meetings which cover audit, risk reporting, patient outcomes	MSF, AA	1,2
Demonstrate awareness of the political/organisational/professional environment	MSF	1
Prepare for meetings – reading agendas, understanding minutes, action points, and background research on agenda items	MSF	1
Work collegiately and collaboratively with a wide range of people outside the immediate clinical setting	CbD, MSF	1,3

Participate in and contribute to organisational decision-making processes	MSF	1,3
Act in a manner consistent with the values and priorities of their organisation and profession and act as an advocate for the service	CbD, mini-CEX, MSF	1,2,4
Deal with complaints in a sensitive and co-operative manner		1,4
Behaviours		
To demonstrate:		
Recognition of the importance of just allocation of healthcare resources and equity of access	CbD, MSF	1
Recognition of the role of physicians as active participants in healthcare system and the development of strategic ideas	CbD, MSF	1,3
Open-mindedness to new ideas, technologies and treatments		1
Recognition of the needs and priorities of other clinical and non-clinical staff	MSF	1
Willingness to improve managerial skills (e.g. management courses) and engage in management of the service	MSF	1,2,3
Positivity regarding improvement and change, and strive for continuing improvement in delivering patient care services	MSF	1
A questioning attitude with regards to existing practice in order to improve services	MSF	1
Commitment regarding proper use of public money. Commitment to taking action when resources are not used efficiently or effectively	CbD, MSF	1,2
Constructive responses regarding the outcome of reviews, assessments or appraisals of performance	MSF	1,2,3
Willingness to take responsibility for clinical governance activities, risk management and audit in order to improve the quality of the service	AA, MSF	1,2,3
An appreciation of the importance of involving the public and communities in developing health services		1,2
Willingness to participate in decision making processes beyond the immediate clinical care setting	AA	1, 3

Level Descriptor

1	Awareness of the importance of good management of health resources Awareness of the value of clinical governance in ensuring optimal care
2	Demonstrates good time management, active participation in clinical governance Has contributed to development of guidelines and protocols Uses feedback effectively
3	Has done a Management course and can demonstrate good understanding of management of the NHS Has participated in managerial meetings Competence includes all above points

4 Learning and Teaching

4.1 The Training Programme

The organisation and delivery of postgraduate training is the statutory responsibility of the General Medical Council (GMC) which devolves responsibility for the local organisation and delivery of training to the deaneries. The deaneries support the Specialty Training Committees (STCs) which are comprised of educational supervisors representing each of the trusts which accept trainees. There are two STCs in Audiovestibular Medicine; one is the Pan-Thames STC which comprises trusts within London, Kent and Essex and this is supported by the London Deanery, and the other is the Manchester, Trent and Wales STC which is supported by the North West Deanery. Responsibility for the organisation and delivery of specialty training in Audiovestibular Medicine in each deanery is, therefore, the remit of the regional Audiovestibular Medicine STC. Each STC has a Training Programme Director who coordinates the training programme in the specialty.

The training programme will be organised by deanery STCs following submission to the JRCPTB who will seek approval from GMC. The final award of the CCT will be dependent on achieving competences as evidenced by successful completion of the curriculum. Completion of the curriculum to the required standard is dependent upon the trainee demonstrating the knowledge, skills and attitudes or behaviours by the appropriate number of adequately-completed assessments as set out in the curriculum. Training will normally take place in a range of district general hospitals, teaching hospitals and community clinics. It is important that the trainee has adequate experience of all four core areas of the curriculum at supra-specialist level as well as at specialist level in order to acquire competences.

All training in AVM should be conducted in institutions with appropriate standards of clinical governance and which meet the relevant health and safety standards for clinical areas. Training placements must also comply with the European Working Time Directive for trainee doctors.

Training posts must provide the necessary clinical exposure and also evidence that the required supervision and assessments can be achieved.

The sequence of training should ensure appropriate progression in experience and responsibility. The training to be provided at each training site is defined to ensure that, during the programme, the entire curriculum is covered and also that unnecessary duplication and educationally unrewarding experiences are avoided. However, the sequence of training should ideally be flexible enough to allow the trainee to develop a special interest.

The training rotations ensure that the trainees are given the opportunity to be exposed to all areas of clinical practice identified in the curriculum. Individual timetables ensure a balance between opportunity for individual study or research, direct training and learning through consultant-supervised clinical work as well as off-the-job training. The work is outpatient-based and trainees have access to all facilities required to gain the practical competences listed in the curriculum. Training in related topics is largely obtained by secondments.

Within the individual timetables each trainee is expected to attend at least 5 clinics (maximum 7) in Audiovestibular Medicine each week and 2 sessions for specified training objectives such as secondments or practical procedures which provide work-

based experiential learning. In addition each trainee has at least 2 sessions a week for private study, audit or research. There should be adequate time for administration. There is allowance for 30 study days per year.

The curriculum recommends, as an approximate guide only, across the 5 year programme with 30 days study leave each year:

1. 20 to 30 days study leave for taught modules in Basic Sciences taken part-time over 2 years.

2. 120 -130 days study leave for appropriate off-the-job education. This can be used in a variety of ways that include:
   - Attendance at training courses recommended and approved by the STC, postgraduate training committees or SAC
   - Attendance at national and international conferences e.g. IAPA (International Association of Physicians in Audiology), BAAP (British Association of Audiovestibular Physicians), Hallpike symposia.
   - Attendance and participation in national trainee presentations and audit (BAAP)

3. In addition there are 40 days regional study days throughout the five years which trainees are expected to attend. It is recommended that these are timetabled activities to ensure attendance. They may count towards the study leave allowance.

4.2 Teaching and Learning Methods

The curriculum will be delivered through a variety of learning experiences. Trainees will learn from practice clinical skills appropriate to their level of training and to their attachment within the department.

There will be a balance of different modes of learning from formal teaching programmes to experiential learning 'on the job'. The proportion of time allocated to different learning methods may vary depending on the nature of the attachment within a rotation.

This section identifies the types of situations in which a trainee will learn.

Learning with Peers - There are many opportunities for trainees to learn with their peers. The monthly regional training days as well as the biannual national Specialist/Specialty Registrar presentations and the biannual national audit meetings provide excellent learning opportunities for trainees. Several posts cater for more than one trainee and rotation through these posts ensures joint learning experiences. In most posts trainees are able to join medical Grand Rounds and other post-graduate meetings.

Work-based Experiential Learning - The training programme is structured to enable the trainee to build up skills and competences over the full 4 to 5 year programme. Fundamental to the acquisition of new skills based on knowledge and observation is the opportunity to practice skills under appropriate supervision. All clinical placements allow for learning by observation and then clinical practice until competence is achieved. There will be a graded increase in independent practice as well as complexity of clinical material with experience. There should be appropriate levels of clinical supervision throughout training with increasing clinical independence

and responsibility as learning outcomes are achieved. At least five outpatient clinics a week (no more than 7 clinics a week) should be undertaken throughout the 4 to 5 year training programme to ensure adequate clinical skills are acquired and maintained. Opportunities for informal and formal feedback will occur during and at the end of clinical sessions

Every patient seen provides a learning opportunity, which will be enhanced by following the patient over time, if possible: the experience of the evolution of patients' problems over time is a critical part both of the diagnostic process as well as management. Patients seen should provide the basis for critical reading and reflection of clinical problems.

Multidisciplinary work is an essential aspect of Audiovestibular Medicine. Most of the clinical work is multidisciplinary in nature and discussion of clinical problems with the other members of the team provides excellent training. The multidisciplinary meetings allow opportunity for active contribution to clinical management decision making. There are also many situations where clinical problems are discussed with clinicians in other specialties, either within the clinic or during multidisciplinary team meetings. These professional encounters provide excellent opportunities for observation of, and contribution to, clinical reasoning and joint working.

Opportunities for Concentrated Practice in Skills and Procedures
Trainees are encouraged to develop competence in a number of practical skills as outlined above. Opportunity is available in all posts for concentrated practice of most practical skills. Specific targeted training is available if needed.

Learning in Formal Situations inside and outside the Department
Trainees are expected to attend formal teaching sessions inside the department which could include lectures, tutorials and journal reviews. Situations outside the department could include post-graduate training within the trust or locally such as management skills courses, CPR training, teaching courses, child protection courses as well as training opportunities on national courses and conferences recommended by the STC, Postgraduate Training Committee, SAC or the trainer. Taught courses in Basic Sciences are part of the curriculum.

Independent Self-Directed Learning - All trainees are expected to continue personal study and are given the time in which to achieve this as well as support from the training consultants. Suggested activities include:

- Reading, including web-based material
- Maintenance of personal portfolio (self-assessment, reflective learning, personal development plan)
- Audit and research projects
- Reading journals
- Achieving personal learning goals beyond the essential core curriculum

Trainees are expected to present case studies and research at the 2 national StR presentation meetings each year as well as at other in-house, regional or national meetings. They are expected to produce evidence of research, publications and audit at ARCP reviews.

Specific Teacher Inputs
These include:

- Taught theoretical modules that cover the knowledge base for the specialty.

- Sub-specialty teaching in a clinical environment from a recognised specialist
- Audiometric and vestibular testing skills taught by an audiologist or consultant in Audiovestibular Medicine
- Various courses considered suitable for training purposes by the STC, Postgraduate Training Committees or SAC.

Courses
Trainees need to demonstrate the required outcomes (knowledge, skills and competence) in:

- Cardio Pulmonary Resuscitation – adult and child
- Child Safeguarding level 3
- Safeguarding vulnerable adults
- Dizziness
- Aetiology
- Management skills
- Equality and Diversity or Equal Opportunity training

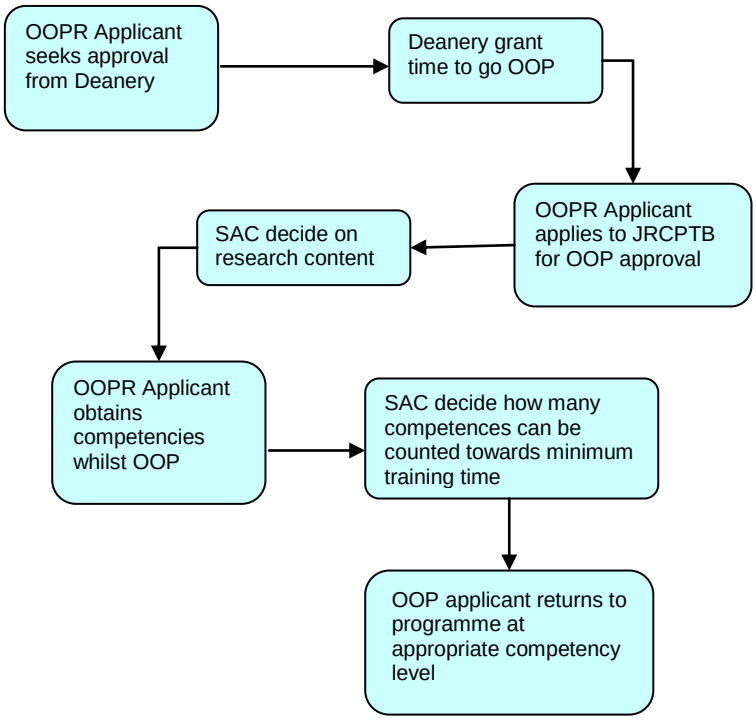
Please refer to the JRCPTB specialty webpage (www.jrcptb.org.uk/specialties/audio-vestibular-medicine) for suggested methods for demonstrating these outcomes (eg national and trust/regional courses).

4.3 Research

Trainees who wish to acquire research competences, in addition to those specified in their specialty curriculum, may undertake a research project as an ideal way of obtaining those competences. For those in specialty training, one option to be considered is that of taking time out of programme to complete a specified project or research degree. Applications to research bodies, the deanery (via an OOPR form) and the JRCPTB (via a Research Application Form) are necessary steps, which are the responsibility of the trainee. The JRCPTB Research Application Form can be accessed via the JRCPTB website. It requires an estimate of the competences that will be achieved and, once completed, it should be returned to JRCPTB together with a job description and an up to date CV. The JRCPTB will submit applications to the relevant SACs for review of the research content including an indicative assessment of the amount of clinical credit (competence acquisition) which might be achieved. This is likely to be influenced by the nature of the research (eg entirely laboratory-based or strong clinical commitment), as well as duration (eg 12 month Masters, 2-year MD, 3-Year PhD). On approval by the SAC, the JRCPTB will advise the trainee and the deanery of the decision. The deanery will make an application to the GMC for approval of the out of programme research. All applications for out of programme research must be prospectively approved.

Upon completion of the research period the competences achieved will be agreed by the OOP Supervisor, Educational Supervisor and communicated to the SAC, accessing the facilities available on the JRCPTB ePortfolio. The competences achieved will determine the trainee's position on return to programme; for example if an ST3 trainee obtains all ST4 competences then 12 months will be recognised towards the minimum training time and the trainee will return to the programme at ST5. This would be corroborated by the subsequent ARCP.

This process is shown in the diagram below:



Funding will need to be identified for the duration of the research period. Trainees need not count research experience or its clinical component towards a CCT programme but must decide whether or not they wish it to be counted on application to the deanery and the JRCPTB.

A maximum period of 3 years out of programme is allowed and the SACs will recognise up to 12 months towards the minimum training times.

4.4 Academic Training

There are some academic training posts in Audiovestibular Medicine; Academic Clinical Fellows and Clinical Lecturer. While the main emphasis of these posts is ensuring the trainee establishes good academic and research skills, nevertheless the training curriculum, as stated in this document, also needs to be covered.

Academic integrated pathways to CCT are a) considered fulltime CCTs as the default position and b) are run through in nature. The academic programmes are CCT programmes and the indicative time academic trainees to achieve the CCT is the same as the time set for non-academic trainees. If a trainee fails to achieve all the required competences within the notional time period for the programme, this would be considered at the ARCP, and recommendations to allow completion of clinical training would be made (assuming other progress to be satisfactory). An academic trainee working in an entirely laboratory-based project would be likely to require additional clinical training, whereas a trainee whose project is strongly clinically oriented may complete within the “normal” time (see the guidelines for monitoring training and progress http://www.academicmedicine.ac.uk/careersacademicmedicine.aspx). Extension of a CCT date will be in proportion depending upon the nature of the research and will

ensure full capture of the specialty outcomes set down by the Royal College and approved by GMC.
All applications for research must be prospectively approved by the SAC and the regulator, see www.jrcptb.org.uk for details of the process.

5 Assessment

5.1 The Assessment System

The purpose of the assessment system is to:

- enhance learning by providing formative assessment, enabling trainees to receive immediate feedback, measure their own performance and identify areas for development;
- drive learning and enhance the training process by making it clear what is required of trainees and motivating them to ensure they receive suitable training and experience;
- provide robust, summative evidence that trainees are meeting the curriculum standards during the training programme;
- ensure trainees are acquiring competences within the domains of Good Medical Practice*;*
- assess trainees' actual performance in the workplace;
- ensure that trainees possess the essential underlying knowledge required for their specialty;
- inform the Annual Review of Competence Progression (ARCP), identifying any requirements for targeted or additional training where necessary and facilitating decisions regarding progression through the training programme;
- identify trainees who should be advised to consider changes of career direction.

The integrated assessment system comprises both workplace-based assessments, and knowledge based assessments. Individual workplace based assessment methods are described in more detail below.

Workplace-based assessments will take place throughout the training programme to allow trainees to continually gather evidence of learning and to provide trainees with formative feedback. They are not individually summative but overall outcomes from a number of such assessments provide evidence for summative decision making. The number and range of these will ensure a reliable assessment of the training relevant to their stage of training and achieve coverage of the curriculum.

5.2 Assessment Blueprint

In the syllabus (3.4) the "Assessment Methods" shown are those that are appropriate as **possible** methods that could be used to assess each competence. It is not expected that all competences will be assessed and that where they are assessed not every method will be used.

It should be noted that the competences learned during the secondments in related specialties can be assessed by supervisors in Audiovestibular Medicine as the trainee is expected to learn competences that pertain to everyday practice in Audiovestibular Medicine, the exception being the paediatric developmental examinations which should be assessed by a paediatrician.

5.3 Assessment Methods

The following assessment methods are used in the integrated assessment system:

Examinations and Certificates
Taught modules in basic science at MSc level
Advanced Life Support Certificate (ALS) for adults and children
British Sign Language Stage 1
Child safeguarding Level 3

Trainees are required to attend taught modules in basic sciences at MSc level as identified in the syllabus and to provide evidence of satisfactory attainment in assessment of the material learnt. Suitable modules offered as part of MSc courses have been identified and mapped to the curriculum (see syllabus and appendix 2).The basic scientific knowledge needed to practise Audiovestibular Medicine is not covered at any other point in medical training to the degree required.

Trainees will normally complete the modules as part of a postgraduate certificate (60 credits) and can complete additional module(s) which will be of relevance to Audiovestibular Medicine and can be used to demonstrate knowledge in other areas of the curriculum (eg Research Methods). Trainees may opt to undertake a diploma or MSc but this is not compulsory.

A specialty knowledge-based assessment (KBA) is currently being piloted in Audiovestibular Medicine and has been mapped to the curriculum as a possible assessment method. The KBA is formative and trainees will be expected to demonstrate satisfactory progress throughout training. The KBA will be subject to a submission for future evaluation by the GMC.

Workplace-Based Assessments
- Multi-Source Feedback (MSF)
- mini-Clinical Evaluation Exercise (mini-CEX)
- Case-Based Discussion (CbD)
- Direct Observation of Practical Skills (DOPS)
- Patient Survey (PS)
- Audit Assessment (AA)
- Teaching Observation (TO)
- Practical Procedures Sign-off (PPS)
- Quality Improvement Project Assessment Tool (QIPAT)

These methods are described briefly below. More information about these methods including guidance for trainees and assessors is available in the ePortfolio and on the JRCPTB website www.jrcptb.org.uk. Workplace-based assessments should be recorded in the trainee's ePortfolio. The workplace-based assessment methods include feedback opportunities as an integral part of the assessment process, this is explained in the guidance notes provided for the techniques.

Multisource Feedback (MSF)
This tool is a method of assessing fundamental skills such as communication, leadership, team working, reliability etc, across the domains of Good Medical Practice. This provides objective systematic collection and feedback of performance data on a trainee, derived from a number of colleagues. 'Raters' are individuals with whom the trainee works, and includes doctors, administration staff, and other allied professionals. The trainee will not see the individual responses by raters, feedback is given to the trainee by the educational supervisor.

mini-Clinical Evaluation Exercise (mini-CEX)
This tool evaluates a clinical encounter with a patient to provide an indication of competence in skills essential for good clinical care such as history taking, examination and clinical reasoning. The trainee receives immediate feedback to aid learning. The mini-CEX can be used at any time and in any setting when there is a trainee and patient interaction and an assessor is available.

Case based Discussion (CbD)
The CbD assesses the performance of a trainee in their management of a patient to provide an indication of competence in areas such as clinical reasoning, decision-making and application of medical knowledge in relation to patient care. It also serves as a method to document conversations about, and presentations of, cases by trainees. The CbD should include discussion about a written record (such as written case notes, out-patient letter, discharge summary). A typical encounter might be when presenting newly referred patients in the out-patient department.

Direct Observation of Procedural Skills (DOPS)
A DOPS is an assessment tool designed to evaluate the performance of a trainee in undertaking a practical procedure against a structured checklist. The trainee receives immediate feedback to identify strengths and areas for development. This method of assessment is only applicable to a couple of procedures such as ear suction or bithermal calorics. Other practical procedures overseen by an audiologist need only to be signed off - see PPS.

Patient Survey (PS)
Patient Survey addresses issues, including behaviour of the doctor and effectiveness of the consultation, which are important to patients. It is intended to assess the trainee's performance in areas such as interpersonal skills, communication skills and professionalism by concentrating solely on their performance during one consultation.

Audit Assessment Tool (AA)
The Audit Assessment Tool is designed to assess a trainee's competence in completing an audit. The Audit Assessment can be based on review of audit documentation or on a presentation of the audit at a meeting. If possible the trainee should be assessed on the same audit by more than one assessor.

Quality Improvement Project Assessment Tool (QIPAT)
The Quality Improvement Project Assessment tool is designed to assess a trainee's competence in completing a quality improvement project. The Quality Improvement Project Assessment can be based on review of quality improvement project documentation or on a presentation of the quality improvement project at a meeting. If possible the trainee should be assessed on the same quality improvement project by more than one assessor.

Teaching Observation (TO)
The Teaching Observation tool is designed to provide structured formative feedback to trainees on their competence at teaching. The Teaching Observation can be based on any instance of formalised teaching by the trainee which has been observed by the assessor. The process should be trainee-led (identifying appropriate teaching sessions and assessors). Suitable opportunities would include presentations for BAAP trainee meetings.

Practical Procedures Sign-off (PPS)

The PPS is an assessment tool designed to evaluate the performance of a trainee in undertaking a practical procedure against a structured checklist. When trainees observe or perform the practical procedures outlined in the syllabus they will require the signature of a trainer as to their attendance/competence. The trainer may be a physician but is more likely to be a senior audiologist.

5.4 Decisions on Progress (ARCP)

The Annual Review of Competence Progression (ARCP) is the formal method by which a trainee's progression through her/his training programme is monitored and recorded. ARCP is not an assessment – it is the review of evidence of training and assessment. The ARCP process is described in 'A Reference Guide for Postgraduate Specialty Training in the UK' (the "Gold Guide" – available from www.mmc.nhs.uk). Deaneries are responsible for organising and conducting ARCPs. The evidence to be reviewed by ARCP panels should be collected in the trainee's ePortfolio.

The ARCP Decision Aid is included in section 5.5, giving details of the evidence required of trainees for submission to the ARCP panels.

It is important that educational supervisors highlight concerns about poorly performing trainees, based on their assessments throughout the preceding placement, to the Training Programme Director before the ARCP as decisions about future placements are made at this review.

5.5 ARCP Decision Aid

The table that follows includes a column for each training year which documents the targets that have to be achieved for a satisfactory ARCP outcome at the end of the training year for trainees on the 2015 Audiovestibular Medicine curriculum.

Please refer to the JRCPTB website (www.jrcptb.org.uk) for the most up to date version of the ARCP decision aid.

Curriculum topic(s)	ST3	ST4	ST5	ST6	ST7
Paediatric and Adult Audiological and Vestibular Medicine	Evidence of engagement with 20% of competencies Educational supervisor confirmation of level 2 competency in some subjects	Evidence of engagement with 40% of competencies Educational supervisor confirmation that level 2 in approx. 40% of subjects	Evidence of engagement with 60% of competencies Educational supervisor confirmation that level 2 in most areas	Evidence of engagement with 80% of competencies Educational supervisor confirmation of level 2 in approx 80% of subjects and level 3 in some subjects	Evidence of engagement with all competencies Educational supervisor confirmation that will reach level 3 competency in all areas on completion of training
Fundamental competencies	Competent at level 1 across all areas	Competent at level 2 across some areas	Competent at level 2 in most areas	Competent at level 3 across some areas	Competent at level 3 across all areas
General Medicine[1]			Completed		
Paediatrics and Developmental paediatrics[1]			Completed		
Otorhinolaryngology[1]			Completed		
Other secondments		2 Completed	4 Completed	7 Completed	10 Completed
Taught modules in Basic Sciences			Completed[2]		

Courses	Trainees must demonstrate competencies as detailed in the following (please refer to guidance on the JRCPTB website www.jrcptb.org.uk/specialties/audio-vestibular-medicine for suggested methods for meeting these outcomes (eg national, regional or local courses): • Cardio Pulmonary Resuscitation – adult and child • Child Safeguarding level 3 • Safeguarding vulnerable adults • Dizziness • Aetiology • Management skills • Equality and Diversity or Equal Opportunity training				
Multi-source feedback (MSF)		1		1	
Minimum number of mini CEX	6	6	6	6	6
Minimum number of CbD	6	6	6	6	6
Supervised learning events (SLEs) – CbDs and mini-CEX - should be performed proportionately throughout each training year by a number of different assessors across the breadth of the curriculum with structured feedback and action plans to aid the trainee's personal development					
DOPS/ PPS	20% of procedures	40% of procedures	60% of procedures	80% of procedures	100% of procedures
Patient Survey	0	1	1	0	1
Audit Assessment Tool or QIPAT	1	1	1	1	1
Teaching Observation	1	1	1	1	1
Knowledge based assessment[3]	1	1	1	1	1

Footnotes

[1] Secondments in General Medicine, Otolaryngology and Paediatrics & Developmental Paediatrics are seen as being essential as early attachments for safe practice in AVM. It is expected that when a trainee has their initial clinical placement in paediatric Audiovestibular Medicine clinics, they should have attachments in Paediatrics & Developmental Paediatrics during that period and not during a placement in adult Audiovestibular Medicine, even if this training has to be delayed to the second year of training.

[2] There may be rare occasions where a trainee has made good progress but has been unable to complete all the requirements laid down in the decision guide for the year of training. This is likely to occur if ST3 is initially in an entirely adult post or if there is a delay in commencing the taught modules on basic science. Progression from ST3 to ST4 will be at the discretion of the ARCP panel and based on progress the trainee has made with reasonable allowance made for an atypical timetable.

[3] It is expected that a trainee will complete a KBA paper every year of training during the pilot phase. The formative nature of the paper will provide feedback to trainees to help shape future training objectives. It is understood that a trainee's availability to sit every paper cannot be guaranteed and so the minimum number of KBA papers a trainee is expected to complete is 4 over the five year training period. It is important that a trainee ensures a paper is taken prior to the PYA. The returned KBA paper will be discussed with the Educational Supervisor in order to guide recommendations for future training needs. The KBA will be subject to a submission for future evaluation by the GMC.

5.6 Penultimate Year Assessment (PYA)

The penultimate ARCP prior to the anticipated CCT date will include an external assessor from outside the training programme. JRCPTB and the deanery will coordinate the appointment of this assessor. This is known as “PYA”. Whilst the ARCP will be a review of evidence, the PYA will include a face to face component. The purpose of the PYA is to ensure the trainee is on course to complete the curriculum within the expected time frame.

5.7 Complaints and Appeals

All workplace-based assessment methods incorporate direct feedback from the assessor to the trainee and the opportunity to discuss the outcome. If a trainee has a complaint about the outcome from a specific assessment this is their first opportunity to raise it.

Appeals against decisions concerning in-year assessments will be handled at deanery level, and deaneries are responsible for setting up and reviewing suitable processes. If a formal complaint about assessment is to be pursued this should be referred in the first instance to the chair of the Specialty Training Committee or Postgraduate Training Committee who is accountable to the regional deanery. Continuing concerns should be referred to the Associate Dean.

6 Supervision and Feedback

6.1 Supervision

All elements of work in training posts must be supervised with the level of supervision varying depending on the experience of the trainee and the clinical exposure and case mix undertaken. Outpatient supervision must routinely include the opportunity to personally discuss all cases. As training progresses the trainee should have the opportunity for increasing autonomy, consistent with safe and effective care for the patient.

Trainees will at all times have a named educational supervisor and clinical supervisor responsible for overseeing their education. Except in centres with more than one consultant these roles will be combined into a single role of educational supervisor.

The responsibilities of supervisors have been defined by the GMC in the document “Operational Guide for the GMC Quality Framework”. These definitions have been agreed with the National Association of Clinical Tutors, the Academy of Medical Royal Colleges and the Gold Guide team at MMC, and are reproduced below:

Educational Supervisor
A trainer who is selected and appropriately trained to be responsible for the overall supervision and management of a specified trainee’s educational progress during a training placement or series of placements. The Educational Supervisor is responsible for the trainee’s Educational Agreement.

Clinical Supervisor
A trainer who is selected and appropriately trained to be responsible for overseeing a specified trainee’s clinical work and providing constructive feedback during a training placement.

In Audiovestibular Medicine an educational supervisor is appointed for each placement. The roles of clinical and educational supervisor may then be merged.

The Educational Supervisor, when meeting with the trainee, should discuss issues of clinical governance, risk management and any report of any untoward clinical incidents involving the trainee. The Educational Supervisor should be part of the clinical specialty team. Thus if the clinical directorate (clinical director) should have any concerns about the performance of the trainee, or there are issues of doctor or patient safety, these could be discussed with the Educational Supervisor. These processes, which are integral to trainee development, must not detract from the statutory duty of the trust to deliver effective clinical governance through its management systems.

Opportunities for feedback to trainees about their performance will arise through the use of the workplace-based assessments, regular appraisal meetings with supervisors, other meetings and discussions with supervisors and colleagues, and feedback from ARCP.

6.2 Appraisal

A formal process of appraisals and reviews underpins training. This process ensures adequate supervision during training, provides continuity between posts and different supervisors and is one of the main ways of providing feedback to trainees. All appraisals should be recorded in the ePortfolio

Induction Appraisal

The trainee and educational supervisor should have an appraisal meeting at the beginning of each post to review the trainee's progress so far, agree learning objectives for the post ahead and identify the learning opportunities presented by the post. Reviewing progress through the curriculum will help trainees to compile an effective Personal Development Plan (PDP) of objectives for the upcoming post. This PDP should be agreed during the Induction Appraisal. The trainee and supervisor should also both sign the educational agreement in the e-portfolio at this time, recording their commitment to the training process.

Mid-point Review

This meeting between trainee and educational supervisor is mandatory (except when an attachment is shorter than 6 months), but is encouraged particularly if either the trainee or educational or clinical supervisor has training concerns or the trainee has been set specific targeted training objectives at their ARCP. At this meeting trainees should review their PDP with their supervisor using evidence from the e-portfolio. Workplace-based assessments and progress through the curriculum can be reviewed to ensure trainees are progressing satisfactorily, and attendance at educational events should also be reviewed. The PDP can be amended at this review.

End of Attachment Appraisal

Trainees should review the PDP and curriculum progress with their educational supervisor using evidence from the e-portfolio. Specific concerns may be highlighted from this appraisal. The end of attachment appraisal form should record the areas where further work is required to overcome any shortcomings. Further evidence of competence in certain areas may be needed, such as planned workplace-based assessments, and this should be recorded. If there are significant concerns following the end of attachment appraisal then the programme director should be informed

7 Managing Curriculum Implementation

7.1 Intended Use of Curriculum by Trainers and Trainees

This curriculum and ePortfolio are web-based documents which are available from the Joint Royal Colleges of Physicians Training Board (JRCPTB) website www.jrcptb.org.uk.

The educational supervisors and trainers can access the up-to-date curriculum from the JRCPTB website and will be expected to use this as the basis of their discussion with trainees. Both trainers and trainees are expected to have a good knowledge of the curriculum and should use it as a guide for their training programme.

Each trainee will engage with the curriculum by maintaining a portfolio. The trainee will use the curriculum to develop learning objectives and reflect on learning experiences.

All trainers are expected to have undertaken the 'Training for Trainers' courses that are available through trusts and deaneries. In both these and in their regular meetings with supervisors they will have had the importance of adhering to the curriculum reinforced.

Trainee representation on the Speciality Training Committee / Postgraduate Training Committee ensures feedback of training issues directly to the training programme director who can work through the deanery to address any training issues. In addition, the SAC reviews the quality of training across programmes through feedback from trainees (GMC surveys), and PYA reviews, and, through the training programme directors, who sit on the SAC, ensures that the curriculum is adequately covered.

7.2 Recording Progress

On enrolling with JRCPTB trainees will be given access to the ePortfolio for Audiovestibular Medicine. The ePortfolio allows evidence to be built up to inform decisions on a trainee's progress and provides tools to support trainees' education and development.

The trainee's main responsibilities are to ensure that the ePortfolio is kept up to date, to arrange assessments and ensure they are recorded, to prepare drafts of appraisal forms, to maintain their personal development plan, to record their reflections on learning and to record their progress through the curriculum.

The supervisor's main responsibilities are to use ePortfolio evidence such as outcomes of assessments, reflections and personal development plans to inform appraisal meetings. They are also expected to update the trainee's record of progress through the curriculum, write end-of-attachment appraisals and supervisor's reports.

It is expected that trainees in Audiovestibular Medicine will construct a logbook containing anonymised evidence of cases that they have managed for discussion with their educational supervisor and as evidence of curriculum coverage.

8 Curriculum Review and Updating

The specialty curriculum will be reviewed regularly. It should be regarded as a living document and the SAC will ensure that it will respond swiftly to new developments. In addition the curriculum in Audiovestibular Medicine will be subject to 3 yearly formal review within the SAC. The SAC will have available to it the trainees'

questionnaire (GMC to provide) plus specialty specific questionnaires, reports from other sources such as educational supervisors, programme directors, specialty deans, other contacts such as at PYAs which SAC members attend, service providers and patients.

Trainee involvement in curriculum review will be facilitated through the involvement of trainees on the SAC and through informal feedback during appraisal, ARCP, College meetings.

The SAC will respond rapidly to changes in health service delivery. Regular review will ensure the coming together of all the stakeholders needed to deliver an up to date modern specialty curriculum. The curriculum will indicate the last date of formal review monitoring and document revision.

Curriculum revision needs to be informed by a review of how the trained CCT specialist performs within the National Health Service. There are two aspects to this:

1. Specific to the person
Was the trained specialist able to carry out the duties of the consultant post they were appointed to, i.e. did they have the requisite skills, knowledge and attitudes required for the post, did the possession of a CCT in that specialty meet the requirements of the person specification?

2. Specific to the role
Did the specialty competences meet the requirements of the service, i.e. was the design of the specialist fit for purpose?

9 Equality and Diversity

The Royal Colleges of Physicians will comply, and ensure compliance, with the requirements of equality and diversity legislation set out in the Equality Act 2010.

The Federation of the Royal Colleges of Physicians believes that equality of opportunity is fundamental to the many and varied ways in which individuals become involved with the Colleges, either as members of staff and Officers; as advisers from the medical profession; as members of the Colleges' professional bodies or as doctors in training and examination candidates. Accordingly, it warmly welcomes contributors and applicants from as diverse a population as possible, and actively seeks to recruit people to all its activities regardless of race, religion, ethnic origin, disability, age, gender or sexual orientation.

LETB quality assurance will ensure that each training programme complies with the equality and diversity standards in postgraduate medical training as set by GMC.

Compliance with anti-discriminatory practice will be assured through:

- monitoring of recruitment processes;
- ensuring all College representatives and Programme Directors have attended appropriate training sessions prior to appointment or within 12 months of taking up post;
- LETBs must ensure that educational supervisors have had equality and diversity training (for example, an e learning module) every 3 years
- LETBs must ensure that any specialist participating in trainee interview/appointments committees or processes has had equality and diversity training (at least as an e module) every 3 years.

- ensuring trainees have an appropriate, confidential and supportive route to report examples of inappropriate behaviour of a discriminatory nature. LETBs and Programme Directors must ensure that on appointment trainees are made aware of the route in which inappropriate or discriminatory behaviour can be reported and supplied with contact names and numbers. LETBs must also ensure contingency mechanisms are in place if trainees feel unhappy with the response or uncomfortable with the contact individual.
- monitoring of College Examinations;
- ensuring all assessments discriminate on objective and appropriate criteria and do not unfairly disadvantage trainees because of gender, ethnicity, sexual orientation or disability (other than that which would make it impossible to practise safely as a physician). All efforts shall be made to ensure the participation of people with a disability in training.

10 Appendix 1

General Medical Competences

The sections of the core medical curriculum outlining the competences needed in order to progress in Audiovestibular Medicine. These competences are covered in the CMT curriculum, level 1 paediatric curriculum and by general practice training. Additional training is required for trainees from ENT surgery.

As these competences are taken from the CMT curriculum there is an additional method of assessment included, ACAT (the Acute Care Assessment Tool). This tool is designed to assess and facilitate feedback on a doctor's performance during their practice on the Acute Medical Take. It is not considered necessary for AVM trainees to be competent in the management of an acutely ill patient but if a trainee wishes to submit an ACAT as evidence of competence in the areas described below this will be accepted.

10.1. History taking

To develop progressively the ability to obtain a relevant focussed history from increasingly complex patients and challenging circumstances

To record the history accurately

To synthesise the history with the clinical examination and formulate a management plan according to the likely clinical picture

Knowledge	Assessment Methods	GMP
• Recognise the importance of different elements of the history	mini-CEX	1
• Recognise the importance of clinical (particularly cognitive impairment), psychological, social, cultural and nutritional factors particularly those relating to ethnicity, race, cultural or religious beliefs and preferences, sexual orientation, gender and disability	mini-CEX	1
• Recognise that patients do not present a history in a structured fashion and that the history may be influenced by the presence of acute and chronic medical conditions	ACAT, mini-CEX	1,3
• Know likely causes and risk factors for conditions relevant to the mode of presentation	mini-CEX	1
• Recognise that history should inform examination, investigation and management	mini-CEX	1
Skills		
• Identify and overcome possible barriers (eg cognitive impairment) to effective communication	mini-CEX	1, 3
• Manage time and draw consultation to a close appropriately	mini-CEX	1, 3
• Supplement history with standardised instruments or	ACAT, mini-CEX	1

questionnaires when relevant		
• Manage alternative and conflicting views from family, carers and friends	ACAT, mini-CEX	1, 3
• Assimilate history from the available information from patient and other sources	ACAT, mini-CEX	1, 3
• Recognise and interpret the use of non verbal communication from patients and carers	mini-CEX	1, 3
• Focus on relevant aspects of history	ACAT, mini-CEX	1, 3
Behaviours		
• Shows respect and behaves in accordance with Good Medical Practice	ACAT, mini-CEX	3, 4

Level Descriptor	
1	Obtains, records and presents accurate clinical history relevant to the clinical presentation Elicits most important positive and negative indicators of diagnosis Starts to ignore irrelevant information
2	Demonstrates ability to obtain relevant focussed clinical history in the context of limited time e.g. outpatients, ward referral Demonstrates ability to target history to discriminate between likely clinical diagnoses Records information in most informative fashion

10.2. Clinical examination

To develop progressively the ability to perform a focussed and accurate clinical examination in increasingly complex patients and challenging circumstances

To relate physical findings to history in order to establish diagnosis and formulate a management plan

Knowledge	**Assessment Methods**	**GMP**
To:		
• Understand the need for a valid clinical examination	CbD, mini-CEX	1
• Understand the basis for clinical signs and the relevance of positive and negative physical signs	ACAT, CbD, mini-CEX	1
• Recognise constraints to performing physical examination and strategies that may be used to overcome them	CbD, mini-CEX	1
• Recognise the limitations of physical examination and the need for adjunctive forms of assessment to confirm diagnosis	ACAT, CbD, mini-CEX	1
Skills		
To be able to:		
• Perform an examination relevant to the presentation and risk factors that is valid, targeted and time efficient	ACAT, CbD, mini-CEX	1
• Recognise the possibility of deliberate harm in vulnerable patients	ACAT, CbD, mini-	1, 2

	and report to appropriate agencies	CEX	
•	Interpret findings from the history, physical examination and mental state examination, appreciating the importance of clinical, psychological, religious, social and cultural factors	mini-CEX, CbD	1
•	Actively elicit important clinical findings	CbD, mini-CEX	1
•	Perform relevant adjunctive examinations including cognitive examination such as Mini Mental state Examination (MMSE) and Abbreviated Mental Test Score (AMTS)	CbD, mini-CEX	1
Behaviours			
Shows respect and behaves in accordance with Good Medical Practice		CbD, mini-CEX, MSF	1, 4
Level Descriptor			
1	• Performs, accurately records and describes findings from basic physical examination • Elicits most important physical signs • Uses and interprets findings adjunct to basic examination e.g. internal examination, blood pressure measurement, pulse oximetry, peak flow		
2	• Performs focussed clinical examination directed to presenting complaint e.g. cardiorespiratory, abdominal pain • Actively seeks and elicits relevant positive and negative signs • Uses and interprets findings adjunct to basic examination e.g. electrocardiography, spirometry, ankle brachial pressure index, fundoscopy		

10.3. Therapeutics and safe prescribing

To develop progressively ability to prescribe, review and monitor appropriate medication relevant to clinical practice including therapeutic and preventive treatments

Knowledge	Assessment Methods	GMP
To:		
• Recall indications, contraindications, side effects, drug interactions and dosage of commonly used drugs	ACAT, CbD, mini-CEX	1
• Recall range of adverse drug reactions to commonly used drugs, including complementary medicines	ACAT, CbD, mini-CEX	1
• Recall drugs requiring therapeutic drug monitoring and interpret results	ACAT, CbD, mini-CEX	1
• Outline tools to promote patient safety and prescribing, including IT systems	ACAT, CbD, mini-CEX	1, 2
• Define the effects of age, body size, organ dysfunction and concurrent illness on drug distribution and metabolism relevant to the trainees practice	ACAT, CbD, mini-CEX	1, 2
• Recognise the roles of regulatory agencies involved in drug use, monitoring and licensing (e.g. National Institute for Clinical Excellence (NICE), Committee on Safety of Medicines (CSM), and Healthcare Products Regulatory Agency and hospital	ACAT, CbD, mini-CEX	1, 2

formulary committees

Skills		
To be able to:		
• Review the continuing need for long term medications relevant to the trainee's clinical practice	ACAT, CbD, mini-CEX	1, 2
• Anticipate and avoid defined drug interactions, including complementary medicines	ACAT, CbD, mini-CEX	1
• Advise patients (and carers) about important interactions and adverse drug effects	ACAT, CbD, mini-CEX	1, 3
• Make appropriate dose adjustments following therapeutic drug monitoring, or physiological change (e.g. deteriorating renal function)	ACAT, CbD, mini-CEX	1
• Use IT prescribing tools where available to improve safety	ACAT, CbD, mini-CEX	1, 2
• Employ validated methods to improve patient concordance with prescribed medication, and recognise when a pre-existing medical condition such as cognitive impairment affects compliance	ACAT, mini-CEX	1, 3
• Provide comprehensible explanations to the patient, and carers when relevant, for the use of medicines	ACAT, CbD, mini-CEX	1, 3
Behaviours		
• Recognises the benefit of minimising the number of medications taken by a patient	ACAT, CbD, mini-CEX	1

Level Descriptor	
1	Understands the importance of patient compliance with prescribed medication Outlines the adverse effects of commonly prescribed medicines Uses reference works to ensure accurate, precise prescribing
2	Takes advice on the most appropriate medicine in all but the most common situations Makes sure an accurate record of prescribed medication is transmitted promptly to relevant others involved in an individual's care Knows indications for commonly used drugs that require monitoring to avoid adverse effects Modifies patients' prescriptions to ensure the most appropriate medicines are used for any specific condition Maximises patient compliance by minimising the number of medicines required that is compatible with optimal patient care Maximises patient compliance by providing full explanations of the need for the medicines prescribed Is aware of the precise indications, dosages, adverse effects and modes of administration of the drugs used commonly within their specialty Uses databases and other reference works to ensure knowledge of new therapies and adverse effects is up to date Knows how to report adverse effects and take part in this mechanism

10.4. Decision making and clinical reasoning

To develop progressively the ability to formulate a diagnostic and therapeutic plan for a patient according to the clinical information available

To develop progressively the ability to prioritise the diagnostic and therapeutic plan

To be able to communicate the diagnostic and therapeutic plan appropriately

Knowledge	Assessment Methods	GMP
To:		
• Define the steps of diagnostic reasoning:	ACAT, CbD, mini-CEX	1
• Interpret the history and clinical signs	ACAT, CbD, mini-CEX	1
• Conceptualise the clinical problem	ACAT, CbD, mini-CEX	1
• Generate a hypothesis within the context of clinical likelihood	ACAT, CbD, mini-CEX	1
• Test, refine and verify hypotheses	ACAT, CbD, mini-CEX	1
• Develop a problem list and an action plan	ACAT, CbD, mini-CEX	1
• Recognise how to use expert advice, clinical guidelines and algorithms	ACAT, CbD, mini-CEX	1
• Recognise the need to determine the best value and most effective treatment both for the individual patient and for a patient cohort	ACAT, CbD, mini-CEX	1, 2
• Define the concepts of disease natural history and assessment of risk	ACAT, CbD, mini-CEX	1
• Recall methods and associated problems of quantifying risk e.g. cohort studies	ACAT, CbD	1
• Outline the concepts and drawbacks of quantitative assessment of risk or benefit e.g. numbers needed to treat	ACAT, CbD	1
• Describe commonly used statistical methodology	CbD, mini-CEX	1
• Know how relative and absolute risks are derived and the meaning of the terms predictive value, sensitivity and specificity in relation to diagnostic tests	CbD, mini-CEX	1
• Know how to use expert advice, clinical guidelines and algorithms and is aware that patients may also use non-medical information sources	AA, CbD	1
Skills		
To be able to:		
• Interpret clinical features, their reliability and relevance to clinical scenarios including recognition of the breadth of presentation of common disorders	ACAT, CbD, mini-CEX	1
• Recognise critical illness and respond with due urgency	ACAT, CbD, mini-CEX	1
• Generate plausible hypothesis(es) following patient assessment	ACAT, CbD, mini-CEX	1
• Construct a concise and applicable problem list using available information	ACAT, CbD, mini-CEX	1
• Construct an appropriate management plan and communicate	ACAT, CbD, mini-	1, 3, 4

	this effectively to the patient, parents and carers where relevant	CEX	
•	Define the relevance of an estimated risk of a future event to an individual patient	ACAT, CbD, mini-CEX	1
•	Use risk calculators appropriately	ACAT, CbD, mini-CEX	1
•	Apply quantitative data of risks and benefits of therapeutic intervention to an individual patient	ACAT, CbD, mini-CEX	1
Behaviours			
	To:		
•	Recognise the difficulties in predicting occurrence of future events	ACAT, CbD, mini-CEX	1
•	Show willingness to discuss intelligibly with a patient the notion and difficulties of prediction of future events, and benefit/risk balance of therapeutic intervention	ACAT, CbD, mini-CEX	3
•	Be willing to facilitate patient choice	ACAT, CbD, mini-CEX	3
•	Show willingness to search for evidence to support clinical decision making	ACAT, CbD, mini-CEX	1, 4
•	Demonstrate ability to identify one's own biases and inconsistencies in clinical reasoning	ACAT, CbD, mini-CEX	1, 3

Level Descriptor	
1	In a straightforward clinical case: • Develops a provisional diagnosis and a differential diagnosis on the basis of the clinical evidence • Institutes an appropriate investigative plan • Institutes an appropriate therapeutic plan • Seeks appropriate support from others • Takes account of the patients wishes
2	In a difficult clinical case: • Develops a provisional diagnosis and a differential diagnosis on the basis of the clinical evidence • Institutes an appropriate investigative plan • Institutes an appropriate therapeutic plan • Seeks appropriate support from others • Takes account of the patient's wishes

10.5. Infection control

To develop the ability to manage and control infection in patients. Including controlling the risk of cross-infection, appropriately managing infection in individual patients, and working appropriately within the wider community to manage the risk posed by communicable diseases

Knowledge	Assessment Methods	GMP
To:		
• Understand the principles of infection control as defined by the GMC	ACAT, CbD, mini-CEX	1
• Understand the principles of preventing infection in high risk groups (e.g. managing antibiotic use to prevent Clostridium difficile) including understanding the local antibiotic prescribing policy	ACAT, CbD, mini-CEX	1
• Understand the role of Notification within the UK and identify the principle notifiable diseases for UK and international purposes	ACAT, CbD, mini-CEX	1
• Understand the role of the Health Protection Agency and Consultants in Health Protection (previously Consultants in Communicable Disease Control – CCDC)	CbD, ACAT	1
• Understand the role of the local authority in relation to infection control	ACAT, CbD, mini-CEX	1
Skills		
To be able to:		
• Recognise the potential for infection within patients being cared for	ACAT, CbD	1, 2
• Counsel patients on matters of infection risk, transmission and control	ACAT, CbD, mini-CEX, PS	2, 3
• Engage actively in local infection control procedures, e.g. hand hygiene	ACAT, CbD	1
• Engage actively in local infection control monitoring and reporting processes	ACAT, CbD	1, 2
• Prescribe antibiotics according to local antibiotic guidelines	ACAT, CbD, mini-CEX	1
• Recognise potential for cross-infection in clinical settings	ACAT, CbD, mini-CEX	1, 2
• Practise aseptic technique whenever relevant	DOPS	1
Behaviours		
• Encourages all staff, patients and relatives to observe infection control principles	ACAT, CbD, MSF	1, 3

Level Descriptor	
1	Always follows local infection control protocols including washing hands before and after seeing all patients Is able to explain infection control protocols to students and to patients and their relatives. Always defers to the nursing team about matters of ward management Is aware of infections of concern – including MRSA and C difficile Is aware of the risks of nosocomial infections Understands the links between antibiotic prescription and the development of nosocomial infections Always discusses antibiotic use with a more senior colleague
2	Demonstrates the ability to perform simple clinical procedures utilising aseptic technique Manages simple common infections in patients using first-line treatments.

	Communicates effectively to the patient the need for treatment and any prevention messages to prevent re-infection or spread Liaises with diagnostic departments in relation to appropriate investigations and tests

10.6. Managing long term conditions and promoting patient self-care

Knowledge	Assessment Methods	GMP
To:		
• Recall the natural history of diseases that run a chronic course	ACAT, CbD, mini-CEX	1
• Define the role of rehabilitation services and the multi-disciplinary team to facilitate long-term care	ACAT, CbD, mini-CEX	1
• Outline the concept of quality of life and how this can be measured	CbD	1
• Outline the concept of patient self-care	CbD, mini-CEX	1
• Know, understand and be able to compare medical and social models of disability	CbD	1
• Understand the relationship between local health, educational and social service provision including the voluntary sector	CbD	1
• Understand the experience of adolescents and young adults with long term conditions and/or disablility diagnosed in childhood requiring transition into adult services and the potential implications on psychological, social and educational/vocational development (including awareness of the Disability Discrimination Act) and how developmental stage may impact on self management	CbD, mini-CEX	1
Skills		
To be able to:		
• Develop and agree a management plan with the patient (and carers), ensuring comprehension to maximise self-care within care pathways when relevant	ACAT, CbD, mini-CEX	1, 3
• Develop and sustain supportive relationships with patients with whom care will be prolonged	CbD, mini-CEX	1, 4
• Provide effective patient education, with support of the multi-disciplinary team	ACAT, CbD, mini-CEX	1, 3, 4
• Promote and encourage involvement of patients in appropriate support networks, both to receive support and to give support to others	CbD, PS	1, 3
• Encourage and support patients in accessing appropriate information	CbD, PS	1, 3
• Provide the relevant and evidence based information in an appropriate medium to enable sufficient choice, when possible	CbD, PS	1, 3

Behaviours		
• Show willingness to act as a patient advocate	ACAT, CbD, mini-CEX	3, 4
• Recognise the impact of long term conditions on the patient, family and friends	ACAT, CbD, mini-CEX	1
• Ensure equipment and devices relevant to the patient's care are discussed	ACAT, CbD, mini-CEX	1
• Put patients in touch with the relevant agency including the voluntary sector from where they can procure items as appropriate	ACAT, CbD, mini-CEX	1, 3
• Provide the relevant tools and devices when possible	ACAT, CbD, mini-CEX	1, 2
• Show willingness to facilitate access to the appropriate training and skills in order to develop the patient's confidence and competence to self care	ACAT, CbD, mini-CEX, PS	1, 3,4
• Show willingness to maintain a close working relationship with other members of the multi-disciplinary team, primary and community care	ACAT, CbD, mini-CEX, MSF	3
• Recognise and respect the role of family, friends and carers in the management of the patient with a long term condition	ACAT, CbD, mini-CEX, PS	1,3

Level Descriptor	
1	Describes relevant long term conditions Understands the meaning of quality of life Is aware of the need for promotion of patient self care Helps the patient with an understanding of their condition and how they can promote self management
2	Demonstrates awareness of management of relevant long term conditions Is aware of the tools and devices that can be used in long term conditions Is aware of external agencies that can improve patient care Teaches the patient and works within the team to promote excellent patient care

10.6 Relationships with patients and communication within a consultation

Communicate effectively and sensitively with patients, relatives and carers

Knowledge	Assessment Methods	GMP
To:		
• Structure an interview appropriately	ACAT, CbD, mini-CEX, PS	1
• Understand the importance of the patient's background, culture, education and preconceptions (ideas, concerns, expectations) to the process	ACAT, CbD, mini-CEX, PS	1
• Understand the importance of the developmental stage when communicating with adolescents and young adults	ACAT, CbD, mini-CEX, PS	1

Skills		
To be able to:		
• Establish a rapport with the patient and any relevant others (e.g. carers)	ACAT, CbD, mini-CEX, PS	1, 3
• Listen actively and question sensitively to guide the patient and to clarify information in particular with regard to matters that they may find it difficult to discuss, e.g. domestic violence or other abuse	ACAT, mini-CEX, PS	1, 3
• Identify and manage communication barriers (eg cognitive impairment, speech and hearing problems), tailoring language to the individual patient and using interpreters when indicated	ACAT, CbD, mini-CEX, PS	1, 3
• Deliver information compassionately, being alert to and managing their and your emotional response (anxiety, antipathy etc)	ACAT, CbD, mini-CEX	1, 3,4
• Use, and refer patients to, appropriate written and other information sources	ACAT, CbD, mini-CEX	1, 3
• Check the patient's/carer's understanding, ensuring that all their concerns/questions have been covered	ACAT, CbD, mini-CEX	1, 3
• Indicate when the interview is nearing its end and conclude with a summary	ACAT, CbD, mini-CEX	1, 3
• Make accurate contemporaneous records of the discussion	ACAT, CbD, mini-CEX	1, 3
• Manage follow-up effectively	ACAT, CbD, mini-CEX	1
Behaviours		
• Approach the situation with courtesy, empathy, compassion and professionalism, especially by appropriate body language - act as an equal not a superior	ACAT, CbD, mini-CEX, MSF, PS	1, 3, 4
• Ensure that the approach is inclusive and patient centred and respect the diversity of values in patients, carers and colleagues	ACAT, CbD, mini-CEX, MSF, PS	1, 3
• Be willing to provide patients with a second opinion	ACAT, CbD, mini-CEX, MSF, PS	1, 3
• Use different methods of ethical reasoning to come to a balanced decision where complex and conflicting issues are involved	ACAT, CbD, mini-CEX, MSF	1, 3
• Be confident and positive in one's own values	ACAT, CbD, mini-CEX	1, 3

Level Descriptor	
1	Conducts simple interviews with due empathy and sensitivity and writes accurate records thereof
2	Conducts interviews on complex concepts satisfactorily, confirming that accurate two-way communication has occurred

10.7 Breaking bad news

To recognise the fundamental importance of breaking bad news. To develop strategies for skilled delivery of bad news according to the needs of individual patients and their relatives /

carers		
Knowledge	**Assessment Methods**	**GMP**
To know:		
• Recognise that the way in which bad news is delivered irretrievably affects the subsequent relationship with the patient	ACAT, CbD, mini-CEX, MSF, PS	1
• Recognise that every patient may desire different levels of explanation and have different responses to bad news	ACAT, CbD, mini-CEX, PS	1, 4
• Recognise that bad news is confidential but the patient may wish to be accompanied	ACAT, CbD, mini-CEX, PS	1
• Recognise that breaking bad news can be extremely stressful for the doctor or professional involved	ACAT, CbD, mini-CEX	1, 3
• Understand that the interview may be an educational opportunity	ACAT, CbD, mini-CEX	1
• Recognise the importance of preparation when breaking bad news by: ○ Setting aside sufficient uninterrupted time ○ Choosing an appropriate private environment ○ Having sufficient information regarding prognosis and treatment ○ Structuring the interview ○ Being honest, factual, realistic and empathic ○ Being aware of relevant guidance documents	ACAT, CbD, mini-CEX	1, 3
• Understand that “bad news” may be expected or unexpected	ACAT, CbD, mini-CEX	1
• Recognise that sensitive communication of bad news is an essential part of professional practice	ACAT, CbD, mini-CEX	1
• Understand that “bad news” has different connotations depending on the context, individual, social and cultural circumstances	ACAT, CbD, mini-CEX, PS	1
• Recall that a post mortem examination may be required and understand what this involves	ACAT, CbD, mini-CEX, PS	1
• Recall the local organ retrieval process	ACAT, CbD, mini-CEX	1
Skills		
To:		
• Demonstrate to others good practice in breaking bad news	CbD, DOPS, MSF	1, 3
• Involve patients and carers in decisions regarding their future management	CbD, DOPS, MSF	1, 3, 4
• Encourage questioning and ensure comprehension	CbD, DOPS, MSF	1, 3
• Respond to verbal and visual cues from patients and relatives	CbD, DOPS, MSF	1, 3
• Act with empathy, honesty and sensitivity avoiding undue optimism or pessimism	CbD, DOPS, MSF	1, 3
• Structure the interview e.g. ○ Set the scene ○ Establish understanding	CbD, DOPS, MSF	1, 3

○ Discuss; diagnosis, implications, treatment, prognosis and subsequent care		
Behaviours		
• Take leadership in breaking bad news	CbD, DOPS, MSF	1
• Respect the different ways people react to bad news	CbD, DOPS, MSF	1

Level Descriptor	
1	Recognises when bad news must be imparted Recognises the need to develop specific skills Requires guidance to deal with most cases
2	Able to break bad news in planned settings Prepares well for interview Prepares patient to receive bad news Responsive to patient reactions

10.8. Health promotion and public health

To develop progressively the ability to work with individuals and communities to reduce levels of ill health, remove inequalities in healthcare provision and improve the general health of a community.

Knowledge	**Assessment Methods**	**GMP**
To know:		
• Understand the factors which influence the incidence of and prevalence of common conditions	CbD, mini-CEX	1
• Understand the factors which influence health – psychological, biological, social, cultural and economic especially work and poverty	CbD, mini-CEX	1
• Understand the influence of lifestyle on health and the factors that influence an individual to change their lifestyle	CbD, mini-CEX	1
• Understand the purpose of screening programmes and know in outline the common programmes available within the UK	CbD, mini-CEX	1
• Understand the relationship between the health of an individual and that of a community	CbD, mini-CEX	1
• Know the key local concerns about health of communities such as smoking and obesity	CbD, mini-CEX	1
• Understand the role of other agencies and factors including the impact of globalisation in protecting and promoting health	CbD, mini-CEX	1
• Demonstrate knowledge of the determinants of health worldwide and strategies to influence policy relating to health issues including the impact of the developed world strategies on the third world	CbD, mini-CEX	1
• Outline the major causes of global morbidity and mortality and	CbD, mini-CEX	1

effective, affordable interventions to reduce these		
• Recall the effect of addictive behaviours, especially substance misuse and gambling, on health and poverty	CbD, mini-CEX	1
• Recognise the links between health and work, including the positive benefits of work on well-being, and develop skills to enable patients with illness to remain at work or return to work whenever appropriate	CbD, mini-CEX	1
Skills		
To be able to:		
• Identify opportunities to prevent ill health and disease in patients	CbD, mini-CEX, PS	1, 2
• Identify the interaction between mental, physical and social wellbeing in relation to health	CbD, mini-CEX	1
• Counsel patients appropriately on the benefits and risks of screening	CbD, mini-CEX, PS	1, 3
• Identify opportunities to promote changes in lifestyle and other actions which will positively improve health, e.g. to encourage smoking cessation and / or weight reduction.	CbD, mini-CEX	1,3
• Work collaboratively with other agencies, e.g. occupational health services, to improve the health of individual patients and communities, and help patients to remain at or return to work whenever appropriate.	CbD, mini-CEX	1,3
• Encourage patients to remain at or return to work whenever appropriate	CbD, mini-CEX	1,3
• Work collaboratively with others to encourage patients to safely reduce their weight if obese and increase their physical activity / exercise	CbD, mini-CEX	1,3
• Provide information to an individual about mechanisms to support them remaining at work or returning to work, and offering encouragement that they should do so whenever possible	CbD, mini-CEX	1,3
• Engage with local or regional initiatives to support patients remaining at or returning to work	CbD, mini-CEX	1,3
• Encourage patients to remain at or return to work whenever appropriate	CbD, mini-CEX	1,3
Behaviours		
• Engage in effective team-working around the improvement of health	CbD, MSF	1, 3
• Encourage, where appropriate, screening to facilitate early intervention	CbD	1

Level Descriptor	
1	Discuss with patients and others factors which could influence their personal health Maintains own health and is aware of own responsibility as a doctor for promoting healthy approach to life
2	Communicates to an individual information about the factors which influence their personal health Supports an individual in a simple health promotion activity (e.g. smoking cessation, weight

	reduction, increasing physical activity / exercise)