JRCPTB

Joint Royal Colleges of Physicians Training Board

Audiovestibular Medicine Training Curriculum

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ROYAL COLLEGE of PHYSICIANS of EDINBURGH

ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF GLASGOW

Royal College of Physicians

Contents

1. Introduction

Audiovestibular Medicine (AVM) is the branch of medicine that deals with hearing and balance in patients across the age range from birth to old age.

Societal needs

The curriculum underpinning the training in this specialty aims to provide a structure that will train doctors who are competent in diagnosing and managing hearing and balance conditions that are often highly disabling, with a significant impact on people's lives.

The epidemiology is well described in the RCP document 'Hearing and Balance Disorders, Achieving excellence in diagnosis and management' 2007. Hearing and balance problems affect all ages from new-born to the elderly. The above report states that 'the social, occupational and economic costs of hearing and balance disorders on the individual, society and health services are profound'. Hearing loss can affect people of all ages and is the most common sensory impairment in humans, affecting 5% of individuals in industrialised nations (around 9,000,000 people in UK). In addition to impairing communication, hearing loss can also have an impact on an individual's work and lead to mental health issues. There is also a recently recognised link between hearing loss and dementia and stroke. More than one in 1000 newborn babies has a permanent hearing loss, with another one in 1000 acquiring sensorineural loss before the age of 16 years. This loss can affect development of communication, behaviour, social skills, friendships and education. It can also be the first sign of a serious medical condition. Therefore, every deaf child should have a medical aetiological workup. Every screening team must have an appropriately trained and competent doctor, preferably at consultant level, to take the lead and be responsible for providing medical input at every stage of the care pathway (BAAP guidelines). Timely aetiological investigations and developmental assessments are required according to national guidelines and local protocols. The Report of the Children and Young People's Health Outcomes Forum 2013/14 in chapter 8 highlights 'All those working with children and young people should have the right knowledge and skills to meet their specific needs'. The curriculum for Audiovestibular Medicine training includes training in Developmental Paediatrics and encompasses the same generic competences as expected of training in Paediatrics. In addition, we focus on transition and transfer of audiovestibular care in adolescents. About 2 years of the training programme is spent in dedicated paediatric Audiovestibular Medicine training.

There are other complex hearing conditions that also need specialist medical input as they are not recognised by conventional audiometry, eg auditory processing disorder. This can affect 2 to 3% of children and may result in under achievement in school and college. It is also present in adults. This population require highly trained doctors to contribute to the assessment. Audiovestibular Physicians are specifically trained in this area. Patients with

dysacuses e.g. tinnitus also frequently benefit from medical input. Tinnitus affects up to 30% of the population, with 5% reporting the complaint as troublesome. For 1% tinnitus is severe enough to have a significant effect on their quality of life. Identification of treatable causes and management of symptoms are important aspects of medical input as is identification of attendant psychiatric or psychological problems. This identification enables the development of a habilitation/rehabilitation management plan that meets the individual needs of the patient.

In children, dizziness and balance problems need to be viewed within the context of continually developing systems. Dizziness is prevalent in 8-18% of children (Niemensivu, 2006). By the age of 60, one third of the population will have had a balance disorder. Dizziness is a frequent complaint in the elderly, and the prevalence of balance problems at age 70 has been reported in 36% of women and 29% of men, increasing with advanced age to 45–51% at ages 88–90 (Jonsson et al 2004). Dizziness and/or imbalance are the most common reason for a visit to a doctor by patients over the age of 65 years and a major risk factor predisposing to falls among the elderly. Vestibular causes contribute and should be excluded (Ahearn and Umapathy 2015).

With more pre-term survivors with complex profiles, because of advances in medicine, a growing number of people with multiple comorbidities and the expected increase in the elderly population, there will be a greater number of patients requiring medical care for hearing and balance disorders expected in the future.

The cost of hearing and balance disorders to the individual and the economy is evidenced by the cost of falls on NHS and social services (£981 million), early retirement and time from work and repeated medical attendances/costly investigations. It is recognised that effective intervention in the management of deaf children improves their educational achievements and will increase their earning capacity. In addition provision of a safer service for patients reduces morbidity and can lead to a reduction in litigation for trusts because of a more accurate and timely diagnosis in cases such as those of ototoxicity, hyperbilirubinaemia and early identification of cytomegalovirus, intracranial tumours and chronic vertigo. Mental health issues are often linked with balance disorders, as well as hearing loss and tinnitus, and timely diagnosis and management can reduce the cost burden of psychological care for these conditions.

Professional and Service Needs

Audiovestibular Physicians differ from audiologists, who are non-medical staff with training in providing accurate hearing measurement, technical aspects of auditory rehabilitation (i.e. hearing aids) and technological assessment of balance. However, frequently hearing and balance impairments are not discrete conditions and have an underlying medical cause with

other medical and developmental implications. With the correct diagnosis, many of these disorders are manageable if not treatable, leading to improved quality of life and reduced cost from reduced morbidity. The Audiovestibular Physicians work with multidisciplinary teams that may include audiologists, hearing therapists, teachers of the deaf, speech and language therapists, psychologists, specialist nurses, physiotherapists, paediatricians and ENT surgeons within specialist and supra-specialist centres. They take complex referrals from ENT surgeons, paediatricians, neurologists, audiologists, care of the elderly physicians, general and acute physicians and general practitioners

Audiovestibular Medicine remains the only discipline or specialty where the training equips the doctor to fully understand the underlying pathogenesis of disorders in hearing and balance including tinnitus, dysacuses, dizziness and vertigo, thus allowing full investigation, diagnosis and management of the underlying causes which may have significant morbidity, as well as the resultant disability. Disorders of balance are primarily medical or neurological (not otological) in aetiology and require a medical opinion for full evaluation. More than 95% of hearing and balance disorders need non-surgical intervention, illustrating the need for robust medical services for these problems. The Audiovestibular Physician is trained to identify comorbidities in both children and adults and additional developmental issues in children ensuring that management optimises the individual's potential.

2. Purpose

2.1 Purpose of the curriculum

The purpose of the Audiovestibular Medicine curriculum is to produce consultants with the generic professional and specialty specific capabilities needed to manage adult and paediatric patients presenting with a wide range of acute and chronic hearing and balance symptoms and conditions including dizziness, imbalance, hearing loss, tinnitus, hyperacusis, auditory processing difficulties, misophonia, speech disorders, abnormalities in eye movement and secondary psychological sequelae. Training therefore supports prevention: primary in the identification of aetiological factors, secondary by early identification and management of impairment to prevent activity limitation and tertiary through habilitation/ rehabilitation to prevent participation restriction. Prevention of hearing and balance disorders and their impact on the population is essential for the future health care provision. Timely diagnosis and management is better for the individual and reduces cost for society.

Despite the prevalence of hearing and balance disorders, the provision of medical care for these problems has remained a low priority for the NHS. Accordingly, there are inadequate

numbers of medical and non-medical personnel, and there is limited availability of test facilities and poor access nationally to the range of treatment and rehabilitation options.

There are, at present, 57 consultant Audiovestibular Physicians in England, 3 in Wales and 1 in Scotland of whom approximately 70% work full time and 40 % work in adult practice. The majority of service provision is outpatient based. Currently the distribution of Audiovestibular Physicians is patchy throughout England with some areas not providing the service, namely the North-East, the South-West, East of England, and the North-West (adult services), West Midlands (adult services). Although few in number, Consultants in Audiovestibular Medicine play key roles in setting standards for the medical and audiological care of patients with hearing and balance problems in the UK. A 1:250.000 population served by each whole-time equivalent audiovestibular consultant has previously been recommended by the RCP. There is less than one audiovestibular physician per million population in England. As a consequence, the majority of patients presenting with audiovestibular symptoms will not be seen by a service with the appropriate medical expertise, leading to limited diagnosis and treatment of relevant medical conditions and inappropriate, unnecessary and expensive investigations and additional referrals. The US National Institute of Health reports that a patient with peripheral vestibular pathology sees a mean of 4.5 physicians before receiving a correct diagnosis. A similar finding is reported from specialist balance centres in the UK where consultant Audiovestibular Physicians are practising (results of a British Association of Audiovestibular Physicians survey). Clearly, long delays in vestibular diagnosis result in delays returning to work and thus are an avoidable cost in social security support.

It is important to deliver the right care to the patient and to offer timely and effective management which should be both audiological and medical. It is expected that, with enhanced training and knowledge within the field, particularly of the audiologists, there will be a greater demand for the medical aspects of hearing and balance disorders as awareness of the complexity of these conditions increases. This includes:

- Increasing knowledge of pathology leading to hearing and balance problems.
- Increase in demand, due to aging population with an increased tendency to fall and an increase in long-term conditions and co-morbidities.
- An increase in the national birth rate and an increase in survival of pre-term infants with multiple co-morbidities including hearing and auditory processing disorders.

These will lead to improved quality of care for the individual with a speedier identification of the underlying pathology and co-morbidities or additional needs and appropriate medical management which will lead to reduced morbidity.

Re-design of training in Audiovestibular Medicine

The Shape of Training (SoT) review was a catalyst for reform of postgraduate training of all doctors to ensure it is more patient focused, more general holistic and with more flexibility of career structure.

Audiovestibular Medicine will be a group 2 specialty and a new model is proposed for Audiovestibular medicine training consisting of an indicative four-five years specialist training period after the initial two foundation years and a core programme, leading to a CCT in AVM. The new curriculum will follow the General Medical Council's (GMC) requirements around general professional capabilities (GPCs).

The proposed model of training will

- Strengthen training
- Help address the issue of CCT qualified work force gaps

Entry to Audiovestibular Medicine is at ST3 level. As part of the holistic ethos of the specialty, we accept entry from a number of routes. Entry is possible following successful completion of both a foundation programme and core training programme (2 years of IM Stage 1, Acute Care Common Stem – Acute Medicine, General Practice Training or Level 1 Paediatric training). Entry is also possible for trainees in otolaryngology who have obtained MRCS (ENT) or MRCS plus DOHNS (Diploma in Otolaryngology - Head and Neck Surgery) and will acquire core medical competencies during ST3 and ST4. Only two deaneries, the London and the North Western Deanery, offer training in Audiovestibular Medicine.

There are training slots in the Pan-Thames London Deanery and in the North Western Deanery, which rotates between Greater Manchester, Cardiff, Mersey and Nottingham.

The curriculum for Audiovestibular Medicine training was developed with input from trainees, service representatives, lay persons and consultants who are actively involved in delivering teaching and training across the UK.

The Audiovestibular Medicine curriculum aims to train a doctor to consultant level who is competent in medical assessment, diagnosis and treatment of hearing and balance disorders within a framework that takes a holistic patient focused approach i.e. takes into account other medical co-morbid conditions and the individual's psychosocial needs and environment. The curriculum also aims to ensure that the doctor in Audiovestibular Medicine is competent to provide leadership within a service and the tools to be able to input to strategic planning of services, teaching and training, as well as research.
Doctors in training will learn in a variety of settings using a range of methods, including workplace-based experiential learning, formal postgraduate teaching and simulation-based education. The assessments will measure a trainee's ability to progress from working

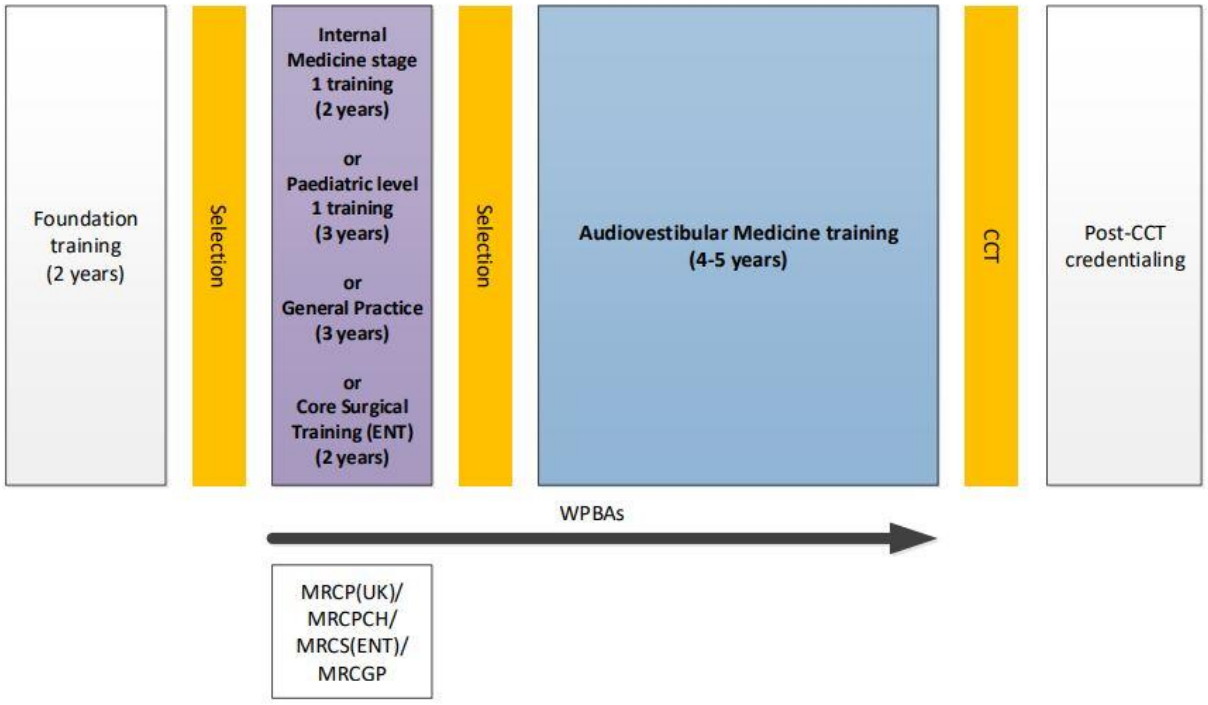
competently under supervision to working independently with the number of assessments guided by the trainee's progress.

This purpose statement has been endorsed by the GMC's Curriculum Oversight Group and confirmed as meeting the needs of the health services of the countries of the UK.

2.2 High level learning outcomes – capabilities in practice (CiPs)

Learning outcomes – capabilities in practice (CiPs)
Generic CiPs
1. Able to successfully function within NHS organisational and management systems 2. Able to deal with ethical and legal issues related to clinical practice 3. Communicates effectively and is able to share decision making, while maintaining appropriate situational awareness, professional behaviour and professional judgement 4. Is focused on patient safety and delivers effective quality improvement in patient care 5. Carrying out research and managing data appropriately 6. Acting as a clinical teacher and clinical supervisor
Specialty CiPs
1. Able to formulate a holistic audiovestibular analysis and prioritise 2. Able to diagnose and manage audiovestibular and co-morbid medical conditions 3. Diagnosis and medical management of hearing disorders and dysacuses across all ages of adults within a holistic biopsychosocial framework 4. Diagnosis and medical management of vestibular disorders across all ages of adults within a holistic biopsychosocial framework 5. Diagnosis and medical management of hearing disorders and dysacuses in neonates and children within a holistic biopsychosocial framework 6. Diagnosis and medical management of vestibular disorders in neonates and children within a holistic biopsychosocial framework 7. Able to work in multidisciplinary Audiovestibular Medicine teams 8. Managing and leading multidisciplinary Audiovestibular Medicine service

2.3 Training pathway



2.4 Duration of training

As a group 2 specialty, training in Audiovestibular Medicine will comprise an indicative 2 years of Internal Medicine Training followed by 4-5 years of specialty training.

The specialty also accepts trainees who have completed level 1 Paediatric training, General Practice training and ENT training and will continue to do so.

There will be options for those trainees who demonstrate exceptionally rapid development and acquisition of capabilities to complete training more rapidly than the current indicative time although it is recognised that clinical experience is a fundamental aspect of development as a good physician (guidance on completing training early will be available on the JRCPTB website). There may also be a small number of trainees who develop more slowly and will require an extension of training in line the Reference Guide for Postgraduate Specialty Training in the UK (The Gold Guide).

2.5 Flexibility and accreditation of transferable capabilities

The curriculum incorporates and emphasises the importance of the generic professional capabilities (GPCs). GPCs will promote flexibility in postgraduate training as these common capabilities can be transferred from specialty to specialty. In addition, the generic CiPs will be shared across all physicianly curricula supporting flexibility for trainees to move between

these specialties without needing to repeat aspects of training. The curriculum supports the accreditation of transferrable competencies (using the Academy framework).

Audiovestibular Medicine training is broad and multifaceted to provide doctors with a variety of hospital, community and academic workplace experience during ST3-ST7 programme. Sign off with CCT ensures multi-skilled physicians with the ability to apply a holistic approach to patient management and rehabilitation. Patients can thus be helped to return to work or usual activities of daily living.

Interdependencies exist between AVM curriculum and various professions who work closely in teams:

- Paramedical staff including audiologists, hearing therapists, psychologists, speech and language therapists, education sector advisory teachers of hearing impaired. AVM works closely with these disciplines to provide the medical component of care and often leadership and management of the multidisciplinary team.

- There are also interdependencies with other medical specialties. The curriculum supports flexibility and significant transferable knowledge and skills across related specialties. These include general internal medicine, care of older people, ear, nose, and throat surgery, paediatrics and developmental paediatrics, paediatric and adult neurology and other neuroscience specialties, child and adolescent psychiatry, adult psychiatry, immunology and allergy, paediatric and adult ophthalmology, genetics. It is well-established current practice that Audiovestibular Physician trainees undertake targeted placements with the above specialties to achieve the curriculum learning outcomes. Increased flexibility is possible and yet to be developed.

The specialty has considerable scope for research, particularly clinical research, and doctors are encouraged to study for diploma or MSc in Audiovestibular Medicine and are supported in studying for higher research degrees. By catering to the clinical needs of complex audiovestibular populations within multidisciplinary and academic structures, Audiovestibular Medicine is in a unique position to deliver applied clinical research that translates basic science findings and novel technological developments into clinical practice; implementing new technologies in diagnostics and therapeutics for patient benefit.

The PG Certificate in Audiovestibular Medicine covers the essential scientific knowledge in physics of sound, signalling, acoustics, anatomy, biochemistry and physiology of the ear, diagnostics, needed to underpin trainees' clinical practice. The PGCert ensures trainees have the knowledge to meet the learning outcomes detailed in the curriculum and for delivering equitable and high quality care in a resource limited setting.

The academic lead on the Audiovestibular Medicine SAC is involved in checking the suitability of the currently available PGCert course content and Masters level standard of teaching.

Alternative knowledge based assessments may be accepted provided they have proven educational equivalence to the PG Cert and have been approved by the Audiovestibular Medicine SAC and the GMC.

2.6 Less than full time training

Trainees are entitled to opt for less than full time training programmes. Less than full time 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.

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 in accordance with the Gold Guide.

2.7 Generic Professional Capabilities and Good Medical Practice

The GMC has developed the Generic professional capabilities (GPC) framework[1] with the Academy of Medical Royal Colleges (AoMRC) to describe the fundamental, career-long, generic capabilities required of every doctor. The framework describes the requirement to develop and maintain key professional values and behaviours, knowledge, and skills, using a common language. GPCs also represent a system-wide, regulatory response to the most common contemporary concerns about patient safety and fitness to practise within the medical profession. The framework will be relevant at all stages of medical education, training and practice.

[1] Generic professional capabilities framework

The nine domains of the GMC's Generic Professional Capabilities

Good medical practice (GMP)[2] is embedded at the heart of the GPC framework. In describing the principles, duties and responsibilities of doctors the GPC framework articulates GMP as a series of achievable educational outcomes to enable curriculum design and assessment.

The GPC framework describes nine domains with associated descriptor outlining the 'minimum common regulatory requirement' of performance and professional behaviour for those completing a CCT or its equivalent. These attributes are common, minimum and generic standards expected of all medical practitioners achieving a CCT or its equivalent.

The nine domains and subsections of the GPC framework are directly identifiable in the curriculum. They are mapped to each of the generic and specialty CiPs, which are in turn mapped to the assessment blueprints. This is to emphasise those core professional capabilities that are essential to safe clinical practice and that they must be demonstrated at every stage of training as part of the holistic development of responsible professionals.

This approach will allow early detection of issues most likely to be associated with fitness to practise and to minimise the possibility that any deficit is identified during the final phases of training.

[2] Good Medical Practice

3. Content of Learning

The curriculum is spiral, and topics and themes will be revisited to expand understanding and expertise. The level of entrustment for capabilities in practice (CiPs) will increase as an individual progresses from needing direct supervision to able to be entrusted to act unsupervised.

3.1 Capabilities in practice

CiPs describe the professional tasks or work within the scope of the specialty. CiPs are based on the concept of entrustable professional activities[3] which use the professional judgement of appropriately trained, expert assessors as a defensible way of forming global judgements of professional performance.

Each CiP has a set of descriptors associated with that activity or task. Descriptors are intended to help trainees and trainers recognise the knowledge, skills and attitudes which should be demonstrated. Doctors in training may use these capabilities to provide evidence of how their performance meets or exceeds the minimum expected level of performance for their year of training. The descriptors are not a comprehensive list and there are many more examples that would provide equally valid evidence of performance.

Many of the CiP descriptors refer to patient centred care and shared decision making. This is to emphasise the importance of patients being at the centre of decisions about their own treatment and care, by exploring care or treatment options and their risks and benefits and discussing choices available.

Additionally, the CiPs repeatedly refer to the need to demonstrate professional behaviour with regard to patients, carers, colleagues and others. Good doctors work in partnership with patients and respect their rights to privacy and dignity. They treat each patient as an individual. They do their best to make sure all patients receive good care and treatment that will support them to live as well as possible, whatever their illness or disability. Appropriate professional behaviour should reflect the principles of GMP and the GPC framework.

In order to complete training and be recommended to the GMC for the award of CCT and entry to the specialist register, the doctor must demonstrate that they are capable of unsupervised practice in all generic and specialty CiPs. Once a trainee has achieved level 4 sign off for a CiP it will not be necessary to repeat assessment of that CiP if capability is maintained (in line with standard professional conduct).

This section of the curriculum details the eight generic CiPs and Audiovestibular Medicine of specialty CiPs for Audiovestibular Medicine. The expected levels of performance, mapping to relevant GPCs and the evidence that may be used to make an entrustment decision are given for each CiP. The list of evidence for each CiP is not prescriptive and other types of evidence may be equally valid for that CiP.

[3] Nuts and bolts of entrustable professional activities

3.2 Generic capabilities in practice

The six generic CiPs cover the universal requirements of all specialties as described in GMP and the GPC framework. Assessment of the generic CiPs will be underpinned by the descriptors for the nine GPC domains and evidenced against the performance and behaviour expected at that stage of training. Satisfactory sign off will indicate that there are no concerns. It will not be necessary to assign a level of supervision for these non-clinical CiPs.

In order to ensure consistency and transferability, the generic CiPs have been grouped under the GMP-aligned categories used in the Foundation Programme curriculum plus an additional category for wider professional practice:

- Professional behaviour and trust
- Communication, team-working and leadership
- Safety and quality
- Wider professional practice

For each generic CiP there is a set of descriptors of the observable skills and behaviours which would demonstrate that a trainee has met the minimum level expected. The descriptors are not a comprehensive list and there may be more examples that would provide equally valid evidence of performance.

KEY

CbD	Case-based discussion	DOPS	Direct observation of procedural skills
GCP	Good Clinical Practice	PGC	PG Certificate in MSc level Audiology
Mini-CEX	Mini-clinical evaluation exercise	MCR	Multiple consultant report
MSF	Multi source feedback	PS	Patient survey
QIPAT	Quality improvement project assessment tool	TO	Teaching observation

Generic capabilities in practice (CiPs)	
Category 1: Professional behaviour and trust	
1. Able to function successfully within NHS organisational and management systems	
Descriptors	• Aware of and adheres to the GMC professional requirements • Aware of public health issues including population health, social detriments of health and global health perspectives • Demonstrates effective clinical leadership • Demonstrates promotion of an open and transparent culture • Keeps practice up to date through learning and teaching • Demonstrates engagement in career planning • Demonstrates capabilities in dealing with complexity and uncertainty

	• Aware of the role of and processes for commissioning • Aware of the need to use resources wisely
GPCs	Domain 1: Professional values and behaviours Domain 3: Professional knowledge • professional requirements • national legislative requirements • the health service and healthcare systems in the four countries Domain 9: Capabilities in research and scholarship
Evidence to inform decision	MCR MSF Active role in governance structures Management course
2. Able to deal with ethical and legal issues related to clinical practice	
Descriptors	• Aware of national legislation and legal responsibilities, including safeguarding vulnerable groups • Behaves in accordance with ethical and legal requirements • Demonstrates ability to offer apology or explanation when appropriate • Demonstrates ability to lead the clinical team in ensuring that medical legal factors are considered openly and consistently
GPCs	Domain 3: Professional knowledge • professional requirements • national legislative requirements • the health service and healthcare systems in the four countries Domain 4: Capabilities in health promotion and illness prevention Domain 7: Capabilities in safeguarding vulnerable groups Domain 8: Capabilities in education and training Domain 9: Capabilities in research and scholarship
Evidence to inform decision	MCR MSF CbD Mini-CEX
Category 2: Communication, teamworking and leadership	
3. Communicates effectively and is able to share decision making, while maintaining appropriate situational awareness, professional behaviour and professional judgement	
Descriptors	• Communicates clearly with patients and carers in a variety of settings • Communicates effectively with clinical and other professional colleagues • Identifies and manages barriers to communication (eg cognitive impairment, speech and hearing problems, capacity issues) • Demonstrates effective consultation skills including effective verbal and nonverbal interpersonal skills

	• Shares decision making by informing the patient, prioritising the patient's wishes, and respecting the patient's beliefs, concerns and expectations • Shares decision making with children and young people • Applies management and team working skills appropriately, including influencing, negotiating, re-assessing priorities and effectively managing complex, dynamic situations
GPCs	Domain 2: Professional skills • practical skills • communication and interpersonal skills • dealing with complexity and uncertainty • clinical skills *(history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease)* Domain 5: Capabilities in leadership and teamworking
Evidence to inform decision	MCR MSF PS
Category 3: Safety and quality	
4. Is focused on patient safety and delivers effective quality improvement in patient care	
Descriptors	• Makes patient safety a priority in clinical practice • Raises and escalates concerns where there is an issue with patient safety or quality of care • Demonstrates commitment to learning from patient safety investigations and complaints • Shares good practice appropriately • Contributes to and delivers quality improvement • Understands basic Human Factors principles and practice at individual, team, organisational and system levels • Understands the importance of non-technical skills and crisis resource management • Recognises and works within limit of personal competence • Avoids organising unnecessary investigations or prescribing poorly evidenced treatments
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills • practical skills • communication and interpersonal skills • dealing with complexity and uncertainty • clinical skills (history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease) Domain 3: Professional knowledge

	• professional requirements • national legislative requirements • the health service and healthcare systems in the four countries Domain 4: Capabilities in health promotion and illness prevention Domain 5: Capabilities in leadership and teamworking Domain 6: Capabilities in patient safety and quality improvement • patient safety • quality improvement
Evidence to inform decision	MCR MSF QIPAT
Category 4: Wider professional practice	
5. Carrying out research and managing data appropriately	
Descriptors	• Manages clinical information/data appropriately • Understands principles of research and academic writing • Demonstrates ability to carry out critical appraisal of the literature • Understands the role of evidence in clinical practice and demonstrates shared decision making with patients • Demonstrates appropriate knowledge of research methods, including qualitative and quantitative approaches in scientific enquiry • Demonstrates appropriate knowledge of research principles and concepts and the translation of research into practice • Follows guidelines on ethical conduct in research and consent for research • Understands public health epidemiology and global health patterns • Recognises potential of applied informatics, genomics, stratified risk and personalised medicine and seeks advice for patient benefit when appropriate
GPCs	Domain 3: Professional knowledge • professional requirements • national legislative requirements • the health service and healthcare systems in the four countries Domain 7: Capabilities in safeguarding vulnerable groups Domain 9: Capabilities in research and scholarship
Evidence to inform decision	MCR MSF GCP certificate (if involved in clinical research) Evidence of literature search and critical appraisal of research Use of clinical guidelines Quality improvement and audit Evidence of research activity
6. Acting as a clinical teacher and clinical supervisor	
Descriptors	• Delivers effective teaching and training to medical students, junior doctors and other health care professionals

	• Delivers effective feedback with action plan • Able to supervise less experienced trainees in their clinical assessment and management of patients • Able to supervise less experienced trainees in carrying out appropriate practical procedures • Able to act as clinical supervisor to doctors in earlier stages of training
GPCs	Domain 1: Professional values and behaviours Domain 8: Capabilities in education and training
Evidence to inform decision	MCR MSF TO Relevant training course

3.3 Specialty capabilities in practice

The specialty CiPs describe the clinical tasks or activities which are essential to the practice of Audiovestibular Medicine. The CiPs have been mapped to the nine GPC domains to reflect the professional generic capabilities required to undertake the clinical tasks.

Satisfactory sign off will require educational supervisors to make entrustment decisions on the level of supervision required for each CiP and if this is satisfactory for the stage of training, the trainee can progress. More detail is provided in the programme of assessment section of the curriculum.

KEY

CbD	Case-based discussion	DOPS	Direct observation of procedural skills
GCP	Good Clinical Practice	PGC	PG Certificate in MSc level Audiology
Mini-CEX	Mini-clinical evaluation exercise	MCR	Multiple consultant report
MSF	Multi source feedback	PS	Patient survey
QIPAT	Quality improvement project assessment tool	TO	Teaching observation

Specialty CiPs	
1. Able to formulate a holistic audiovestibular analysis and prioritise	
Descriptors	• Demonstrates ability to assess patients using a biopsychosocial model • Recognises the impact of hearing and balance difficulties on the patient and their significant others • Recognises the complexity caused by multiple comorbidities • Recognises the impact of systemic disorders on hearing and balance • Formulates an appropriate patient-centred holistic management plan • Demonstrates awareness of the quality of patient experience
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills

	• practical skills • communication and interpersonal skills • dealing with complexity and uncertainty • clinical skills Domain 4: Capabilities in health promotion and illness prevention Domain 7: Capabilities in safeguarding vulnerable groups
Evidence to inform decision	CBD Mini-CEX MSF PS MCR PGC Reflection
2. Able to diagnose and manage audiovestibular and co-morbid medical conditions	
Descriptors	• Demonstrates knowledge of the pathology, appropriate investigations and management of co-morbid conditions • Interprets clinical features, their reliability and relevance to clinical scenarios including recognition of the breadth of presentation of co-morbid disorders • Appropriately manages comorbidities in audiovestibular patients and arrange further investigations taking into account patient preferences and the urgency required • Recognises the importance of joint working, need to liaise with other specialty services and refers appropriately • Is aware of the many factors that affect a patient's presentation, understanding of the problem and approach to management • Can identify, articulate and negotiate priorities •Delivers patient centred care including shared decision making
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills • practical skills • communication and interpersonal skills • dealing with complexity and uncertainty Domain 3: Professional knowledge • professional requirements • national legislative requirements Domain 5: Capabilities in leadership and team working Domain 6: Capabilities in patient safety and quality improvement • understand the importance of sharing good practice • demonstrate effective multidisciplinary and inter professional team working • demonstrate respect for and recognition of the roles of other health professionals in the effective delivery of patient care Domain 7: Capabilities in safeguarding vulnerable groups

Evidence to inform decision	CBD Mini-CEX MSF PS MCR PGC Reflection
3. Diagnosis and medical management of hearing disorders and dysacuses across all ages of adults within a holistic biopsychosocial framework	
Descriptors	• Demonstrates knowledge of the anatomy, physiology and pathophysiology of the extended auditory system • Demonstrates knowledge of the range of audiological conditions affecting adults including different clinical populations • Demonstrates the ability to obtain a comprehensive history, administer appropriate questionnaires and perform a detailed targeted examination in adults • Demonstrates ability to request appropriate audiovestibular, imaging and laboratory tests, and to interpret test results, integrating all the information to establish a diagnosis • Formulates and communicates an appropriate patient-centred, multidisciplinary management plan • Demonstrates understanding of, and follows local and national guidelines and clinical trial protocols • Liaises with other specialty services when appropriate • Demonstrates understanding of transitional care from paediatric to adult services
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills • practical skills • communication and interpersonal skills • dealing with complexity and uncertainty • clinical skills (history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease) Domain 4: Capabilities in health promotion and illness prevention Domain 6: Capabilities in patient safety and quality improvement Domain 7: Capabilities in safeguarding vulnerable groups
Evidence to inform decision	CbD Mini-CEX MSF PS MCR PGC Reflection
4. Diagnosis and medical management of vestibular disorders across all ages of adults within a holistic biopsychosocial framework	

Descriptors	• Demonstrates understanding of the functional anatomy and physiology of the vestibular and related systems, including central pathways and connections • Demonstrates good diagnostic skills through accurate history taking, thorough and pertinent clinical examination to reach a provisional diagnosis • Formulates appropriate differential diagnosis • Selects and interprets appropriate audiological, vestibular and aetiological investigations, understanding the limitations of these tests. • Formulates and explains an appropriate management plan, taking into account patient preferences, and the urgency required • Explains clinical reasoning behind patient-centred diagnostic and clinical management decisions, in collaboration with the multidisciplinary team • Recognises need to liaise with specialty services to manage comorbidities and refers where appropriate
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills • practical skills • communication and interpersonal skills • dealing with complexity and uncertainty • clinical skills (history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease) Domain 3: Professional knowledge • professional requirements • national legislation • the health service and healthcare systems in the four countries Domain 4: Capabilities in health promotion and illness prevention Domain 5: Capabilities in leadership and team working Domain 6: Capabilities in patient safety and quality improvement
Evidence to inform decision	CbD Mini-CEX MSF PS MCR PGC Reflection
5. Diagnosis and medical management of hearing disorders and dysacuses in neonates and children within a holistic biopsychosocial framework	
Descriptors	• Demonstrates knowledge of the anatomy, physiology and pathophysiology of the extended auditory system • Demonstrates the ability to take an accurate, relevant and detailed audiovestibular and neurodevelopmental history from the child/young person or carer including the ability to identify safeguarding concerns

	• Demonstrates ability to perform a thorough and detailed physical examination appropriate to the age and developmental level of the child/young person • Able to identify medical, social, emotional and psychological problems which may be causative or may adversely affect (re)habilitation • Able to identify the impact of auditory disorders on the child/young person's physical, social, emotional and psychological well-being and activities of daily living (home, social and school) and the reciprocal impact of these on the auditory disorder • Able to select and interpret appropriate diagnostic audiological assessments, laboratory tests, imaging and relevant multidisciplinary assessments enabling aetiological diagnosis of auditory disorders. • Recognises the impact of the diagnosis on the family and selects the appropriate management strategies through multidisciplinary team discussion • Recognises and support the specific needs of the child/young person and family at different stages of childhood, including transition to young adulthood through relevant agencies
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills • practical skills • communication and interpersonal skills • dealing with complexity and uncertainty • clinical skills (history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease) Domain 3: Professional knowledge • professional requirements • national legislative requirements Domain 4: Capabilities in health promotion and illness prevention Domain 6: Capabilities in patient safety and quality improvement Domain 7: Capabilities in safeguarding vulnerable groups
Evidence to inform decision	CbD Mini-CEX MSF PS MCR PGC Reflection Attendance at relevant courses
6. Diagnosis and medical management of vestibular disorders in neonates and children within a holistic biopsychosocial framework	
Descriptors	• Demonstrates knowledge of the anatomy, physiology and pathophysiology of the vestibular system and its connections

	• Demonstrates the ability to take an accurate, relevant and detailed audiovestibular and neurodevelopmental history from the child/young person or carer • Demonstrates the ability to perform a thorough clinical examination appropriate to the age and developmental level of the child/young person • Demonstrates the ability to select and interpret appropriate audiovestibular, laboratory, imaging and relevant multidisciplinary assessments enabling aetiological diagnosis of dizziness and balance disorders • Demonstrates the ability to formulate and implement a holistic patient-centred management plan, including use of medications, in children and young people with dizziness and imbalance, involving multidisciplinary colleagues as necessary • Demonstrates the ability to recognise the role and impact of non-vestibular factors in children and young people with imbalance and dizziness and liaises with/refers to related specialties for assessment and management as appropriate • Works within the framework of local and national guidelines and protocols
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills • practical skills • communication and interpersonal skills • dealing with complexity and uncertainty • clinical skills Domain 3: Professional knowledge • professional requirements • national legislative requirements • the health service and healthcare systems Domain 5: Capabilities in leadership and team working Domain 6: Capabilities in patient safety and quality improvement Domain 7: Safeguarding vulnerable groups
Evidence to inform decision	CbD Mini-CEX MSF PS MCR PGC Reflection Attendance at relevant courses
7. Able to work in multidisciplinary Audiovestibular Medicine teams	
Descriptors	• Contributes and engages in multidisciplinary team meetings • Understands the role of the members of the multidisciplinary team • Demonstrates effective communication skills including in challenging circumstances

	• Understands the appropriate patient pathway in relation to audiovestibular disorders • Appropriately communicates need of assessments, test results and further management to other colleagues, patients and carers • Involves other colleagues in shared decision making and values the opinion of other professionals
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills • practical skills • communication and interpersonal skills • dealing with complexity and uncertainty Domain 3: Professional knowledge • professional requirements • national legislative requirements Domain 5: Capabilities in leadership and team working Domain 6: Capabilities in patient safety and quality improvement • understand the importance of sharing good practice • demonstrate effective multidisciplinary and inter professional team working • demonstrate respect for and recognition of the roles of other health professionals in the effective delivery of patient care
Evidence to inform decision	CbD Mini-CEX MSF PS MCR Reflection
8. Managing and leading multidisciplinary Audiovestibular Medicine service	
Descriptors	• Formulates and delivers patient centred care including shared decision making and demonstrates effective teamwork with other professional colleagues • Demonstrates the ability to take leadership in local, regional and national Audiovestibular Medicine initiatives • Demonstrates appropriate leadership behaviour and an ability to adapt their leadership behaviour to engage with stake-holders and improve outcomes • Demonstrates a good understanding of the value of peer review process • Understands the principles of commissioning process with regards to the audiovestibular needs of the population • Demonstrates appropriate supervision and influence of colleagues and knows how to escalate any concerns • Promotes an open and transparent culture and a culture of learning
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills • practical skills • communication and interpersonal skills

	• dealing with complexity and uncertainty • clinical skills (history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease) Domain 3: Professional knowledge • professional requirements • national legislative requirements • the health service and healthcare systems Domain 5: Capabilities in leadership and teamworking Domain 6: Capabilities in patient safety and quality improvement • patient safety • quality improvement Domain 8: Capabilities in education and training
Evidence to inform decision	CbD Mini-CEX MSF PS MCR Leadership/ management course

3.4 Presentations and conditions

The table below details the key presentations and conditions of Audiovestibular Medicine. Each of these should be regarded as a clinical context in which trainees should be able to demonstrate CiPs and GPCs. In this spiral curriculum, trainees will expand and develop the knowledge, skills and attitudes around managing patients with these conditions and presentations. The patient should always be at the centre of knowledge, learning and care.

Trainees must demonstrate core bedside skills, including information gathering through history and physical examination and information sharing with patients, families and colleagues.

Treatment care and strategy cover how a doctor selects drug treatments or interventions for a patient. It includes discussions and decisions as to whether care is focused mainly on curative intent or whether the main focus is on symptomatic relief. It also covers broader aspects of care, including involvement of other professionals or services.

Particular presentations, conditions and issues are listed either because they are common or serious (having high morbidity, mortality and/or serious implications for treatment or public health). While the primary presentations are listed, people may also have other audiovestibular features, for example a child presenting with congenital hearing loss may also have a vestibular disorder.

For each condition/presentation, trainees will need to be familiar with such aspects as aetiology, epidemiology, clinical features, investigation, management and prognosis. Our approach is to provide general guidance and not exhaustive detail, which would inevitably become out of date.

Clinical area	Primary presentation	Conditions/Issues
Paediatric audiological conditions	• Hearing problem in children and adolescents • Hearing problem in children with complex needs • Sudden Hearing loss • Fluctuating hearing loss • Progressive hearing loss • Listening difficulties • Speech and language difficulties • Auditory processing difficulties • Dysacusis • Aural fullness • Otalgia • Tinnitus • Hyperacusis • Auditory hallucination	• Congenital hearing loss • Syndromic hearing loss • Non syndromic hearing loss • Permanent conductive hearing loss • Middle ear conditions e.g. otitis media with effusion, chronic suppurative otitis media • Traumatic hearing loss • Infective hearing loss • Iatrogenic hearing loss • Ototoxicity • Autoimmune/ vasculitic hearing loss • Metabolic hearing loss • Noise induced hearing loss • Hearing disorder in neurological conditions e.g. stroke, demyelination, neurodegenerative conditions, tumours • Auditory Processing Disorder • Auditory Neuropathy Spectrum Disorder • Implantable hearing devices • Tinnitus • Hyperacusis • Misophonia • Non-organic hearing loss • Issues related to transition
Adult audiological conditions	• Hearing problem in younger adults • Congenitally deaf adults • Hearing problem in adults with learning disability • Hearing problems in older adults • Listening difficulties • Sudden hearing loss	• Presbycusis (age related hearing loss) • Asymmetrical sensorineural hearing loss e.g. vestibular schwannoma • Traumatic hearing loss / Blast injury related hearing loss • Iatrogenic hearing loss • Infective hearing loss • Middle ear conditions e.g. Otitis media with effusion, chronic suppurative otitis media,

	• Fluctuating hearing loss • Progressive hearing loss • Aural Fullness • Otalgia • Central auditory dysfunction • Dysacusis • Tinnitus • Hyperacusis • Auditory hallucination	otosclerosis, ossicular fixation and discontinuity • Ototoxicity • Genetic hearing loss • Autoimmune/ vasculitic hearing loss • Metabolic hearing loss • Noise induced hearing loss • Occupational hearing loss • Non-organic hearing loss • Hearing disorder in neurological conditions e.g. demyelination, stroke, tumours • Auditory Processing Disorder • Auditory Neuropathy Spectrum Disorder • Tinnitus • Hyperacusis • Misophonia • Implantable hearing devices
Paediatric vestibular conditions	• Dizziness • Vertigo • Imbalance • Delayed motor milestones • Ataxia • Abnormal gait, frequent falls • Headaches • Auditory neuropathy • Abnormal eye movements, e.g. – nystagmus, skew deviations	<u>Peripheral vestibular causes</u> • Unilateral vestibular hypofunction • Bilateral vestibular hypofunction • Genetic syndromes with vestibular hypofunction • Vestibular neuritis/ labyrinthitis • Middle ear disease • Vestibular symptoms related to cochlear implants • Meniere's Disease • Benign Paroxysmal Positional Vertigo • '3rd window' disorders • Congenital inner ear anomalies ○ Enlarged vestibular aqueducts • Autoimmune inner ear disorders • Ototoxicity <u>Central vestibular causes</u> • Intracranial space occupying lesions e.g. vestibular schwannoma

		• Neurological conditions e.g. episodic ataxia
		
		<u>Mixed vestibular causes</u>
		• Migraine and its equivalents, e.g. Benign paroxysmal vertigo of childhood
		• Head injury related dizziness
		• Vestibular paroxysmia
		• Infective causes
		  ○ CMV
		  ○ Meningitis/encephalitis
		<u>Others</u>
		• Psychological dizziness
		• Orthostatic dizziness and/or vertigo
		• Cardiovascular disorders
		• Ocular disorders
		• Musculoskeletal disorders
		• Metabolic and haematological conditions
		• Developmental Coordination Disorder

Adult vestibular conditions	• Dizziness • Vertigo • Imbalance • Ataxia • Abnormal gait • Falls • Headaches and migraine • Auditory neuropathy • Abnormal eye movements, e.g. – nystagmus, skew deviations	<u>Peripheral vestibular causes</u> • Unilateral vestibular hypofunction • Bilateral vestibular hypofunction • Genetic syndromes with vestibular hypofunction • Vestibular neuritis/ labyrinthitis • Middle ear disease • Vestibular symptoms related to cochlear implants • Meniere's Disease • Benign Paroxysmal Positional Vertigo • '3rd window' disorders • Enlarged vestibular aqueducts • Autoimmune inner ear disorders • Ototoxicity <u>Central vestibular causes</u> • Intracranial space occupying lesions e.g. vestibular schwannoma

		• Neurological conditions e.g. demyelinating conditions, strokes, progressive degenerative conditions, episodic ataxia, movement disorders
		
		<u>Mixed vestibular causes</u>
		• Migraine and its equivalents
		• Head injury related dizziness and imbalance
		• Neuropathy
		• Vestibular paroxysmia
		• Infective causes
		  ○ Syphilis / HIV
		  ○ Meningitis / encephalitis
		<u>Others</u>
		• PPPD
		• Dementia
		• Psychogenic dizziness
		• Orthostatic dizziness and/or vertigo
		• Cardiovascular disorders
		• Ocular disorders
		• Musculoskeletal disorders
		• Metabolic and haematological conditions

Interpretation of diagnostic test results	• Paediatric and adult audiological test results • Paediatric and adult vestibular test results	Distraction test Visual reinforcement audiometry Play audiometry Pure tone audiometry Tympanometry Otoacoustic emissions Acoustic reflexes Auditory brainstem response test Cortical evoked response audiometry Speech audiometry Auditory Processing Disorder tests Electronystagmography Videonystagmography Rotational chair Vestibular evoked myogenic potentials Bithermal calorics

		Video head impulse test Posturography
Rehabilitation		Appropriate hearing amplification Implantable devices (Bone conduction and cochlear implants) Hearing therapy Vestibular rehabilitation Psychological approaches Speech and language therapy

3.5 Practical procedures

There are a number of procedural skills in which a trainee must become proficient.

Trainees must be able to outline the indications for these procedures and recognise the importance of valid consent, use of microscope, safe use of microsuction, ear irrigation, minimisation of patient discomfort and requesting help when appropriate. For all practical procedures the trainee must be able to recognise complications and respond appropriately if they arise, including calling for help from colleagues in other specialties when necessary.

Trainees should receive training in procedural skills in a clinical skills lab if required. Assessment of procedural skills will be made using the direct observation of procedural skills (DOPS) tool. The table below sets out the minimum competency level expected for each of the practical procedures.

When a trainee has been signed off as being able to perform a procedure independently, they are not required to have any further assessment (DOPS) of that procedure, unless they or their educational supervisor think that this is required (in line with standard professional conduct).

Procedure	**ST3**	**ST4**	**ST5**	**ST6**	**ST7**
Minimum level required					
Wax removal	Able to perform the procedure under direct supervision	Able to perform the procedure with limited supervision	Competent to perform the procedure unsupervised	Competent to perform the procedure unsupervised	Competent to perform the procedure unsupervised
Particle repositioning manoeuvres	Able to perform the procedure under direct supervision	Able to perform the procedure with limited supervision	Competent to perform the procedure unsupervised	Competent to perform the procedure unsupervised	Competent to perform the procedure unsupervised
Audiological tests (Distraction test, PTA,	Able to perform the procedure	Able to perform the procedure	Able to perform the procedure with limited supervision	Competent to perform the procedure unsupervised	Competent to perform the procedure unsupervised

Procedure	ST3	ST4	ST5	ST6	ST7
Minimum level required					
play audiometry, tympanometry, OAE)	under direct supervision	under direct supervision			
Audiological tests (VRA, Acoustic reflexes, ABR, CERA, Speech audio, APD tests)	Able to perform the procedure under direct supervision	Able to perform the procedure under direct supervision	Able to perform the procedure under direct supervision	Able to perform the procedure under direct supervision	Able to perform the procedure under direct supervision
Vestibular tests (v-HIT, caloric)	Able to perform the procedure under direct supervision	Able to perform the procedure under direct supervision	Able to perform the procedure with limited supervision	Competent to perform the procedure unsupervised	Competent to perform the procedure unsupervised
Vestibular tests ENG, (VNG, Rotational chair, VEMPs, Posturography)	Able to perform the procedure under direct supervision	Able to perform the procedure under direct supervision	Able to perform the procedure under direct supervision	Able to perform the procedure under direct supervision	Able to perform the procedure under direct supervision

4 Learning and Teaching

4.1 The training programme

The organisation and delivery of postgraduate training is the responsibility of the Health Education England (HEE), NHS Education for Scotland (NES), Health Education and Improvement Wales (HEIW) and the Northern Ireland Medical and Dental Training Agency (NIMDTA) – referred to from this point as 'deaneries'. A training programme director (TPD) will be responsible for coordinating the specialty training programme. In England, the local organisation and delivery of training is overseen by a school of medicine.

Progression through the programme will be determined by the Annual Review of Competency Progression (ARCP) process and the training requirements for each indicative year of training are summarised in the ARCP decision aid (available on the JRCPTB website).

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 curriculum requirements are met and also that unnecessary duplication and educationally unrewarding experiences are avoided.

The following provides a guide on how training programmes should be focused in each training year in order for trainees to gain the experience and develop the capabilities to the level required.

Trainees will have an appropriate clinical supervisor and a named educational supervisor. The clinical supervisor and educational supervisor may be the same person. Trainees will also be required to rotate through a variety of placements core internal medical, paediatric or ENT training (depending on background specialty of trainee) to achieve the curriculum learning outcomes (CiPs). The exact rotations will be designed according to the needs of individual trainees.

4.2 Teaching and learning methods

The curriculum will be delivered through a variety of learning experiences and will achieve the capabilities described in the syllabus through a variety of learning methods. 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.

Work-based experiential learning - The content of work-based experiential learning is decided by the local faculty for education but includes active participation in:

Medical clinics including specialty clinics
The educational objectives of attending clinics are:

- To understand the management of chronic diseases
- Be able to assess a patient in a defined time-frame
- To interpret and act on the referral letter to clinic
- To propose an investigation and management plan in a setting different from the acute medical situation
- To review and amend existing investigation plans
- To write an acceptable letter back to the referrer
- To communicate with the patient and where necessary relatives and other health care professionals.

These objectives can be achieved in a variety of settings including hospitals, day care facilities and the community. The clinic might be primarily run by a specialist nurse (or other qualified health care professionals) rather than a consultant physician. After initial induction, trainees will review patients in clinic settings, under direct supervision. The degree of responsibility taken by the trainee will increase as competency increases. Trainees should see a range of new and follow-up patients and present their findings to their clinical supervisor. Clinic letters written by the trainee should also be reviewed and feedback given.

The number of patients that a trainee should see in each clinic is not defined, neither is the time that should be spent in clinic, but as a guide this should be a minimum of three hours.

Clinic experience should be used as an opportunity to undertake supervised learning events and reflection.

Reviewing patients with consultants
It is important that trainees have an opportunity to present at least a proportion of the patients whom they have admitted to their consultant for senior review in order to obtain immediate feedback into their performance (that may be supplemented by an appropriate WBA such as an ACAT, mini-CEX or CBD). This may be accomplished when working in an outpatient clinic along with a consultant.

Provision of ongoing clinical care on specialist medical ward attachments and in outpatients
Every patient seen in outpatients provides a learning opportunity, which will be enhanced by following the patient through the course of their illness. 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 on clinical problems.

Multidisciplinary team meetings
There are many situations where clinical problems are discussed with clinicians in other disciplines. These provide excellent opportunities for observation of clinical reasoning.

Trainees have supervised responsibility for the care of outpatients. This includes review of clinical conditions, note keeping, and the management with referral to and liaison with clinical colleagues as necessary. The degree of responsibility taken by the trainee will increase as competency increases. There should be appropriate levels of clinical supervision throughout training, with increasing clinical independence and responsibility.

Formal postgraduate teaching
The content of these sessions are determined by the local faculty of medical education and will be based on the curriculum. There are many opportunities throughout the year for formal teaching in the local postgraduate teaching sessions and at regional, national and international meetings. Many of these are organised by the Royal Colleges of Physicians.

Suggested activities include:
- a programme of formal teaching sessions to cohorts of trainees
- case presentations
- research, audit and quality improvement projects
- lectures and small group teaching
- Grand Rounds
- clinical skills demonstrations and teaching
- critical appraisal and evidence based medicine and journal clubs
- joint specialty meetings

- attendance at training programmes organised on a deanery or regional basis, which are designed to cover aspects of the training programme outlined in this curriculum.

Learning with peers
There are many opportunities for trainees to learn with their peers. Local postgraduate teaching opportunities allow trainees of varied levels of experience to come together for small group sessions and engage with teaching. Trainees are expected to regularly present at annual national conferences and national audit meetings.

Independent self-directed learning
Trainees will use this time in a variety of ways depending upon their stage of learning. Suggested activities include:

- reading, including web-based material such as e-Learning for Healthcare (e-LfH)
- maintenance of personal portfolio (self-assessment, reflective learning, personal development plan)
- audit, quality improvement and research projects
- reading journals
- achieving personal learning goals beyond the essential, core curriculum.

Formal study courses
Time to be made available for formal courses is encouraged, subject to local conditions of service. Examples include management and leadership courses and communication courses, which are particularly relevant to patient safety and experience.

4.3 Academic training

The four nations have different arrangements for academic training and doctors in training should consult the local deanery for further guidance.

Trainees may train in academic medicine as an academic clinical fellow (ACF), academic clinical lecturer (ACL) or equivalent.

Some trainees may opt to do research leading to a higher degree without being appointed to a formal academic programme. This new curriculum should not impact in any way on the facility to take time out of programme for research (OOPR) but as now, such time requires discussion between the trainee, the TPD and the Deanery as to what is appropriate together with guidance from the appropriate SAC that the proposed period and scope of study is sensible.

4.4 Taking time out of programme

There are a number of circumstances when a trainee may seek to spend some time out of specialty training, such as undertaking a period of research or taking up a fellowship post. All such requests must be agreed by the postgraduate dean in advance and trainees are

advised to discuss their proposals as early as possible. Full guidance on taking time out of programme can be found in the Gold Guide.

4.5 Acting up as a consultant

A trainee coming towards the end of their training may spend up to three months "acting-up" as a consultant, provided that a consultant supervisor is identified for the post and satisfactory progress is made. As long as the trainee remains within an approved training programme, the GMC does not need to approve this period of "acting up" and their original CCT date will not be affected. More information on acting up as a consultant can be found in the Gold Guide.

5 Programme of Assessment

5.1 Purpose of assessment

The purpose of the programme of assessment is to:

- Assess trainees' actual performance in the workplace.
- Enhance learning by providing formative assessment, enabling trainees to receive immediate feedback, understand 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.
- Demonstrate trainees have acquired the GPCs and meet the requirements of GMP.
- Ensure that trainees possess the essential underlying knowledge required for their specialty.
- Provide robust, summative evidence that trainees are meeting the curriculum standards during the training programme.
- Inform the 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.

5.2 Programme of Assessment

Our programme of assessment refers to the integrated framework of exams, assessments in the workplace and judgements made about a learner during their approved programme of training. The purpose of the programme of assessment is to robustly evidence, ensure and clearly communicate the expected levels of performance at critical progression points in, and to demonstrate satisfactory completion of training as required by the curriculum.

The programme of assessment is comprised of several different individual types of assessment. A range of assessments is needed to generate the necessary evidence required for global judgements to be made about satisfactory performance, progression in, and completion of, training. All assessments, including those conducted in the workplace, are

linked to the relevant curricular learning outcomes (e.g. through the blueprinting of assessment system to the stated curricular outcomes).

The programme of assessment emphasises the importance and centrality of professional judgement in making sure learners have met the learning outcomes and expected levels of performance set out in the approved curricula. Assessors will make accountable, professional judgements. The programme of assessment includes how professional judgements are used and collated to support decisions on progression and satisfactory completion of training.

The assessments will be supported by structured feedback for trainees. Assessment tools will be both formative and summative and have been selected on the basis of their fitness for purpose.

Assessment will take place throughout the training programme to allow trainees continually to gather evidence of learning and to provide formative feedback. Those assessment tools which are not identified individually as summative will contribute to summative judgements about a trainee's progress as part of the programme of assessment. 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.

Reflection and feedback should be an integral component to all SLEs and WBPAs. In order for trainees to maximise benefit, reflection and feedback should take place as soon as possible after an event. Every clinical encounter can provide a unique opportunity for reflection and feedback and this process should occur frequently. Feedback should be of high quality and should include an action plan for future development for the trainee. Both trainees and trainers should recognise and respect cultural differences when giving and receiving feedback.

5.3 Assessment of CiPs

Assessment of CiPs involves looking across a range of different skills and behaviours to make global decisions about a learner's suitability to take on particular responsibilities or tasks.

Clinical supervisors and others contributing to assessment will provide formative feedback to the trainee on their performance throughout the training year. This feedback will include a global rating in order to indicate to the trainee and their educational supervisor how they are progressing at that stage of training. To support this, workplace based assessments and multiple consultant reports will include global assessment anchor statements.

Global assessment anchor statements

- Below expectations for this year of training; may not meet the requirements for critical progression point
- Meeting expectations for this year of training; expected to progress to next stage of training
- Above expectations for this year of training; expected to progress to next stage of training

Towards the end of the training year, trainees will make a self-assessment of their progression for each CiP and record this in the eportfolio with signposting to the evidence to support their rating.

The educational supervisor (ES) will review the evidence in the eportfolio including workplace based assessments, feedback received from clinical supervisors (via the Multiple Consultant Report) and the trainee's self-assessment and record their judgement on the trainee's performance in the ES report, with commentary.

For **generic CiPs**, the ES will indicate whether the trainee is meeting expectations or not using the global anchor statements above. Trainees will need to be meeting expectations for the stage of training as a minimum to be judged satisfactory to progress to the next training year.

For **specialty CiPs**, the ES will make an entrustment decision for each CiP and record the indicative level of supervision required with detailed comments to justify their entrustment decision. The ES will also indicate the most appropriate global anchor statement (see above) for overall performance.

Level descriptors for specialty CiPs

Level	Descriptor
Level 1	**Entrusted to observe only** – no provision of clinical care
Level 2	**Entrusted to act with direct supervision**: The trainee may provide clinical care, but the supervising physician is physically within the hospital or other site of patient care and is immediately available if required to provide direct bedside supervision
Level 3	**Entrusted to act with indirect supervision**: The trainee may provide clinical care when the supervising physician is not physically present within the hospital or other site of patient care, but is available by means of telephone and/or electronic media to provide advice, and can attend at the bedside if required to provide direct supervision
Level 4	**Entrusted to act unsupervised**

The ARCP will be informed by the ES report and the evidence presented in the eportfolio. The ARCP panel will make the final summative judgement on whether the trainee has achieved the generic outcomes and the appropriate level of supervision for each CiP. The ARCP panel will determine whether the trainee can progress to the next year/level of training in accordance with the Gold Guide. ARCPs will be held for each training year. The final ARCP will ensure trainees have achieved level 4 in all CiPs for the critical progression point at completion of training.

5.4 Critical progression points

There will be a key progression point on completion of specialty training. Trainees will be required to be entrusted at level 4 in all CiPs by the end of training in order to achieve an ARCP outcome 6 and be recommended for a CCT.

The educational supervisor report will make a recommendation to the ARCP panel as to whether the trainee has met the defined levels for the CiPs and acquired the procedural competence required for each year of training. The ARCP panel will make the final decision on whether the trainee can be signed off and progress to the next year/level of training [see section 5.6].

The outline grid below sets out the expected level of supervision and entrustment for the specialty CiPs and includes the critical progression points across the whole training programme.

Table 1: Outline grid of levels expected for Audiovestibular Medicine specialty CiPs

Levels to be achieved by the end of each training year for specialty CiPs

Level descriptors
Level 1: Entrusted to observe only – no clinical care
Level 2: Entrusted to act with direct supervision
Level 3: Entrusted to act with indirect supervision
Level 4: Entrusted to act unsupervised

Specialty CiP	ST3	ST4	ST5	ST6	ST7	CRITICAL PROGRESSION POINT
Able to formulate a holistic audiovestibular analysis and prioritise	2	2	3	3	4	
Able to diagnose and manage audiovestibular and co-morbid medical conditions	2	2	3	3	4	
Diagnosis and medical management of hearing disorders and dysacuses across all ages of adults within a holistic biopsychosocial framework	2	2	3	3	4	
Diagnosis and medical management of vestibular disorders across all ages of adults within a holistic biopsychosocial framework	2	2	3	3	4	
Diagnosis and medical management of hearing disorders and dysacuses in neonates and children within a holistic biopsychosocial framework	2	2	3	3	4	
Diagnosis and medical management of vestibular disorders in neonates and children within a holistic biopsychosocial framework	2	2	3	3	4	
Able to work in multidisciplinary Audiovestibular Medicine teams	2	3	3	3	4	
Managing and leading multidisciplinary Audiovestibular Medicine service	2	2	3	3	4	

5.5 Evidence of progress

The following methods of assessment will provide evidence of progress in the integrated programme of assessment. The requirements for each training year/level are stipulated in the ARCP decision aid (jrcptb.org.uk).

Summative assessment

Examinations and certificates

- PG Certificate in MSc level Audiology

AVM SAC would be willing to accept alternative knowledge based assessments provided they have proven educational equivalence to the PG Cert and have been approved by the SAC and the GMC.

Workplace-based assessment (WPBA)

- Direct Observation of Procedural Skills (DOPS) – summative

Formative assessment

Supervised Learning Events (SLEs)

- Case-Based Discussions (CbD)
- Mini-Clinical Evaluation Exercise (mini-CEX)

WPBA

- Direct Observation of Procedural Skills (DOPS) – formative
- Multi-Source Feedback (MSF)
- Patient Survey (PS)
- Quality Improvement Project Assessment Tool (QIPAT) – replaces Audit Assessment
- Teaching Observation (TO)

Supervisor reports

- Multiple Consultant Report (MCR)
- Educational Supervisor Report (ESR)

These methods are described briefly below. More information and guidance for trainees and assessors are available in the eportfolio and on the JRCPTB website (www.jrcptb.org.uk).

Assessment should be recorded in the trainee's eportfolio. These methods include feedback opportunities as an integral part of the programme of assessment.

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 focus on a written record (such as written case notes, out-patient letter, and discharge summary). A typical encounter might be when presenting newly referred patients in the out-patient department.

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.

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. DOPS can be undertaken as many times as the trainee and their supervisor feel is necessary (formative). A trainee can be regarded as competent to perform a procedure independently after they are signed off as such by an appropriate assessor (summative).

Multi-source feedback (MSF)
This tool is a method of assessing generic skills such as communication, leadership, team working, reliability etc, across the domains of Good Medical Practice. This provides 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, administrative staff, and other allied professionals. Raters should be agreed with the educational supervisor at the start of the training year. The trainee will not see the individual responses by raters. Feedback is given to the trainee by the Educational Supervisor.

Patient Survey (PS)
A trainee's interaction with patients should be continually observed and assessed. The Patient Survey provides a tool to assess a trainee during a consultation period. The Patient Survey assesses the trainee's performance in areas such as interpersonal skills, communication skills and professionalism.

Quality Improvement Project Assessment Tool (QIPAT)
The QIPAT is designed to assess a trainee's competence in completing a quality improvement project. The QIPAT 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 TO form is designed to provide structured, formative feedback to trainees on their competence at teaching. The TO 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).

Supervisor reports

Multiple Consultant Report (MCR)
The MCR captures the views of consultant supervisors based on observation on a trainee's performance in practice. The MCR feedback and comments received give valuable insight into how well the trainee is performing, highlighting areas of excellence and areas of support required. MCR feedback will be available to the trainee and contribute to the educational supervisor's report.

Educational supervisors report (ESR)
The ES will periodically (at least annually) record a longitudinal, global report of a trainee's progress based on a range of assessment, potentially including observations in practice or reflection on behaviour by those who have appropriate expertise and experience. The ESR will include the ES's summative judgement of the trainee's performance and the entrustment decisions given for the learning outcomes (CiPs). The ESR can incorporate commentary or reports from longitudinal observations, such as from supervisors or formative assessments demonstrating progress over time.

5.6 Decisions on progress (ARCP)

The decisions made at critical progression points and upon completion of training should be clear and defensible. They must be fair and robust and make use of evidence from a range of assessments, potentially including exams and observations in practice or reflection on behaviour by those who have appropriate expertise or experience. They can also incorporate commentary or reports from longitudinal observations, such as from supervisors or formative assessments demonstrating progress over time.

Periodic (at least annual) review should be used to collate and systematically review evidence about a doctor's performance and progress in a holistic way and make decisions about their progression in training. The annual review of progression (ARCP) process supports the collation and integration of evidence to make decisions about the achievement of expected outcomes.

Assessment of CiPs involves looking across a range of different skills and behaviours to make global decisions about a learner's suitability to take on particular responsibilities or tasks, as do decisions about the satisfactory completion of presentations/conditions and procedural skills set out in this curriculum. The outline grid in section 5.4 sets out the level of supervision expected for each of the clinical and specialty CiPs. The table of practical procedures sets out the minimum level of performance expected at the end of each year or training. The requirements for each year of training are set out in the ARCP decision aid (jrcptb.org.uk).

The ARCP process is described in the Gold Guide. Deaneries are responsible for organising and conducting ARCPs. The evidence to be reviewed by ARCP panels should be collected in the trainee's ePortfolio.

As a precursor to ARCPs, JRCPTB strongly recommend that trainees have an informal eportfolio review either with their educational supervisor or arranged by the local school of medicine. These provide opportunities for early detection of trainees who are failing to gather the required evidence for ARCP.

There should be review of the trainee's progress to identify any outstanding targets that the trainee will need to complete to meet all the learning outcomes for completion training approximately 12-18 months before CCT. This should include an external assessor from outside the training programme.

In order to guide trainees, supervisors and the ARCP panel, JRCPTB has produced an ARCP decision aid which sets out the requirements for a satisfactory ARCP outcome at the end of each training year and critical progression point. The ARCP decision aid is available on the JRCPTB website jrcptb.org.uk.

Poor performance should be managed in line with the Gold Guide.

5.7 Assessment blueprint

The table below show the possible methods of assessment for each CiP. It is not expected that every method will be used for each competency and additional evidence may be used to help make a judgement on capability.

KEY

ACAT	Acute care assessment tool	CbD	Case-based discussion
DOPS	Direct observation of procedural skills	Mini-CEX	Mini-clinical evaluation exercise
MCR	Multiple consultant report	MSF	Multi source feedback
PS	Patient survey	QIPAT	Quality improvement project assessment tool
TO	Teaching observation		

Blueprint for WPBAs mapped to CiPs

Learning outcomes	CbD	DOPS	MCR	Mini-CEX	MSF	PS	QIPAT	TO	PG Certificate
Generic CiPs									
Able to function successfully within			√		√		√		

Learning outcomes	CbD	DOPS	MCR	Mini -CEX	MSF	PS	QIPAT	TO	PG Certificate
NHS organisational and management systems									
Able to deal with ethical and legal issues related to clinical practice	√	√	√	√	√				
Communicates effectively and is able to share decision making, while maintaining appropriate situational awareness, professional behaviour and professional judgement		√	√	√	√	√			
Is focused on patient safety and delivers effective quality improvement in patient care	√	√	√	√	√		√		
Carrying out research and managing data appropriately			√		√			√	
Acting as a clinical teacher and clinical supervisor			√		√			√	
Specialty CiPs									
Able to formulate a holistic audiovestibular analysis and prioritise	√		√	√	√	√	√	√	√
Able to diagnose and manage audiovestibular and co-morbid medical conditions	√		√	√	√	√	√		√
Diagnosis and medical management of hearing disorders and dysacuses across all ages of adults within a holistic biopsychosocial framework	√		√	√	√	√			√

Learning outcomes	CbD	DOPS	MCR	Mini -CEX	MSF	PS	QIPAT	TO	PG Certificate
Diagnosis and medical management of vestibular disorders across all ages of adults within a holistic biopsychosocial framework	√	√	√	√	√	√			√
Diagnosis and medical management of hearing disorders and dysacuses in neonates and children within a holistic biopsychosocial framework	√		√	√	√	√			√
Diagnosis and medical management of vestibular disorders in neonates and children within a holistic biopsychosocial framework	√	√	√	√	√	√			√
Able to work in multidisciplinary Audiovestibular Medicine teams	√		√	√	√	√		√	
Managing and leading multidisciplinary Audiovestibular Medicine service	√		√	√	√	√			

Blueprint for examination (PG Certificate)

The objective of the Postgraduate Certificate in MSc level audiology is to provide knowledge of the anatomy, physiology and biochemistry of the audiovestibular system and related organs, including central pathways and connections with a view to understanding the effect of loss of sensory input on the auditory pathway during development and in the adult. This includes:

- Gross anatomy and histology of the ear
- Inner ear microscopic anatomy, cellular organisation, molecular biology
- 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 the cochlear nucleus

- Physiology of the peripheral auditory and vestibular system, central auditory pathway
- Physiology of the central vestibular pathway and reflexes
- Central auditory processing

6 Supervision and feedback

This section of the curriculum describes how trainees will be supervised, and how they will receive feedback on performance. For further information please refer to the AoMRC guidance on Improving feedback and reflection to improve learning[4].

Access to high quality, supportive and constructive feedback is essential for the professional development of the trainee. Trainee reflection is an important part of the feedback process and exploration of that reflection with the trainer should ideally be a two way dialogue. Effective feedback is known to enhance learning and combining self-reflection to feedback promotes deeper learning.

Trainers should be supported to deliver valuable and high quality feedback. This can be by providing face to face training to trainers. Trainees would also benefit from such training as they frequently act as assessors to junior doctors, and all involved could also be shown how best to carry out and record reflection.

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 and referral supervision must routinely include the opportunity to discuss all cases with a supervisor if appropriate. As training progresses the trainee should have the opportunity for increasing autonomy, consistent with safe and effective care for the patient.

Organisations must make sure that each doctor in training has access to a named clinical supervisor and a named educational supervisor. Depending on local arrangements these roles may be combined into a single role of educational supervisor. However, it is preferred that a trainee has a single named educational supervisor for (at least) a full training year, in which case the clinical supervisor is likely to be a different consultant during some placements.

The role and responsibilities of supervisors have been defined by the GMC in their standards for medical education and training[5].

Educational supervisor
The educational supervisor is responsible for the overall supervision and management of a doctor's educational progress during a placement or a series of placements. The educational supervisor regularly meets with the doctor in training to help plan their training, review

[4] Improving feedback and reflection to improve learning. A practical guide for trainees and trainers
[5] Promoting excellence: standards for medical education and training

progress and achieve agreed learning outcomes. The educational supervisor is responsible for the educational agreement, and for bringing together all relevant evidence to form a summative judgement about progression at the end of the placement or a series of placements.

Clinical supervisor
Consultants responsible for patients that a trainee looks after provide clinical supervision for that trainee and thereby contribute to their training; they may also contribute to assessment of their performance by completing a 'Multiple Consultant Report (MCR)' and other WPBAs. A trainee may also be allocated (for instance, if they are not working with their educational supervisor in a particular placement) a named clinical supervisor, who is responsible for reviewing the trainee's training and progress during a particular placement. It is expected that a named clinical supervisor will provide a MCR for the trainee to inform the Educational Supervisor's report.

The educational and (if relevant) clinical supervisors, when meeting with the trainee, should discuss issues of clinical governance, risk management and any report of any untoward clinical incidents involving the trainee. If the service lead (clinical director) has any concerns about the performance of the trainee, or there are issues of doctor or patient safety, these would be discussed with the clinical and educational supervisors (as well as the trainee). 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.

Educational and clinical supervisors need to be formally recognised by the GMC to carry out their roles[6]. It is essential that training in assessment is provided for trainers and trainees in order to ensure that there is complete understanding of the assessment system, assessment methods, their purposes and use. Training will ensure a shared understanding and a consistency in the use of the WPBAs and the application of standards.

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.

Trainees
Trainees should make the safety of patients their first priority and they should not be practising in clinical scenarios which are beyond their experiences and competencies without supervision. Trainees should actively devise individual learning goals in discussion with their trainers and should subsequently identify the appropriate opportunities to achieve said learning goals. Trainees would need to plan their WPBAs accordingly to enable their WPBAs to collectively provide a picture of their development during a training period. Trainees should actively seek guidance from their trainers in order to identify the appropriate learning opportunities and plan the appropriate frequencies and types of WPBAs according to their individual learning needs. It is the responsibility of trainees to seek feedback following learning opportunities and WPBAs. Trainees should self-reflect and

[6] Recognition and approval of trainers

self-evaluate regularly with the aid of feedback. Furthermore, trainees should formulate action plans with further learning goals in discussion with their trainers.

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 not mandatory (particularly 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. Supervisors should also identify areas where a trainee has performed about the level expected and highlight successes.

7 Quality Management

The organisation of training programs is the responsibility of the deaneries. The deaneries will oversee programmes for postgraduate medical training in their regions. The Schools of Medicine in England, Wales and Northern Ireland and the Medical Specialty Training Board in Scotland will undertake the following roles:

- oversee recruitment and induction of trainees into the specialty
- allocate trainees into particular rotations appropriate to their training needs

- oversee the quality of training posts provided locally
- ensure adequate provision of appropriate educational events
- ensure curricula implementation across training programmes
- oversee the workplace-based assessment process within programmes
- coordinate the ARCP process for trainees
- provide adequate and appropriate career advice
- provide systems to identify and assist doctors with training difficulties
- provide flexible training.

Educational programmes to train educational supervisors and assessors in workplace based assessment may be delivered by deaneries or by the colleges or both.

Development, implementation, monitoring and review of the curriculum are the responsibility of the JRCPTB and the SAC. The committee will be formally constituted with representatives from each health region in England, from the devolved nations and with trainee and lay representation. It will be the responsibility of the JRCPTB to ensure that curriculum developments are communicated to heads of school, regional specialty training committees and TPDs.

The JRCPTB has a role in quality management by monitoring and driving improvement in the standard of all medical specialties on behalf of the three Royal Colleges of Physicians in Edinburgh, Glasgow and London. The SACs are actively involved in assisting and supporting deaneries to manage and improve the quality of education within each of their approved training locations. They are tasked with activities central to assuring the quality of medical education such as writing the curriculum and assessment systems, reviewing applications for new posts and programmes, provision of external advisors to deaneries and recommending trainees eligible for CCT or Certificate of Eligibility for Specialist Registration (CESR).

JRCPTB uses data from six quality datasets across its specialties and subspecialties to provide meaningful quality management. The datasets include the GMC national Training Survey (NTS) data, ARCP outcomes, examination outcomes, new consultant survey, penultimate year assessments (PYA)/external advisor reports and the monitoring visit reports.

Quality criteria have been developed to drive up the quality of training environments and ultimately improve patient safety and experience. These are monitored and reviewed by JRCPTB to improve the provision of training and ensure enhanced educational experiences.

8 Intended use of curriculum by trainers and trainees

This curriculum and ARCP decision aid are available from the Joint Royal Colleges of Physicians Training Board (JRCPTB) via the website jrcptb.org.uk.

Clinical and educational supervisors should use the curriculum and decision aid as the basis of their discussion with trainees, particularly during the appraisal process. 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 an eportfolio. The trainee will use the curriculum to develop learning objectives and reflect on learning experiences.

Recording progress in the eportfolio

On enrolling with JRCPTB trainees will be given access to the eportfolio. 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 the eportfolio is kept up to date, arrange assessments and ensure they are recorded, prepare drafts of appraisal forms, maintain their personal development plan, record their reflections on learning and 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.

Deaneries, training programme directors, college tutors and ARCP panels may use the eportfolio to monitor the progress of trainees for whom they are responsible.

JRCPTB will use summarised, anonymous eportfolio data to support its work in quality assurance.

All appraisal meetings, personal development plans and workplace based assessments (including MSF) should be recorded in the eportfolio. Trainees are encouraged to reflect on their learning experiences and to record these in the eportfolio. Reflections can be kept private or shared with supervisors.

Reflections, assessments and other eportfolio content should be used to provide evidence towards acquisition of curriculum capabilities. Trainees should add their own self-assessment ratings to record their view of their progress. The aims of the self-assessment are:

- To provide the means for reflection and evaluation of current practice.
- To inform discussions with supervisors to help both gain insight and assists in developing personal development plans.
- To identify shortcomings between experience, competency and areas defined in the curriculum so as to guide future clinical exposure and learning.

Supervisors can sign-off and comment on curriculum capabilities to build up a picture of progression and to inform ARCP panels.

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.

Deaneries quality assurance will ensure that each training programme complies with the equality and diversity standards in postgraduate medical training as set by GMC. They should provide access to a professional support unit or equivalent for trainees requiring additional support.

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.
- Deaneries ensuring that educational supervisors have had equality and diversity training (for example, an e-learning module) every three years.
- Deaneries ensuring that any specialist participating in trainee interview/appointments committees or processes has had equality and diversity training (at least as an e-module) every three years.
- Ensuring trainees have an appropriate, confidential and supportive route to report examples of inappropriate behaviour of a discriminatory nature. Deaneries 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. Deaneries must also ensure contingency mechanisms are in place if trainees feel unhappy with the response or uncomfortable with the contact individual.
- Providing resources to trainees needing support (for example, through the provision of a professional support unit or equivalent).
- Monitoring of College Examinations.
- Ensuring all assessments discriminate on objective and appropriate criteria and do not unfairly advantage or disadvantage a trainee with any of the Equality Act 2010 protected characteristics. All efforts shall be made to ensure the participation of people with a disability in training through reasonable adjustments.

JRCPTB

Joint Royal Colleges of Physicians Training Board

ROYAL COLLEGE of PHYSICIANS of EDINBURGH

ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF GLASGOW

Royal College of Physicians