# SPECIALTY TRAINING CURRICULUM FOR SPORT AND EXERCISE MEDICINE AUGUST 2010

Joint Royal Colleges of Physicians Training Board

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## 1 Introduction

This document describes Specialist Training (ST) for doctors wishing to specialise in the field of the Sport and Exercise Medicine (SEM). Aims and objectives for both general professional and specialty specific learning are provided as well details of how that learning will be supported and assessed in the practice of SEM. The training structure is also described.

## 2 Rationale

#### 2.1 Purpose of the Curriculum

The purpose of this curriculum is to define the process of training and the competencies needed for the award of a certificate of completion of training (CCT) in Sport and Exercise Medicine.

The curriculum covers training for all four nations of the UK.

SEM is a specialty founded on the disease and wellness models of medicine. It is through the latter, in particular, that SEM physicians in the future can play a leading and vital role in helping determine the Health of the Nation.

One of the great medical challenges over the coming century is to reverse the slide towards a sedentary population. The technological advances seen over the past century have been labour-saving and time-saving. These same advances however have resulted in a population that is generally required to perform less physical activity than at any other stage in human existence. Medical conditions such as obesity, diabetes, hyperlipidaemia, osteoporosis, cardiovascular disease and mental illness can all be at least partially attributed to a sedentary lifestyle. Certainly exercise has been proven to provide therapeutic benefit in each of these conditions. Studies demonstrate that those who exercise regularly are likely to contribute in a positive way to society. Children who exercise regularly are more likely to continue as exercisers and be successful at sport, with its inherent benefits for self esteem, health and social skills. These issues have been addressed by the government White Paper: Choosing Health, and more recently 'Be active, be healthy' (DH 2009).

Whilst governments struggle under the burden of increasing health-care costs, there is a real need for proactive support structures for those who wish to exercise, as part of healthy living. Training in SEM provides doctors with a specialised skill set that enables them to treat and encourage the exercising individual. Knowledge of the health benefits of exercise and of optimal exercise regimes for specific subgroups, allows SEM specialists to promote an active lifestyle to those groups who can benefit most.

SEM specialists require a broad range of clinical skills for dealing with medical illness in those who wish to exercise, as well as for treatment of musculoskeletal pathology. SEM now represents a distinct body of knowledge. There will always be common ground with other specialist areas of knowledge such as general practice, orthopaedics, emergency medicine, rheumatology, rehabilitation medicine, physiotherapy and neurology. SEM doctors however have specialist training which is focused on the beneficial effects of exercise on health, and the effects that medical conditions have on the individual's capacity to exercise. Giving encouragement and assistance to individuals and groups in their endeavours to be active today, provides a holistic and effective means of addressing the population health challenges of tomorrow.

#### 2.2 The Role of the Specialist in SEM

The SEM consultant participates in a variety of activities and has a number of roles spanning primary and secondary care. While the training programme includes obligatory "core" knowledge and skills, the flexibility within the training programme allows the trainee to pursue areas of special interest. SEM physicians will therefore have a variety of areas of special expertise to satisfy the diversity of needs within the community. The role of the Consultant in Sport & Exercise Medicine reflects the 'broad church' of the specialty training curriculum and spans primary, secondary and tertiary care. It includes:

#### Clinical

- To provide accurate diagnosis for those individuals with injury or illness who would like to exercise, or for whom exercise would be beneficial, including:-
  - The general population.
  - At risk populations, e.g. diabetics, those with cardio-vascular disease, the overweight and obese.
  - Special groups such as pregnant women, children and older adults.
  - Groups in whom physical activity is limited by co-existing musculoskeletal morbidities.
- To provide a high level of clinical expertise and to communicate effectively with clinicians referring patients for a professional opinion.
- To work closely with allied health professionals to ensure that the patient receives the highest level of clinical care at each stage of their treatment process.
- To work within the sporting environment to ensure a safe exercising environment for participants.
- To provide support to elite sportsmen and women to assist them in maximising performance (within international rules), reducing injury time and minimising the co-morbidity associated with elite sporting participation.
- To promote the highest level of ethical standards within the sporting environment by contribution to sporting organisations and teams

#### **Public Health**

- As a leading member of a multi-disciplinary team encourage and promote physical activity as a lever for healthy living
- To identify impediments to an active lifestyle and work within a multidisciplinary framework to remove those impediments or minimise their impact
- To work alongside local health authorities, public health clinicians and PCT's in planning and developing exercise opportunities for the general public for health gain
- To liaise with local authorities and education boards, the voluntary and private sectors to advise on the health aspects of exercise programmes.

#### Managerial

- To provide a leadership role within the multidisciplinary team providing clinical management of individuals with injury or illness.
- To establish courteous and respectful relationships with general practitioners and other clinicians for the betterment of patient care.

- To work with specialists in other fields such as general practice, orthopaedics, rheumatology, emergency medicine, rehabilitation and neurology to further understanding of medical conditions affecting the active population.
- To liaise with health authorities at all levels for provision of resources to promote increased physical activity for the general population in the interests of improved community health.
- To establish liaison with other agencies such as social services, housing, education, unemployment, voluntary agencies and the private sector, involved in the provision of services to physically disabled people in the community
- To contribute to organisations which promote the dissemination of SEM knowledge throughout the community for the betterment of community health and for the advancement of sport

#### **Education and Research**

- To participate in regular clinical audit
- To promote original scientific research to develop and expand the understanding of SEM
- To critically review scientific literature and apply evidence based principles to the practice of SEM
- To actively participate in educational activities for children, community groups, sporting organisations, athletes and other medical professionals to promote an active lifestyle and to improve safety standards in sport
- To participate in approved training programmes in SEM: foundation programmes, basic specialty training and higher specialty training.

#### 2.3 Development

This curriculum was developed by the Specialty Advisory Committee for Sport and Exercise Medicine under the direction of the Joint Royal Colleges of Physicians Training Board (JRCPTB). It replaces the previous version of the curriculum dated April 2007, with changes to ensure the curriculum meets GMC's standards for Curricula and Assessment, and to incorporate revisions to the content and delivery of the training programme. Major changes from the previous curriculum include the incorporation of generic, leadership and health inequalities competencies.

Sport and Exercise Medicine was formally recognised as a medical specialty in February 2005. The original specialty curriculum was developed by a panel of SEM experts from within the UK and Australia, with support from DCMS and DH. The curriculum received GMC approval in June 2007. Higher Specialty Training programmes commenced in August 2007, under the guidance of the Specialist Advisory Committee (SAC) of the Faculty of Sport and Exercise Medicine (UK). A small number of minor revisions to the curriculum were introduced in January 2009, following feedback from programme directors, trainers and trainees.

#### 2.4 Training Pathways

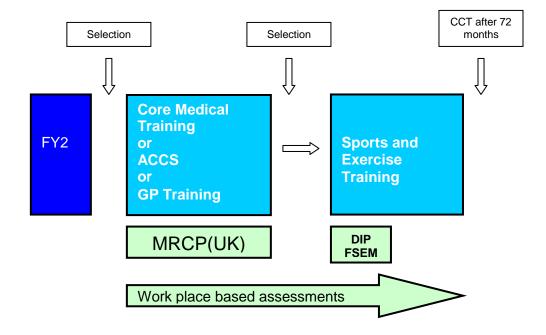
Specialty training in SEM consists of core and higher speciality training. Core training provides physicians with the ability to investigate, treat and diagnose patients with acute and chronic medical symptoms, and with high quality review skills for managing inpatients and outpatients. Higher speciality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

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

Core training may be completed in a Core Medical Training (CMT), Acute Care Common Stem (ACCS) or GP training programme. The full curriculum for specialty training in SEM therefore consists of the curriculum for either CMT, ACCS or GP training plus this specialty training curriculum for SEM.

The approved curriculum for CMT is a sub-set of the Curriculum for General Internal Medicine (GIM). A "Framework for CMT" has been created for the convenience of trainees, supervisors, tutors and programme directors. The body of the Framework document has been extracted from the approved curriculum but only includes the syllabus requirements for CMT and not the further requirements for acquiring a CCT in GIM.

Trainees undertaking CMT or ACCS as their core training programme will be required to obtain full MRCP (UK) before entry into Specialty training at ST3 (2011 onwards).



#### 2.5 Enrolment with JRCPTB

Trainees are required to register for specialist training with JRCPTB at the start of their training programmes. Enrolment with JRCPTB, including the complete payment

of enrolment fees, is required before JRCPTB will be able to recommend trainees for a CCT. Trainees can enrol online at <u>www.jrcptb.org.uk</u>

#### 2.6 Duration of Training

The SAC has advised that training from ST1 will usually be completed in 6 years of full time training (2 years core plus 4 years specialty training). At least 3 of the 4 years specialty training must comprise supervised clinical training in a regional training programme approved by GMC but with relevant input from the deanery and the specialty (SAC). It is desirable that the trainee spends a period, equivalent to at least 6 months full-time, with a variety of sports teams or settings under the supervision of an approved trainer during the four years of specialty training. The construction of the programme is flexible to ensure that trainees from different backgrounds complete the programme with a similar breadth of experience. A period of longitudinal training in primary care is mandatory and training in aspects of relevant Public Health Medicine and General Practice is expected (typically but not invariably in ST3).

From the start of SEM training at ST1 to completion at ST6 trainees, are expected to gain specific competencies irrespective of their entry pathway at ST1 (CMT, ACCS or GP training). Central to the early years of SEM specialty training is the development of competencies to enable the trainee to identify and manage sick patients. This is considered a 'corner stone' of SEM practice and thus essential before proceeding with the ST3-ST6 years of specialty training.

#### 2.7 Less Than Full Time Training (LTFT)

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

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

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

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

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

Less than full time trainees should assume that their clinical training will be of a duration pro-rata with the time indicated/recommended, but this should be reviewed during annual appraisal by their TPD and chair of STC and Deanery Associate Dean for LTFT training. As long as the statutory European Minimum Training Time (if

relevant), has been exceeded, then indicative training times as stated in curricula may be adjusted in line with the achievement of all stated competencies.

## 3 Content of learning

#### 3.1 Programme Content and Objectives

The primary purpose of training in SEM is the development of a specialist who has the appropriate level of knowledge, skills, behaviours and competencies to work independently and effectively as a consultant in the NHS. Patient-centred approaches and team working are of vital importance. Training should be enjoyable in order to facilitate the learning of the trainee.

The curriculum provides:

- opportunities for self-directed learning
- regular feedback from educational supervisors and trainers to the trainee
- appropriate career advice and counselling
- processes for extra support
- processes for mediation and retraining

#### 3.2 Good Medical Practice

In preparation for the introduction of licensing and revalidation, the General Medical Council has translated Good Medical Practice into a Framework for Appraisal and Assessment which provides a foundation for the development of the appraisal and assessment system for revalidation. The Framework can be accessed at <a href="http://www.gmc-uk.org/static/documents/content/GMP\_.pdf">http://www.gmc-uk.org/static/documents/content/GMP\_.pdf</a>.

The Framework for Appraisal and Assessment covers the following domains:

Domain 1 – Knowledge, Skills and Performance

Domain 2 - Safety and Quality

Domain 3 – Communication, Partnership and Teamwork

Domain 4 – Maintaining Trust

The "GMP" column in the syllabus defines which of the 4 domains of the Good Medical Practice Framework for Appraisal and Assessment are addressed by each competency. Most parts of the syllabus relate to "Knowledge, Skills and Performance" but some parts will also relate to other domains.

#### 3.3 Syllabus

In the tables below, the "Assessment Methods" shown are those that are appropriate as **possible** methods that could be used to assess each competency. It is not expected that all competencies will be assessed and that where they are assessed not every method will be used. See section 5.2 for more details.

"GMP" defines which of the 4 domains of the Good Medical Practice Framework for Appraisal and Assessment are addressed by each competency. See section 3.2 for more details.

The **Common Competencies Framework (CCF)** developed by the Specialty Training Committee of the Academy of Medical Royal Colleges is referenced in those modules in the SEM Curriculum where the Knowledge, Skills and Behaviours described in the Common Competencies framework may be most readily assessed.

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# **General Medical Skills**

#### **Principles of Quality and Safety Improvement**

To recognise the desirability of monitoring performance, learning from mistakes and adopting no blame culture in order to ensure high standards of care and optimise patient safety

Knowledge	Assessment Methods	GMP
Understands the elements of clinical governance	CbD, MSF	1
Recognises that governance safeguards high standards of care and facilitates the development of improved clinical services	CbD, MSF	1,2
Defines local and national significant event reporting systems relevant to specialty	ACAT, CbD, mini- CEX	1
Recognises importance of evidence-based practice in relation to clinical effectiveness	CbD	1
Outlines local health and safety protocols (fire, manual handling etc)	CbD	1
Understands risk associated with the trainee's specialty work including biohazards and mechanisms to reduce risk	CbD	1
Outlines the use of patient early warning systems to detect clinical deterioration where relevant to the trainee's clinical specialty	ACAT, CbD, mini- CEX	1
Keeps abreast of national patient safety initiatives including National Patient Safety Agency , NCEPOD reports, NICE guidelines etc	ACAT, CbD, mini- CEX	1
Skills		
Adopts strategies to reduce risk e.g. surgical pause	ACAT, CbD	1,2
Contributes to quality improvement processes e.g.	AA, CbD	2
<ul> <li>Audit of personal and departmental/directorate/practice performance</li> </ul>		
Errors / discrepancy meetings		
Critical incident and near miss reporting		
Unit morbidity and mortality meetings		
Local and national databases		
Maintains a portfolio of information and evidence, drawn from own medical practice	CbD	2
Reflects regularly on own standards of medical practice in accordance with GMC guidance on licensing and revalidation	AA	1,2,3,4
Behaviours		
Shows willingness to participate in safety improvement strategies such as critical incident reporting	CbD, MSF	3
Develops reflection in order to achieve insight into own professional practice	CbD, MSF	3
Demonstrates personal commitment to improve own performance in the light of feedback and assessment	CbD, MSF	3
Engages with an open no blame culture	CbD, MSF	3
Responds positively to outcomes of audit and quality improvement	CbD, MSF	1,3
Co-operates with changes necessary to improve service quality and	CbD, MSF	1,2

safety

#### **History Taking**

To develop the ability to elicit a relevant focused history from patients with increasingly complex issues and in increasingly challenging circumstances.

To record the history accurately and synthesise this with relevant clinical examination, establish a problem list increasingly based on pattern recognition including differential diagnosis (es) an formulate a management plan that takes account of likely clinical evolution

Knowledge	Assessment Methods	GMP
Recognises importance of different elements of history	mini-CEX	1
Recognises that patients do not present history in structured fashion	ACAT, mini-CEX	1,3
Knows likely causes and risk factors for conditions relevant to mode of presentation	mini-CEX	1
Recognises that the patient's agenda and the history should inform examination, investigation and management	mini-CEX	1
Skills		
Identifies and overcomes possible barriers to effective communication	mini-CEX	1,3
Manages time and draws consultation to a close appropriately	mini-CEX	1,3
Recognises that effective history taking in non-urgent cases may require several discussions with the patient and other parties, over time	ACAT, mini-CEX	1,3
Supplements history with standardised instruments or questionnaires when relevant	ACAT, mini-CEX	1,3
Manages alternative and conflicting views from family, carers, friends and members of the multi-professional team	ACAT, mini-CEX	1,3
Assimilates history from the available information from patient and other sources including members of the multi-professional team	ACAT, mini-CEX	1,3
Recognises and interprets appropriately the use of non verbal communication from patients and carers	mini-CEX	1,3
Focuses on relevant aspects of history	ACAT, mini-CEX	1,3
Maintains focus despite multiple and often conflicting agendas	ACAT, mini-CEX	1,3
Behaviours		
Shows respect and behaves in accordance with Good Medical Practice	ACAT, mini-CEX	3,4

#### **Clinical Examination**

To develop the ability to perform focused, relevant and accurate clinical examination in patients with increasingly complex issues and in increasingly challenging circumstances

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

Knowledge	Assessment Methods	GMP
Understands the need for a targeted and relevant clinical examination	CbD, mini-CEX	1
Understands the basis for clinical signs and the relevance of positive and negative physical signs	ACAT, CbD, mini- CEX	1
Recognises constraints to performing physical examination and strategies that may be used to overcome them	CbD, mini-CEX	1
Recognises the limitations of physical examination and the need for adjunctive forms of assessment to confirm diagnosis	ACAT, CbD, mini- CEX	1
Recognises when the offer/ use of a chaperone is appropriate or required	ACAT, CbD, mini- CEX	1
Skills		
Performs an examination relevant to the presentation and risk factors that is valid, targeted and time efficient	ACAT, CbD, mini- CEX	1
Recognises the possibility of deliberate harm (both self harm and harm by others) in vulnerable patients and report to appropriate agencies	ACAT, CbD, mini- CEX	1,2
Actively elicits important clinical findings	CbD, mini-CEX	1
Performs relevant adjunctive examinations	CbD, mini-CEX	1
Behaviours		
Shows respect and behaves in accordance with Good Medical Practice	CbD, mini-CEX, MSF	1,4
Ensures examination, whilst clinically appropriate, considers social, cultural and religious boundaries to examination, appropriately communicates and makes alternative arrangements where necessary	CbD, mini-CEX, MSF	1,4

#### **Therapeutics and Safe Prescribing**

To develop your ability to prescribe, review and monitor appropriate therapeutic interventions relevant to clinical practice including non-medication-based therapeutic and preventative indications

Knowledge	Assessment Methods	GMP
Indications, contraindications, side effects, drug interactions and dosage of commonly used drugs	ACAT, CbD, mini- CEX	1
Recalls range of adverse drug reactions to commonly used drugs, including complementary medicines	ACAT, CbD, mini- CEX	1
Recalls drugs requiring therapeutic drug monitoring and interpret results	ACAT, CbD, mini- CEX	1
Outlines tools to promote patient safety and prescribing, including electronic clinical record systems and other IT systems	ACAT, CbD, mini- CEX	1,2

Defines the effects of age, body size, organ dysfunction and concurrent illness on drug distribution and metabolism relevant to the trainee's practice	ACAT, CbD, mini- CEX	1,2
Recognises the roles of regulatory agencies involved in drug use, monitoring and licensing (e.g. National Institute for Clinical Excellence (NICE), Committee on Safety of Medicines (CSM), and Healthcare Products Regulatory Agency and hospital formulary committees	ACAT, CbD, mini- CEX	1,2
Skills		
Reviews the continuing need for, effect of and adverse effects of long term medications relevant to the trainee's clinical practice	ACAT, CbD, mini- CEX	1,2
Anticipates and avoids defined drug interactions, including complementary medicines	ACAT, CbD, mini- CEX	1
Advises patients (and carers) about important interactions and adverse drug effects	ACAT, CbD, mini- CEX	1,3
Prescribes appropriately in pregnancy, and during breast feeding	ACAT, CbD, mini- CEX	1
Makes appropriate dose adjustments following therapeutic drug monitoring, or physiological change (e.g. deteriorating renal function)	ACAT, CbD, mini- CEX	1
Uses IT prescribing tools where available to improve safety	ACAT, CbD, mini- CEX	1,2
Employs validated methods to improve patient concordance with prescribed medication	ACAT, mini-CEX	1,3
Provides comprehensible explanations to the patient, and carers when relevant, for the use of medicines and understands the principles of concordance in ensuring that drug regimes are followed	ACAT, CbD, mini- CEX	1,3
Understanding of the importance of non-medication based therapeutic interventions including the legitimate role of placebos	ACAT, CbD, mini- CEX	1,3
Where involved in "repeat prescribing," ensures safe systems for monitoring, review and authorisation	ACAT, CbD, mini- CEX	1
Behaviours		
Recognises the benefit of minimising number of medications taken by a patient to a level compatible with best care	ACAT, CbD, mini- CEX	1
Appreciates the role of non-medical prescribers	ACAT, CbD, mini- CEX	1,3
Remains open to advice from other health professionals on medication issues	ACAT, CbD, mini- CEX	1,3
Recognises the importance of resources when prescribing, including the role of a Drug Formulary and electronic prescribing systems	ACAT, CbD, mini- CEX	1,2
Ensures prescribing information is shared promptly and accurately between a patient's health providers, including between primary and secondary care	ACAT, CbD	1,3
Participates in adverse drug event reporting mechanisms	mini-CEX, CbD	1
Remains up to date with therapeutic alerts, and responds appropriately	ACAT, CbD	1

# **Decision Making and Clinical Reasoning**

To develop the ability to formulate a diagnostic and therapeutic plan for a patient according to the clinical information available To develop the ability to prioritise the diagnostic and therapeutic plan To be able to communicate a diagnostic and therapeutic plan appropriately			
Knowl		Assessment Methods	GMP
Defines	the steps of diagnostic reasoning:	ACAT, CbD, mini- CEX	1
•	Interprets history and clinical signs	ACAT, CbD, mini- CEX	1
•	Conceptualises clinical problem in a medical and social context	ACAT, CbD, mini- CEX	1
•	Understands the psychological component of disease and illness presentation	ACAT, CbD, mini- CEX	1
•	Generates hypothesis within context of clinical likelihood	ACAT, CbD, mini- CEX	1
•	Tests, refines and verifies hypotheses	ACAT, CbD, mini- CEX	1
•	Develops problem list and action plan	ACAT, CbD, mini- CEX	1
•	Recognises how to use expert advice, clinical guidelines and algorithms	ACAT, CbD, mini- CEX	1
•	Recognises and appropriately responds to sources of information accessed by patients	ACAT, CbD, mini- CEX	1
•	nises the need to determine the best value and most effective ant both for the individual patient and for a patient cohort	ACAT, CbD, mini- CEX	1,2
Defines risk	the concepts of disease natural history and assessment of	ACAT, CbD, mini- CEX	1
Recalls	methods and associated problems of quantifying risk e.g. studies	ACAT, CbD	1
	s the concepts and drawbacks of quantitative assessment of penefit e.g. numbers needed to treat	ACAT, CbD	1
Describ	es commonly used statistical methodology	CbD, mini-CEX	1
of the to diagnos	how relative and absolute risks are derived and the meaning erms' predictive value, sensitivity and specificity in relation to stic tests	CbD, mini-CEX	1
Skills			
scenari	ets clinical features, their reliability and relevance to clinical os including recognition of the breadth of presentation of n disorders	ACAT, CbD, mini- CEX	1
elemen	rates an understanding of the psychological and social ts of clinical scenarios into decision making through a robust s of clinical reasoning	ACAT, CbD, mini- CEX	1
Recogr	nises critical illness and responds with due urgency	ACAT, CbD, mini- CEX	1

ACAT, CbD, mini- CEX	1
ACAT, CbD, mini- CEX	1
ACAT, CbD, mini- CEX	1,3,4
ACAT, CbD, mini- CEX	1
AA, CbD	1
ACAT, CbD, mini- CEX	1
ACAT, CbD, mini- CEX	3
ACAT, CbD, mini- CEX	3
ACAT, CbD, mini- CEX	3
ACAT, CbD, mini- CEX	1,4
ACAT, CbD, mini- CEX	1,3
	CEX ACAT, CbD, mini- CEX ACAT, CbD, mini-

#### The Patient as Central Focus of Care

To develop the ability to prioritise the patient's agenda encompassing their beliefs, concerns expectations and needs

Knowledge	Assessment Methods	GMP
Outlines health needs of particular populations e.g. ethnic minorities and recognises the impact of health beliefs, culture and ethnicity in presentations of physical and psychological conditions	ACAT, CbD	1
Skills		
Gives adequate time for patients and carers to express their beliefs ideas, concerns and expectations	ACAT, mini-CEX	1,3,4
Responds to questions honestly and seek advice if unable to answer	ACAT, CbD, mini- CEX	3
Encourages the health care team to respect the philosophy of patient focussed care	ACAT, CbD, mini- CEX, MSF	3

Develops a self-management plan with the patient	ACAT, CbD, mini- CEX	1,3
Supports patients, parents and carers where relevant to comply with management plans	ACAT, CbD, mini- CEX, PS	3
Encourages patients to voice their preferences and personal choices about their care	ACAT, mini-CEX, PS	3
Behaviours		
Supports patient self-management	ACAT, CbD, mini- CEX, PS	3
Recognises the duty of the medical professional to act as patient advocate	ACAT, CbD, mini- CEX, MSF, PS	3,4

#### **Prioritisation of Patient Safety in Clinical Practice**

To understand that patient safety depends on the effective and efficient organisation of care, and health care staff working well together

To understand that patient safety depends on safe systems not just individual competency and safe practice

To never compromise patient safety

To understand the risks of treatments and to discuss these honestly and openly with patients so that patients are able to make decisions about risks and treatment options

To ensure that all staff are aware of risks and work together to minimise risk

Knowledge	Assessment Methods	GMP
Outlines the features of a safe working environment	ACAT, CbD, mini- CEX	1
Outlines the hazards of medical equipment in common use	ACAT, CbD	1
Recalls side effects and contraindications of medications prescribed	ACAT, CbD, mini- CEX	1
Recalls principles of risk assessment and management	CbD	1
Recalls the components of safe working practice in the personal, clinical and organisational settings	ACAT, CbD	1
Outlines local procedures and protocols for optimal practice e.g. GI bleed protocol, safe prescribing	ACAT, CbD, mini- CEX	1
Understands the investigation of significant events, serious untoward incidents and near misses	ACAT, CbD, mini- CEX	1
Skills		
Recognises limits of own professional competence and only practises within these	ACAT, CbD, mini- CEX	1
Recognises when a patient is not responding to treatment and reassesses the situation; encourages others to do the same	ACAT, CbD, mini- CEX	1
Ensures the correct and safe use of medical equipment, ensuring faulty equipment is reported appropriately	ACAT, CbD, mini- CEX	1
Improves patients' and colleagues' understanding of the side effects and contraindications of therapeutic intervention	ACAT, CbD, mini- CEX	1,3
Sensitively counsels a colleague following a significant untoward event, or near incident, to encourage improvement in practice of individual and unit	ACAT, CbD	3

Recognises and responds to the manifestations of a patient's deterioration or lack of improvement (symptoms, signs, observations, and laboratory results) and supports other members of the team to act similarly	ACAT, CbD, mini- CEX, MSF	1
Behaviours		
Continues to maintain a high level of safety awareness and consciousness at all times	ACAT, CbD, mini- CEX	2
Encourages feedback from all members of the team on safety issues	ACAT, CbD, mini- CEX, MSF	3
Reports serious untoward incidents and near misses and co-operates with the investigation of the same	ACAT, CbD, mini- CEX, MSF	3
Shows willingness to take action when concerns are raised about performance of members of the healthcare team, and acts appropriately when these concerns are voiced to you by others	ACAT, CbD, mini- CEX, MSF	3
Continues to be aware of one's own limitations, and operates within them competently	ACAT, CbD, mini- CEX	1

#### **Infection Control**

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

Knowledge	Assessment Methods	GMP
Understands the principles of infection control as defined by the GMC	ACAT, CbD, mini- CEX	1
Understands the principles of preventing infection in high risk groups (e.g. managing antibiotic use to reduce Clostridium difficile infection,) including understanding the local antibiotic prescribing policy	ACAT, CbD, mini- CEX	1
Understands the role of Notification of diseases within the UK and identifies the principle notifiable diseases for UK and international purposes	ACAT, CbD, mini- CEX	1
Understands the role of the Health Protection Agency and Consultants in Health Protection (previously Consultants in Communicable Disease Control – CCDC)	CbD, ACAT	1
Understands the role of the local authority in relation to infection control	ACAT, CbD, mini- CEX	1
Skills		
Recognises the potential for infection within patients being cared for	ACAT, CbD	1,2
Counsels patient on matters of infection risk, transmission and control	ACAT, CbD, mini- CEX, PS	2,3
Actively engages in local infection control procedures	ACAT, CbD	1
Actively engages in local infection control monitoring and reporting processes	ACAT, CbD	1,2
Prescribes antibiotics according to local antibiotic guidelines and works with microbiological services where this is not possible	ACAT, CbD, mini- CEX	1
Recognises potential for cross-infection in clinical settings	ACAT, CbD, mini- CEX	1,2

Practises aseptic technique whenever relevant	DOPS	1
Behaviours		
Encourages all staff, patients and relatives to observe infection control principles	ACAT, CbD, MSF	1,3
Recognises the risk of personal ill-health as a risk to patients and colleagues in addition to its effect on performance	ACAT, CbD, MSF	1,3

# Communication

#### **Relationships with Patients and Communication within a Consultation**

To recognise the need, and develop the abilities, to communicate effectively and sensitively with patients, relatives and carers Assessment GMP Methods Knowledge ACAT, CbD, mini-1 How to structure a consultation appropriately CEX. PS The importance of the patient's background, culture, education and ACAT, CbD, mini-1 preconceptions (beliefs, ideas, concerns, expectations) to the process CEX, PS Skills Establishes a rapport with the patient and any relevant others (e.g. ACAT, CbD, mini-1.3 carers) CEX. PS Utilises open and closed questioning appropriately ACAT, CbD, mini-1,3 CEX, PS Listens actively and questions sensitively to guide the patient and to ACAT, mini-CEX, PS 1.3 clarify information Identifies and manages communication barriers, tailoring language to ACAT, CbD, mini-1, 3 the individual patient and others, and using interpreters when CEX. PS indicated Delivers information compassionately, being alert to and managing ACAT, CbD, mini-1,3,4 their and your emotional response (anxiety, antipathy etc) CEX Uses, and refers patients to, appropriate written and other evidence ACAT, CbD, mini-1,3 based information sources CEX ACAT, CbD, mini-Checks the patient's/carer's understanding, ensuring that all their 1.3 concerns/questions have been covered CEX Indicates when the consultation is nearing its end and concludes with ACAT, CbD, mini-1,3 a summary and appropriate action plan; asks the patient to CEX summarise back to check his/her understanding Makes accurate contemporaneous records of the discussion ACAT, CbD, mini-1.3 CEX Manages follow-up effectively and safely, utilising a variety if methods ACAT, CbD, mini-1.3 (e.g. phone call, email, letter) CEX Ensures appropriate referral and communications with other ACAT, CbD, mini-1 healthcare professional resulting from the consultation are made CEX accurately and in a timely manner **Behaviours** Approaches the situation with courtesy, empathy, compassion and ACAT, CbD, mini-1,3,4 professionalism, especially by appropriate body language and CEX, MSF, PS endeavouring to ensure an appropriate physical environment - act as an equal not a superior Ensures appropriate personal language and behaviour ACAT, CbD, mini-1,3 CEX, MSF, PS Ensures that the approach is inclusive and patient-centred, and ACAT, CbD, mini-1.3 respects the diversity of values in patients, carers and colleagues CEX, MSF, PS ACAT, CbD, mini-Is willing to provide patients with a second opinion 1.3

	CEX, MSF, PS	
Uses different methods of ethical reasoning to come to a balanced decision where complex and conflicting issues are involved	ACAT, CbD, mini- CEX, MSF	1,3
Is confident and positive in own values	ACAT, CbD, mini- CEX	1,3

# **Breaking Bad News**

To recognise the fundamental importance of breaking bad news To develop strategies for skilled delivery of bad news according to patients and their relatives / carers	the needs of individu	al
Knowledge	Assessment Methods	GMP
How bad news is delivered irretrievably affects the subsequent relationship with the patient	CbD, mini-CEX, MSF, PS	1
Every patient may desire different levels of explanation and have different responses to bad news	CbD, mini-CEX, PS	1,4
That bad news is confidential but the patient may wish to be accompanied	CbD, mini-CEX, PS	1
Once the news is given, patients are unlikely to take anything subsequent in, so an early further appointment should be made	CbD, mini-CEX, PS	1,3
Breaking bad news can be extremely stressful for the doctor or professional involved	CbD, mini-CEX	1,3
The interview at which bad news is given may be an educational opportunity	CbD, mini-CEX	1
It is important to:	CbD, mini-CEX	1,3
Prepare for breaking bad news		
Set aside sufficient uninterrupted time		
<ul> <li>Choose an appropriate private environment and ensure that there will be no unplanned disturbances</li> </ul>		
Have sufficient information regarding prognosis and treatment		
Ensure the individual has appropriate support if desired		
Structure the interview		
<ul> <li>Be honest, factual, realistic and empathic</li> </ul>		
<ul> <li>Be aware of relevant guidance documents</li> </ul>		
'Bad news' may be expected or unexpected and it cannot always be predicted	CbD, mini-CEX	1
Sensitive communication of bad news is an essential part of professional practice	CbD, mini-CEX	1
'Bad news' has different connotations depending on the context, individual, social and cultural circumstances	CbD, mini-CEX, PS	1
That a post mortem examination may be required and understand what this involves	CbD, mini-CEX, PS	1
The local organ retrieval process	ACAT, CbD, mini- CEX	1
Skills		
Demonstrates to others good practice in breaking bad news	CbD, DOPS, MSF	1,3

Involves patients and carers in decisions regarding their future management	CbD, DOPS, MSF	1,3,4
Recognises the impact of the bad news on the patient, carer, supporters, staff members and self	CbD, DOPS, MSF	1,3
Encourages questioning and ensures comprehension	CbD, DOPS, MSF	1,3
Responds to verbal and visual cues from patients and relatives	CbD, DOPS, MSF	1,3
Acts with empathy, honesty and sensitivity, avoiding undue optimism or pessimism	CbD, DOPS, MSF	1,3
Structures the interview, for example:	CbD, DOPS, MSF	1,3
Sets the scene		
Establishes understanding		
<ul> <li>Discusses diagnosis(es), implications, treatment, prognosis and subsequent care</li> </ul>		
Behaviours		
Takes leadership in breaking bad news	CbD, DOPS, MSF	1
Respects the different ways people react to bad news	CbD, DOPS, MSF	1
Ensures appropriate recognition and management of the impact of breaking bad news on the doctor	CbD, DOPS, MSF	1

# **Scientific Knowledge**

#### **Exercise Physiology, Anatomy and Nutrition**

To develop a thorough understanding of the scientific principles underlying the practice of Sport and Exercise Medicine.

To learn to work alongside exercise scientists in maximising athletic performance through the application of scientific knowledge.

To develop a detailed understanding of the functional anatomy relating to athletic performance and injury.

To develop an understanding of the nutritional requirements necessary to promote good health and sustain athletic performance

Knowledge	Assessment Methods	GMP
Exercise Physiology:		
Origins and applications of exercise physiology, basic and applied	Dip SEM.	1
Cellular metabolism and biomechanical pathways of energy production	Dip SEM.	1
Aerobic, anaerobic, intramuscular phosphate		
<ul> <li>Human energy transfer systems during exercise</li> <li>Energy release from various sources including fats, carbohydrates, proteins</li> <li>Substrate utilisation during exercise</li> </ul>	Dip SEM.	1
<ul> <li>Energy systems in exercise</li> <li>Immediate and long term</li> <li>Lactate transfer</li> <li>VO2 kinetics, oxygen lag / debt</li> </ul>	Dip SEM; CbD.	1
<ul> <li>Measurement / energy costs of exercise</li> <li>Basal metabolic rates</li> <li>Calorimetry / daily energy expenditure</li> </ul>	Dip SEM	1
<ul><li>Cardiovascular response and adaptations to exercise</li><li>Blood pressure / Cardiac output/ effects of training</li></ul>	Dip SEM	1
Respiratory response and adaptations to exercise	Dip SEM	1
<ul> <li>Neuromuscular response to exercise</li> <li>Motor units</li> <li>Skeletal muscle structure / function</li> <li>Fibre types</li> </ul>	Dip SEM	1
Evaluating exercise metabolism / neuromuscular activity	Dip SEM	1
Hormones and endocrine systems in exercise	Dip SEM	1
<ul> <li>Principles of training</li> <li>Aerobic</li> <li>Anaerobic</li> <li>Adaptations to Training</li> <li>Training regimes</li> </ul>	Dip SEM; CbD	1
Maintenance and over-reaching		

Strength and conditioning	Dip SEM; CbD	1
Anabolic and catabolic processes		
Resistance / eccentric training		
Children / pregnancy		
Physiological changes		
Affect on muscle / bone / neural / cardiovascular system		
Monitoring of training principles		
Monitoring of exercise capacity / training / overtraining	Dip SEM	1
Fitness assessment	Dip SEM; CbD;	1
Definition	DOPS.	
Different components of fitness		
Rationale for performing assessment		
Tests for aerobic fitness, anaerobic fitness, strength, power, flexibility, body composition		
Environment and exercise:	Dip SEM.	1
Thermoregulation /circulation / hypothalamic response		
Exercise at altitude		
Exercise in the heat		
Exercise in the cold		
Exercise under water		
Exercise in low gravity		
Principles of training and adaptations in extreme environment		
Ergogenic aids	Dip SEM.	1
Genetics and exercise	Dip SEM.	1
Clinical Anatomy:		
Clinically relevant regional anatomy, including the upper limb, lower limb, groin & pelvis, head & neck, thorax and abdomen, cervical spine, thoraco-lumbar spine	Dip SEM	1
Normal variations in anatomy and the relevance for injury risk, injury prevention and injury management	Dip SEM.	1
Nutrition and Exercise:		
Macronutrients and energy	Dip SEM	1
Carbohydrate, fat, protein		
Recommended daily allowances and nutrient sources		
Calorific values and net energy values		
Micronutrients	Dip SEM	1
Vitamins		
Vitamin supplementation		
Minerals (and effect on exercise performance)		
Hydration for Exercise	Dip SEM	1
Water in the body		
Fluid replacement during exercise		
Fluid balance and exercise performance		
Substrate utilisation during exercise	Dip SEM	1
L		

Principles of glucose, lipid and protein utilisation		
Influence of diet on substrate utilisation		
Diet and exercise in extreme environments	Dip SEM	1
Body composition	Dip SEM; mini-CEX;	1
Gross composition of human body	CbD	
Body mass index		
Methods of assessment		
Health risks of different body types		
Diet and health	Dip SEM; CbD	1
<ul> <li>Effect of diet and exercise on cardiovascular health</li> </ul>		
<ul> <li>Effects of diet and exercise on development and management of diabetes</li> </ul>		
Obesity, exercise and weight control	Dip SEM; CbD	1
Principles of energy balance		
Exercise in obese individuals		
Different diet regimes		
Exercise and weight loss		
Nutrition for exercise	Dip SEM	1
Pre-competition		
Carbohydrate intake before, during and after exercise		
Children		
Diet, glycogen stores and endurance	Dip SEM	1
High fat diets and exercise	Dip SEM	1
Protein and anabolic diets	Dip SEM	1
Supplements	Dip SEM	1
Alcohol and exercise performance	Dip SEM	1
Disordered eating, bone health and female athlete triad	Dip SEM.	1
Skills		·
Exercise Physiology:		
		4.0
Calculating energy utilisation	Dip SEM; mini-CEX; DOPS; CbD	1,3
Estimating maximal oxygen consumption	Dip SEM; mini-CEX; DOPS; CbD.	1,3
Lung function testing	Dip SEM; mini-CEX; DOPS; CbD.	1,3
Isokinetic testing	Dip SEM; mini-CEX; DOPS; CbD.	1,3
Force measurement	Dip SEM; mini-CEX; DOPS; CbD.	1,3
Clinical Anatomy:		
Ability to relate anatomical knowledge to history taking and physical examination	mini-CEX; CbD	1,3
Ability to relate anatomical knowledge to interpretation of medical imaging	mini-CEX; CbD	1,3

Nutrition and Exercise:		
Calculation of calorific expenditure	DOPS	1,3
Formulation and analysis of food diaries	DOPS; CbD	1,3
Food weighing	DOPS	1,3
Calculation of body composition	mini-CEX; DOPS; CbD	1,3
To advise on dietary requirements for different exercise conditions/ training regimes and supplement use	mini-CEX; CbD	1,3
Behaviour		
Recognises the fundamental importance of the scientific principles underpinning the practice of Sport and Exercise Medicine	PS; CbD; MSF	1,2
Demonstrates a willingness to work with and seek advice from Sport and Exercise Scientists where appropriate to improve patient care or performance.	DOPS; PS; CbD; MSF	1,3
Demonstrates an ability to apply the scientific principles of exercise to improve patient and athlete care.	mini-CEX; DOPS; PS; CbD; MSF.	1,3

# **Population Health**

#### **Public Health**

To develop the ability to perform a population health needs assessment and to develop strategies to promote and sustain physically active lifestyles, working in association with other relevant public bodies and agencies.

To develop the ability to initiate a health screening programme and to apply the results of this programme appropriately.

Knowledge	Assessment Methods	GMP
Physiology of exercise and health	Dip SEM	1
Essentials of epidemiology	Dip SEM; MSF	1,2
<ul> <li>Epidemiology of relevant diseases: e.g. CHD, diabetes, stroke</li> </ul>		
Theoretical basis of health promotion	Dip SEM; MSF	1,2,3
Working with and for communities		
Strategic leadership in promoting physical activity		
Evidence in physical activity/health research	Dip SEM; CbD	1,2
<ul> <li>Physical activity and effects on CHD, stroke, PVD, cancer(s),</li> <li>Diabetes, obesity, musculoskeletal health, metabolic syndrome, etc</li> </ul>		
<ul> <li>Physical activity as therapy in a range of chronic conditions</li> <li>Effective interventions to promote physical activity</li> </ul>		
Public health policy in physical activity and health	Dip SEM; MSF	1,2,3
Policy development	•	
Policy implementation		
Services supporting the promotion of physical activity and their structures	Dip SEM; MSF	1,2,3
NHS		
Local authority		
Voluntary and private sector		
Collaborative working for physical health and well being		
<ul> <li>Developing appropriate health programmes and services for physical well being</li> </ul>		
Quality of services within an evaluative culture		
Measuring physical activity, fitness and health in individuals and populations	Dip SEM; CbD	1
Knowledge of social and cultural issues affecting health promotion.	Dip SEM; CbD	1
Knowledge of current UK screening programmes to promote health	Dip SEM	1
Common Competencies Framework		
Health Promotion and Public Health:		
Understands the factors which influence health and illness – psychological, biological, social, cultural and economic especially poverty	Dip SEM	1
Understands the influence of lifestyle on health and the factors that	Dip SEM	1

influence an individual to change their lifestyle		
Understands the influence of culture and beliefs on patient's perceptions of health	Dip SEM	1
Understands the purpose of screening programmes and knows in outline the common programmes available within the UK	Dip SEM	1
Understands the positive and negative effects of screening on the individual	Dip SEM	1
Understands the possible positive and negative implications of health promotion activities (e.g. immunisation)	Dip SEM	1
Understands the relationship between the health of an individual and that of a community and vice versa	Dip SEM	1
Knows the key local concerns about health of communities such as smoking and obesity and the potential determinants	Dip SEM	1
Understands the role of other agencies and factors, including the impact of globalisation in increasing disease and in protecting and promoting health	Dip SEM	1
Demonstrates knowledge of the determinants of health worldwide and strategies to influence policy relating to health issues, including the impact of the developed world strategies on the third world	Dip SEM	1
Outlines the major causes of global morbidity and mortality and effective, affordable interventions to reduce these	Dip SEM	1
Recalls the effect of addictive and self harming behaviours, especially substance misuse and gambling, on personal and community health and poverty	Dip SEM	1
, , ,		
Skills		
	Dip SEM; DOPS; CbD; MSF	1,2,3
Skills		1,2,3 1,2,3,4
Skills         The ability to initiate a health screening programme         The ability to provide practical guidance on setting up and managing an exercise programme for people with medical problems, as well as to deal with any technical or patient problems that may arise in such a	CbD; MSF	
Skills         The ability to initiate a health screening programme         The ability to provide practical guidance on setting up and managing an exercise programme for people with medical problems, as well as to deal with any technical or patient problems that may arise in such a programme	CbD; MSF DOPS; CbD	1,2,3,4
Skills         The ability to initiate a health screening programme         The ability to provide practical guidance on setting up and managing an exercise programme for people with medical problems, as well as to deal with any technical or patient problems that may arise in such a programme         Undertaking a needs assessment for a target group or service         Appraising the evidence for the effectives of a physical activity health	CbD; MSF DOPS; CbD DOPS; CbD Dip SEM exam/ M	1,2,3,4
Skills         The ability to initiate a health screening programme         The ability to provide practical guidance on setting up and managing an exercise programme for people with medical problems, as well as to deal with any technical or patient problems that may arise in such a programme         Undertaking a needs assessment for a target group or service         Appraising the evidence for the effectives of a physical activity health promotion programme or service	CbD; MSF DOPS; CbD DOPS; CbD Dip SEM exam/ M Sc; CbD	1,2,3,4 1,2,3 1,2
SkillsThe ability to initiate a health screening programmeThe ability to provide practical guidance on setting up and managing an exercise programme for people with medical problems, as well as to deal with any technical or patient problems that may arise in such a programmeUndertaking a needs assessment for a target group or serviceAppraising the evidence for the effectives of a physical activity health promotion programme or serviceExamining the effectiveness of a relevant serviceDevelop and promote a physical activity programme for a given	CbD; MSF DOPS; CbD DOPS; CbD Dip SEM exam/ M Sc; CbD Dip SEM	1,2,3,4 1,2,3 1,2 1,2
Skills         The ability to initiate a health screening programme         The ability to provide practical guidance on setting up and managing an exercise programme for people with medical problems, as well as to deal with any technical or patient problems that may arise in such a programme         Undertaking a needs assessment for a target group or service         Appraising the evidence for the effectives of a physical activity health promotion programme or service         Examining the effectiveness of a relevant service         Develop and promote a physical activity programme for a given population         Demonstrate an understanding of the relevant services and evidence of the ability to provide leadership and work collaboratively communicating with a range of different audiences' health promoting	CbD; MSF DOPS; CbD DOPS; CbD Dip SEM exam/ M Sc; CbD Dip SEM Dip SEM; MSF	1,2,3,4 1,2,3 1,2 1,2 1,2,3
Skills         The ability to initiate a health screening programme         The ability to provide practical guidance on setting up and managing an exercise programme for people with medical problems, as well as to deal with any technical or patient problems that may arise in such a programme         Undertaking a needs assessment for a target group or service         Appraising the evidence for the effectives of a physical activity health promotion programme or service         Examining the effectiveness of a relevant service         Develop and promote a physical activity programme for a given population         Demonstrate an understanding of the relevant services and evidence of the ability to provide leadership and work collaboratively communicating with a range of different audiences' health promoting messages	CbD; MSF DOPS; CbD DOPS; CbD Dip SEM exam/ M Sc; CbD Dip SEM Dip SEM; MSF	1,2,3,4 1,2,3 1,2 1,2 1,2,3
SkillsThe ability to initiate a health screening programmeThe ability to provide practical guidance on setting up and managing an exercise programme for people with medical problems, as well as to deal with any technical or patient problems that may arise in such a programmeUndertaking a needs assessment for a target group or serviceAppraising the evidence for the effectives of a physical activity health promotion programme or serviceExamining the effectiveness of a relevant serviceDevelop and promote a physical activity programme for a given populationDemonstrate an understanding of the relevant services and evidence of the ability to provide leadership and work collaboratively communicating with a range of different audiences' health promoting messagesCommon Competencies Framework	CbD; MSF DOPS; CbD DOPS; CbD Dip SEM exam/ M Sc; CbD Dip SEM Dip SEM; MSF	1,2,3,4 1,2,3 1,2 1,2 1,2,3
SkillsThe ability to initiate a health screening programmeThe ability to provide practical guidance on setting up and managing an exercise programme for people with medical problems, as well as to deal with any technical or patient problems that may arise in such a programmeUndertaking a needs assessment for a target group or serviceAppraising the evidence for the effectives of a physical activity health promotion programme or serviceExamining the effectiveness of a relevant serviceDevelop and promote a physical activity programme for a given populationDemonstrate an understanding of the relevant services and evidence of the ability to provide leadership and work collaboratively communicating with a range of different audiences' health promoting messagesCommon Competencies Framework Health Promotion and Public Health:	CbD; MSF DOPS; CbD Dip SEM exam/ M Sc; CbD Dip SEM Dip SEM; MSF Dip SEM; CbD; MSF	1,2,3,4 1,2,3 1,2 1,2,3 1,2,3,4

wellbeing in relation to health		
Counsels patients appropriately on the benefits and risks of screening and health promotion activities	CbD, mini-CEX	1,3
Identifies patient's ideas, concerns and health beliefs regarding screening and health promotions programmes and is capable of appropriately responding to these	CbD, mini-CEX	1,3
Works collaboratively with other agencies to improve the health of communities	CbD, mini-CEX	1,3
Recognises and is able to balance autonomy with social justice	CbD, mini-CEX	1,3
Behaviour		
Seeks to promote the maintenance of health and the prevention of illness through the development of physical activity strategies	mini-CEX; DOPS; CbD; MSF	1,3
Recognises the importance of multi-agency involvement in the development of health promotion initiatives	CbD; MSF	1,3
Engages in effective team-working in the implementation of physical activity strategies	MSF	1,3
Understands the criteria for implementing effective screening programmes and in initiating early interventions	Dip SEM; DOPS; CbD; MSF	1,2,3
Demonstrates an awareness of the implications for the patient or athlete of the findings of screening programmes	PS; CbD; MSF	1,3,4
Demonstrates awareness of the social and cultural issues and practices such as:	PS; CbD; MSF	1
<ul> <li>the impact of cultural beliefs and practices on health outcomes</li> </ul>	PS; CbD; MSF	1
determinants which affect patients and communities	PS; CbD; MSF	1
<ul> <li>effects of social and cultural issues and access to healthcare, including an understanding of health issues of migrants and refugees</li> </ul>	PS; CbD; MSF	1

#### **Primary Care**

To develop the ability to diagnose and manage common medical problems presenting in primary care.

To develop the skills to tailor physical activity advice to individuals and groups, for both the promotion of good health and in the management of chronic medical conditions.

To develop the ability to work effectively within a multidisciplinary team to improve patient care.

Knowledge	Assessment Methods	GMP
Treatment options for common conditions seen in General practice including ENT, respiratory, cardiology, gastroenterology, ophthalmology, and dermatology	MiniCEX ; CbD	1,3
Immediate management of the acutely ill patient	Dip SEM; mini-CEX; CbD	1,2,3
Immediate management of common musculoskeletal injuries	Dip SEM; mini-CEX; CbD	1,2,3
Health promotion and screening in General Practice setting	Dip SEM; CbD; MSF	1,2,3,4
Referral procedures to secondary services	CbD; MSF	1,2,3,4

Indications and contraindications for exercise in the healthy population and those with medical conditions	Dip SEM; CbD	1,2,3
Challenges facing deprived communities and ethnic minorities	CbD	1,3,4
Effects of medications on exercise tolerance	CbD	1,2,3
Understanding of community physiotherapy services	CbD; MSF	1,3
Common Competencies Framework		
Decision-Making and Clinical Reasoning:		
Defines the steps of diagnostic reasoning:	CbD, mini-CEX, MSF	1,3
Interprets history and clinical signs	CbD, mini-CEX, MSF	1,3
<ul> <li>Conceptualises clinical problem in a medical and social context</li> </ul>	CbD, mini-CEX, MSF	1,3
<ul> <li>Understands the psychological component of disease and illness presentation</li> </ul>	CbD, mini-CEX, MSF	1,3
Generates hypothesis within context of clinical likelihood	CbD, mini-CEX, MSF	1,3
Tests, refines and verifies hypotheses	CbD, mini-CEX, MSF	1,3
Develops problem list and action plan	CbD, mini-CEX, MSF	1,3
<ul> <li>Recognises how to use expert advice, clinical guidelines and algorithms</li> </ul>	CbD, mini-CEX, MSF	1,3
<ul> <li>Recognises and appropriately responds to sources of information accessed by patients</li> </ul>	CbD, mini-CEX, MSF	1,3
Recognises the need to determine the best value and most effective treatment both for the individual patient and for a patient cohort	CbD, mini-CEX, MSF	1,3
Defines the concepts of disease natural history and assessment of risk	CbD, mini-CEX, MSF	1,3
Recalls methods and associated problems of quantifying risk e.g. cohort studies	CbD, mini-CEX, MSF	1,3
Outlines the concepts and drawbacks of quantitative assessment of risk or benefit e.g. numbers needed to treat	CbD, mini-CEX, MSF	1,3
Describes commonly used statistical methodology	CbD, mini-CEX, MSF	1,3
Knows how relative and absolute risks are derived and the meaning of the terms' predictive value, sensitivity and specificity in relation to diagnostic tests	CbD, mini-CEX, MSF	1,3
Communication with Colleagues and Co-operation:		
Understands the section in 'Good Medical Practice' on Working with Colleagues, in particular:	CbD, mini-CEX, MSF	1,3,4
The roles played by all members of a multi-disciplinary team	CbD, mini-CEX, MSF	1,3,4
The features of good team dynamics	CbD, mini-CEX, MSF	1,3,4
The principles of effective inter-professional collaboration to optimise patient, or population, care	CbD, mini-CEX, MSF	1,3,4
Understands the principles of confidentiality that provide boundaries to communication	CbD, mini-CEX, MSF	1,3,4
Skills		
Basic history taking	mini-CEX	1,3
Basic examination skills of all systems	mini-CEX	1,3

Basic counselling skills	mini-CEX; PS; MSF	1,3
Exercise prescription and understanding of GP referral schemes	DOPS; CbD; MSF	1,2,3
Common Competencies Framework		
Decision-Making and Clinical Reasoning:		
Interprets clinical features, their reliability and relevance to clinical scenarios including recognition of the breadth of presentation of common disorders	CbD, mini-CEX, MSF	1,3
Incorporates an understanding of the psychological and social elements of clinical scenarios into decision making through a robust process of clinical reasoning	CbD, mini-CEX, MSF	1,3
Recognises critical illness and responds with due urgency	CbD, mini-CEX, MSF	1,3
Generates plausible hypothesis(es) following patient assessment	CbD, mini-CEX, MSF	1,3
Constructs a concise and applicable problem list using available information	CbD, mini-CEX, MSF	1,3
Constructs an appropriate management plan in conjunction with the patient, carers and other members of the clinical team and communicates this effectively to the patient, parents and carers where relevant	CbD, mini-CEX, MSF	1,3
Defines the relevance of an estimated risk of a future event to an individual patient	CbD, mini-CEX, MSF	1,3
Uses risk calculators appropriately	CbD, mini-CEX, MSF	1,3
Considers the risks and benefits of screening investigations	CbD, mini-CEX, MSF	1,3
Applies quantitative data of risks and benefits of therapeutic intervention to an individual patient	CbD, mini-CEX, MSF	1,3
Searches and comprehends medical literature to guide reasoning	CbD, mini-CEX, MSF	1,3
Communication with Colleagues and Co-operation:		
Communicates accurately, clearly, promptly and comprehensively with relevant colleagues by means appropriate to the urgency of a situation (telephone, email, letter etc), especially where responsibility for a patient's care is transferred	CbD, mini-CEX, MSF	1,3,4
Utilises the expertise of the whole multi-disciplinary team as appropriate, ensuring when delegating responsibility that appropriate supervision is maintained	CbD, mini-CEX, MSF	1,3,4
Participates in and co-ordinates an effective hospital-at-night or hospital out-of-hours team where relevant; participates effectively in General Practice out-of-hours	CbD, mini-CEX, MSF	1,3,4
Communicates effectively with administrative bodies and support organisations	CbD, mini-CEX, MSF	1,3,4
Employs behavioural management skills with colleagues to prevent and resolve conflict and enhance collaboration	CbD, mini-CEX, MSF	1,3,4
Behaviour		
Demonstrates an understanding of the interaction of physical, mental and psychosocial factors which contribute to clinical presentations in the community	PS; CbD; MSF	1,3
Respects the individual cultural or religious beliefs that may influence a patient's medical care	PS; CbD; MSF	1,3,4
Recognises the role of all members of the Primary Healthcare Team	MSF	1,3,4

in the management of illness in the community		
Shows willingness to promote physical activity for the prevention and management of medical conditions where appropriate, both to individual patients and targeted patient groups	DOPS; PS; CbD; MSF	1,3
Communicates effectively and respectfully with patients, colleagues and carers from diverse backgrounds and those with communication needs	PS; MSF	1,3,4
Respects diversity and recognises the benefits as well as associated stigma it may bring	MSF	1,4
Sensitively explores possible influences of socio-economic status, household poverty and employment status when taking medical history	mini-CEX; DOPS; PS; CbD; MSF	1,3,4
Common Competencies Framework		
Decision-Making and Clinical Reasoning:		
Recognises the difficulties in predicting occurrence of future events	CbD, mini-CEX, MSF	1,3
Shows willingness to discuss intelligibly with a patient the notion and difficulties of prediction of future events, and benefit/risk balance of therapeutic intervention	CbD, mini-CEX, MSF	1,3
Shows willingness to adapt and adjust approaches according to the beliefs and preferences of the patient and/or carers	CbD, mini-CEX, MSF	1,3
Is willing to facilitate patient choice	CbD, mini-CEX, MSF	1,3
Shows willingness to search for evidence to support clinical decision making	CbD, mini-CEX, MSF	1,3
Demonstrates ability to identify one's own biases and inconsistencies in clinical reasoning	CbD, mini-CEX, MSF	1,3
Communication with Colleagues and Co-operation:		
Is aware of the importance of and takes part in multi-disciplinary teamwork, including adoption of a leadership role when appropriate but also recognising where others are better equipped to lead	CbD, mini-CEX, MSF	1,3,4
Fosters a supportive and respectful environment where there is open and transparent communication between all team members	CbD, mini-CEX, MSF	1,3,4
Ensures appropriate confidentiality is maintained during communication with any member of the team	CbD, mini-CEX, MSF	1,3,4
Recognises the need for a healthy work/life balance for the whole team, including yourself, but take any leave yourself only after giving appropriate notice to ensure that cover is in place	CbD, mini-CEX, MSF	1,3,4
Is prepared to accept additional duties in situations of unavoidable and unpredictable absence of colleagues, ensuring that the best interests of the patient are paramount	CbD, mini-CEX, MSF	1,3,4

#### Effects of Illness on Exercise Capacity

To understand how ill health impacts on an individual's ability to exercise and how exercise can be safely used as part of the management of chronic illness.

Knowledge	Assessment Methods	GMP
Understanding of medical conditions commonly encountered in the exercising population including cardiovascular disorders, diabetes, mental illness, acute febrile illness, epilepsy (and other neurological conditions), diabetes, bleeding disorders, cancer, asthma	Dip SEM; CbD	1,3
Understanding of the effect that these conditions may have on the individual's ability to exercise, from both an exercise capacity and safety perspective	Dip SEM; CbD	1,2,3
Understanding of the potential effect of medications prescribed for these conditions, on the individual's ability to exercise	Dip SEM; CbD	1,2,3
Skills		
Ability to determine the status or severity of the disease state from history, examination and investigation	mini-CEX; CbD	1,3
Ability to provide clear and safe advice to the individual regarding exercise	mini-CEX; DOPS; CbD	1,2,3
Ability to recognise the need to consult with specialists in the treatment of specific conditions	PS; CbD; MSF	1,3
Behaviour		
Understands the barriers to exercise participation, both physical and mental, in commonly encountered medical conditions	CbD; MSF	1
Provides leadership and seeks to promote safe exercise programmes where appropriate	PS; MSF	1,2,3
Shows a willingness to engage others, both medical and non-medical, in supporting the introduction of safe physical activity programmes	PS; MSF	1,3

### **Musculoskeletal Medicine**

#### **General Pathology**

To learn to recognise the range of musculoskeletal pathologies that may mimic sports injury or which may present within the exercising population.

Knowledge	Assessment Methods	GMP
Understanding of general musculoskeletal pathology which may present in athletes including:	Dip SEM; CbD. mini- CEX	1
Malignancy		
Infection		
Inflammatory arthritis		
Connective tissue disorders		
Neuropathy, myopathy		
Degenerative joint disease		
<ul> <li>Spinal Disorders, Developmental Disorders and Disorders of Childhood</li> </ul>		
Metabolic and endocrine conditions		
Understanding of the changes which may be detectable with medical imaging and pathology testing in such conditions	Dip SEM; CbD	1
Skills		
Ability to take a thorough history and suspect non-traumatic pathology from atypical and 'red flag' features	mini-CEX; CbD	1,3
Ability to detect key signs on clinical examination to suspect non- traumatic pathology	mini-CEX; CbD	1
Ability to utilise pathology and medical imaging services to confirm or exclude non-traumatic pathology	DOPS; CbD	1,3
Behaviour		
Demonstrates awareness of the broad range of musculoskeletal conditions that may present in the athlete population	CbD; MSF	1
Demonstrates willingness to consult other medical colleagues where appropriate to ensure effective diagnosis and management of these problems in the athlete population	PS; CbD; MSF	1,3

#### Management of Soft Tissue and Sports Injuries

To develop a thorough understanding of the aetiology, presentation and management of sports related injuries, both acute and chronic.

To develop the ability to advise individuals and teams on safe training methods and on injury prevention strategies.

To work with other medical colleagues such as surgeons and physiotherapists to effectively manage sports related injuries.

Knowledge	Assessment Methods	GMP
A. Injury Prevention		
Pre-participation screening (addressing risk factors, including biomechanical abnormalities)	Dip SEM; mini-CEX; CbD	1,2,3

Evidence regarding warm-up and stretching	Dip SEM	1
Sports equipment, including protective equipment – health and safety pertinent to sport	Dip SEM; CbD	1,2
Safe preseason training regimes	Dip SEM	1,2,3
<ul> <li>Targeted strength and conditioning programmes</li> <li>sport-specific</li> <li>individual-specific</li> </ul>	Dip SEM; CbD; MSF	1,3
Training surface and shoes	Dip SEM; CbD	1
Rule changes in sport	Dip SEM	1
B. Acute Injury Management		
The principles of managing acute soft tissue injury – lacerations, sprains, strains, contusions, haematomas	Dip SEM. CbD	1
The principles of managing acute bone and joint injuries – dislocations, fractures, avulsion injury, epiphyseal injuries	Dip SEM. CbD	1
Understanding of the pathological process of soft tissue injury and the possible effects of common pharmacological treatments on this process	Dip SEM.CbD	1,2
C. Chronic/Overuse Injury Management		
The principles of assessing, investigating and managing overuse injury	Dip SEM. CbD	1,3
D. Principles of the Conservative Management of Injury		
Principles of injury rehabilitation - ligament / tendon / muscle / bone / joint	Dip SEM. CbD	1
Multidisciplinary approach to rehabilitation	Dip SEM. CbD	1,3
Protected function and progressive functional approach to rehabilitation	Dip SEM. CbD	1,2
Preservation of cardiovascular fitness and role of cross-training	Dip SEM. CbD	1
Role of manual therapies in the management of soft tissue injuries	Dip SEM. CbD	1
The use of taping, splints, braces, orthotics	Dip SEM. CbD	1
An understanding of the role of joint and soft tissue injections including their limitations and potential side effects	Dip SEM. CbD	1,2
To appreciate the importance and potential for injury prevention	Dip SEM. CbD	1,2
E. Principles of the Surgical Management of Musculoskeletal Injury	Dip SEM. CbD	1
F. Thorough Understanding of the Principles of Tissue Injury and Repair	Dip SEM	1
Skills		
Safely manages acute injury to bone, joint and soft tissue	mini-CEX; DOPS; CbD; MSF	1,3
Ability to initiate an effective pre-season screening programme and initiate effective prevention strategies	MSF. DOPS	1,3,4
The application of rehabilitation techniques	DOPS; CbD; MSF	1,3
Joint and soft tissue injection techniques	DOPS; CbD; MSF	1,2,3

Behaviour		
Demonstrates an understanding of the value and limitations of pre- participation screening and the implications of any findings to the athlete	mini-CEX; DOPS; PS; CbD; MSF	1,3
Encourages effective injury prevention interventions	PS; CbD; MSF	1,2,3
Understands the scientific principles of tissue injury and repair and utilises these in the safe management of the injured individual, always maintaining the health of the patient as the central tenet of care	PS; CbD; MSF	1,2,3
Appreciates the importance of a multi-disciplinary team approach to the rehabilitation of injury	CbD; MSF	1,3

## Radiology

To develop a thorough understanding of the use and limitations of the range of imaging techniques utilised in the assessment of the injured athlete.

To recognise the normal variants on imaging studies which can present in the athlete.

Whilst not mandatory, it is recognised that some trainees may wish to develop more advanced skills in techniques such as diagnostic ultrasound and image guided therapeutic injections.

Knowledge	Assessment Methods	GMP
The role of imaging techniques in general terms and the way in which images are produced	Dip SEM	1
An understanding of the relative radiation risks applicable to different types of imaging	Dip SEM	1,2
The strengths and relative weaknesses of different imaging techniques and their ability to demonstrate both normal and abnormal structures within tendons, ligaments, muscles, bones and joints	Dip SEM	1,2
A full understanding of the role of imaging in investigating patients presenting to a team physician and sports medicine specialist. This will include the investigation of patients with both acute and chronic symptoms including acute traumatic injury and chronic overuse injury	Dip SEM; CbD	1
The ability to construct a differential diagnosis based on history and clinical findings and the targeted use of imaging to reach a definitive diagnosis	Dip SEM; CbD	1,3
An understanding of the use of medical imaging for targeted treatment (e.g. guided injections) to complement history & examination	Dip SEM	1,2
Skills		
An ability to interpret different modalities of medical imaging in a logical and structured manner, and in doing so identify significant pathology	CbD; MSF.	1,3
Optional: Ability to practise musculoskeletal ultrasound, including practical experience of imaging normal and abnormal muscle and tendons commonly associated with tendinopathy, e.g. patella, Achilles	DOPS	1
Optional: Perform injections utilising x-ray guidance	DOPS	1,2,3
Behaviour		
Demonstrates an understanding of the use and limitations of imaging techniques in the diagnosis of musculoskeletal problems	CbD; MSF	1

Understands the safety issues inherent in the use of imaging equipment	CbD; MSF	1,2
Shows willingness to consult with colleagues to ensure the most appropriate choice of imaging technique in any given situation	PS; CbD; MSF	1,3

#### **Gait and Biomechanical Assessment**

To develop an understanding of the principles of human movement and gait, both normal and abnormal.

To be able to perform a basic gait analysis and to advise on the appropriate use of sports equipment, including orthoses.

To work alongside biomechanists and podiatrists to maximise athlete performance and in the prevention of injury.

Knowledge	Assessment Methods	GMP
Functional anatomy of joints and musculo-tendinous units	Dip SEM	1
Characteristics of bone, tendon, ligament, articular cartilage, muscle under stress and strain and potential for fatigue	Dip SEM; CbD	1
Human movement analysis – basic kinematics and kinetics	Dip SEM	1
<ul> <li>Biomechanical analysis of sport-specific techniques</li> <li>swimming</li> <li>throwing</li> <li>jumping</li> <li>kicking</li> <li>running</li> <li>boxing</li> <li>wrestling and martial arts</li> </ul>	Dip SEM	1
<ul> <li>Performance aspects of sport-specific equipment</li> <li>racquets, bats</li> <li>throwing implements (balls, javelin, shot-put, discus)</li> <li>rowing boat, kayak, canoe</li> <li>sporting footwear</li> <li>bicycle</li> <li>golf clubs</li> <li>swimming suits</li> <li>protective equipment (headgear, body protection, etc)</li> <li>mats and playing surfaces</li> </ul>	Dip SEM	1
Effects of faulty biomechanics, influence of posture	Dip SEM; mini-CEX; CbD	1
Methods and effects of changing biomechanics	Dip SEM	1
<ul> <li>Principles of body morphology</li> <li>ectomorphs, endomorphs, mesomorphs</li> <li>sport-specific, position-specific body composition</li> <li>assessment of body composition</li> <li>normal body composition</li> </ul>	Dip SEM; mini-CEX; CbD	1

To perform biomechanical analysis:		
standing	mini-CEX; DOPS	1
moving		1
sports specific		1
Behaviour		
Demonstrates an understanding of the biomechanical principles underpinning sports performance	CbD; MSF	1
Shows an appreciation of the role of sports biomechanists in the prevention and management of sports related injury	PS; CbD; MSF	1,3

## Working within the Team Environment

#### **Team Physician**

To learn how to work effectively within the multidisciplinary team to maximise athlete performance and in the prevention and management of sports related injuries.

To recognise the use and limitations of pre-participation screening and the implications for the athlete of such programmes.

To understand the legal and ethical guidelines for doctors working as team physicians and to work within these guidelines at all times.

Knowledge	Assessment Methods	GMP
The role of the team physician	Dip SEM	1,3,4
Pre-participation screening		
Aims and challenges of pre-participation screening	Dip SEM; CbD	1,2,3,4
Justification for pre-participation screening	Dip SEM; CbD	1,3
Sport-specific pre-participation screening	Dip SEM; CbD	1,2,3
<ul> <li>Screening components (questionnaire, history, examination, investigation)</li> </ul>	Dip SEM; CbD	1,3
Health education and pre-season assessment	Dip SEM; CbD	1,3,4
Development of skills and normal physical maturation	Dip SEM; CbD	1
Protective equipment	Dip SEM	1,2
<ul> <li>Medical equipment, pharmacy supplies required for coverage of teams</li> </ul>	Dip SEM	1,2
Structuring training to prevent injury	Dip SEM; CbD	1,2,3
<ul> <li>Doping classes and methods/ permitted use of banned drugs / doping control</li> </ul>	Dip SEM	1,2,3,4
<ul> <li>Traveller's health issues, combating jet lag and immunisations</li> </ul>	Dip SEM	1,2,3
Athlete confidentiality and medico-legal aspects of team care	Dip SEM; CbD	1,3,4
Disordered eating, female athlete triad	Dip SEM; CbD	1,3,4
Child protection	Dip SEM	1,2,3,4
Knowledge of the contra-indications to participation in sport and exercise	Dip SEM; CbD; MSF	1,2
Familiarity with the range of agencies which can provide care and support both in, and out of, hospital and how they can be accessed.	Dip SEM; CbD; MSF.	1,3
Common Competencies Framework		
Team Working and Patient Safety:		
Outlines the components of effective collaboration and team working	CbD, mini-CEX	1,3,4
Describes the roles and responsibilities of members of the healthcare team	CbD, mini-CEX	1,2,3
Outlines factors adversely affecting a doctor's and team performance and methods to rectify these	CbD, mini-CEX	1,2,3
Communication with Colleagues and Co-operation:		

Understands the section in 'Good Medical Practice' on Working with Colleagues, in particular:	CbD, mini-CEX	
The roles played by all members of a multi-disciplinary team	CbD, mini-CEX	1,3,4
The features of good team dynamics	CbD, mini-CEX	1,3,4
<ul> <li>The principles of effective inter-professional collaboration to optimise patient, or population, care</li> </ul>	CbD, mini-CEX	1,3,4
Understands the principles of confidentiality that provide boundaries to communication	CbD, mini-CEX	1,3,4
Skills		
Communication skills – Coaches / athletes / medical team / media	PS; CbD; MSF	1,3
Ability to prepare a medical team for travel	CbD; MSF	1,2,3
Ability to monitor environment/ hygiene/ facilities	DOPS; CbD; MSF	1,2,3
Ability to work both with individual athletes and a team	PS; CbD; MSF	1,2,3,4
Ability to undertake pre-hospital care of an injured athlete	DOPS; CbD; MSF	1,2,3
Ability to maintain adequate record keeping	DOPS. CbD	1,2,3,4
Common Competencies Framework:		
Team Working and Patient Safety:		
Practises with attention to the important steps of providing good continuity of care	CbD, mini-CEX	1,2,3
Accurate attributable note-keeping, including appropriate use of electronic clinical record systems	CbD, mini-CEX	1,2,3
Prepares patient lists with clarification of problems and ongoing care plan	CbD, mini-CEX	1,2,3
Detailed hand over between shifts and areas of care	CbD, mini-CEX	1,2,3
Demonstrates leadership and management in the following areas:	CbD, mini-CEX	1,2,3
<ul> <li>Education and training of junior colleagues and other members of the healthcare team</li> </ul>	CbD, mini-CEX	
• Deteriorating performance of colleagues (e.g. stress, fatigue)	CbD, mini-CEX	
High quality care	CbD, mini-CEX	
Effective handover of care between shifts and teams	CbD, mini-CEX	
Leads and participates in interdisciplinary team meetings	CbD, mini-CEX	1,2,3
Provides appropriate supervision to less experienced colleagues	CbD, mini-CEX	1,2,3
Communication with Colleagues and Co-operation:		
Communicates accurately, clearly, promptly and comprehensively with relevant colleagues by means appropriate to the urgency of a situation (telephone, email, letter etc), especially where responsibility for a patient's care is transferred	CbD, mini-CEX	1,3,4
Utilises the expertise of the whole multi-disciplinary team as appropriate, ensuring when delegating responsibility that appropriate supervision is maintained	CbD, mini-CEX	1,3,4
Communicates effectively with administrative bodies and support organisations	CbD, mini-CEX	1,3,4
Employs behavioural management skills with colleagues to prevent and resolve conflict and enhance collaboration	CbD, mini-CEX	1,3,4

Behaviour		
Demonstrates an understanding of the individual roles of the different members of the multidisciplinary team involved in the care of individual athletes and sports teams	CbD; MSF	1,3,4
Demonstrates an ability to communicate effectively with all those involved in the team structure	CbD; MSF	1,3,4
Demonstrates an awareness of the importance of risk assessment relating to sports participation and encourages the adoption of effective strategies to prevent illness or injury	CbD; MSF	1,2
Respects patient confidentiality at all times, except in circumstances that present a threat to others	CbD; MSF	1,3,4
Demonstrates the ability to maintain accurate and contemporaneous medical records	CbD; MSF	1,2,3,4
Knows from whom/where to seek advice	CbD; MSF	1
Practise so as to demonstrate an appropriate level of understanding of the scientific basis of health and disease	CbD; MSF	1,2
Common Competencies Framework		
Team Working and Patient Safety:		
Encourages an open environment to foster and explore concerns and issues about the functioning and safety of team working	CbD, MSF	1,2,3,4
Recognises limits of own professional competence and only practises within these	CbD, MSF	1,2,3,4
Recognises and respects the request for a second opinion	CbD, MSF	1,2,3,4
Recognises the importance of induction for new members of a team	CbD, MSF	1,2,3,4
Recognises the importance of prompt and accurate information sharing with Primary Care team following hospital discharge	CbD, MSF	1,2,3,4
Communication with Colleagues and Co-operation:		
Is aware of the importance of and takes part in multi-disciplinary teamwork, including adoption of a leadership role when appropriate but also recognising where others are better equipped to lead	CbD, MSF	1,3,4
Fosters a supportive and respectful environment where there is open and transparent communication between all team members	CbD, MSF	1,3,4
Recognises the need for a healthy work/life balance for the whole team, including yourself, but take any leave yourself only after giving appropriate notice to ensure that cover is in place	CbD, MSF	1,3,4
Is prepared to accept additional duties in situations of unavoidable and unpredictable absence of colleagues, ensuring that the best interests of the patient are paramount	CbD, MSF	1,3,4

#### **Event Physician**

To develop the ability to carry out a full risk assessment for a sports event and to develop an appropriate action plan to provide medical care, consistent with the statutory requirements for such an event.

To demonstrate the ability to take a leadership role within the medical team covering a sports event and to audit the effectiveness of medical support provided at sports events.

Knowledge	Assessment Methods	GMP
Legislative and medico-legal guidelines with regard to medical and crowd safety facilities at sporting venues	Dip SEM	1,2
Guidelines for number and type of medical personnel required for sporting events with large participant numbers and /or large crowds	Dip SEM	1,2
Relevant EU safety legislation governing the running of sporting events with large participation numbers and/or large crowds	Dip SEM	1,2
Procedures for evacuation of injured athlete or member of the crowd from any given sporting event	Dip SEM	1,2,3
Procedures for evaluating requirements in terms of pharmacy supplies, medical equipment, medical personnel, paramedical personnel and communication equipment at any given sporting event	Dip SEM	1,2,3
Skills		
Lead medical team at a sporting event involving large participation numbers and/or large crowd numbers, such that medical coverage is sufficient and complies with relevant legislative and medico-legal requirements	CbD; MSF	1,2,3,4
Evaluate requirements in terms of pharmacy supplies, medical equipment, medical personnel, paramedical personnel and communication equipment at any given sporting event	DOPS; MSF	1,2,3
Establish protocols for evacuation of injured athlete and/or member of crowd from sporting event	DOPS; MSF	1,2,3
Behaviour		
Demonstrates the ability to carry out a risk assessment for a major sports event and to institute appropriate plans to deal with any anticipated eventuality	DOPS; MSF	1,2,3
Demonstrates knowledge of the legislation relating to the staging of sporting events	Dip SEM; MSF	1,2
Demonstrates the ability to lead a team responsible for providing medical care at a major sports event	MSF	1,2,3,4

### **Specific Sports**

To develop an understanding of a range of team and individual sports and to gain expertise in treating athletes from different sporting backgrounds, becoming aware of the specific demands and injuries associated with these sports.

Knowledge	Assessment Methods	GMP
Knowledge of a range of sports in terms of rules and regulations, physiological requirements and injury risk profiles	Dip SEM. CbD	1
These sports to include at least one example from a minimum of two from the following categories:	Dip SEM. CbD	1

1
1
1,2,3,4
1
1,3
1,2,3
1,2,3

# **Medical Emergencies**

### **Head Injury and Concussion**

To develop the ability to recognise and manage appropriately the acute head injury in sport. To develop the ability to recognise and manage appropriately the sequelae of head injury in athletes and to advise on safe return to play following head injury.

Knowledge	Assessment Methods	GMP
Pathophysiology of concussion	Dip SEM	1
Various definitions of concussion	Dip SEM	1
Grading concussion severity – historical perspectives	Dip SEM	1,2
Understanding of possible significant complications	CbD, Dip SEM	1,2
<ul> <li>Assessment of concussion</li> <li>On field retrieval – principles of immediate management</li> <li>'Red flags' on history and examination</li> <li>Neuropsychological testing techniques, including computer- based</li> </ul>	CbD, Dip SEM	1
Understanding of short and long-term sequelae of concussion	CbD, Dip SEM	1
Rehabilitation of concussed athlete	Dip SEM	1,3
Rationale for return to play	Dip SEM	1,2,3
Sport-specific regulations	Dip SEM	1
Maxillofacial and dental issues	Dip SEM	1
Skills		
Lead on field retrieval team and provide appropriate immediate management	CbD, DOPS, mini- CEX	1,2,3,4
Diagnose concussion on history, examination and neuropsychological testing	CbD, DOPS, mini- CEX	1,3
Clinically detect significant deterioration and provide appropriate management	CbD, DOPS, mini- CEX	1,2,3
Familiarity with neuropsychological testing techniques (including computer-based)	DOPS, mini-CEX	1
Provide safe and scientifically sound advice to athletes and team management regarding return to sport	CbD; MSF	1,2,3,4
Behaviour		
Demonstrates an understanding of the pathological processes underlying the management, both immediate and long-term, of the concussed athlete	CbD; MSF	1
Maintains the long-term health of the concussed athlete at the centre of patient care	CbD, MSF, PS	1,2,3
Demonstrates an ability to provide a leadership role within the medical team caring for the concussed athlete	CbD; MSF	1,3,4

### Sudden Death in Sport

To develop an understanding of the causes of sudden death in sport and to develop the ability to advise on screening programmes to detect those at risk of sudden death in sport.

To be able to advise athletes and their relatives of the significance of any findings detected through screening programmes, particularly with reference to future participation in sport.

Knowledge	Assessment Methods	GMP
Incidence and prevalence of sudden death in sport	Dip SEM	1
<ul><li>Aetiology of sudden death in sport</li><li>Age-related factors</li><li>Sport-specific factors</li></ul>	Dip SEM	1
<ul> <li>Cardiac causes of sudden death, including:</li> <li>HOCM</li> <li>Coronary artery anomalies</li> <li>Coronary artery disease</li> <li>Conduction abnormalities</li> <li>Structural derangements including valvular disease and Marfan's syndrome</li> <li>Traumatic causes including:</li> <li>Head injury</li> <li>Extracranial/maxillofacial pathology</li> <li>Intracranial pathology, raised intracranial pressure</li> <li>Diffuse and focal pathology</li> <li>Abdominal injury</li> </ul>	CbD, Dip SEM/ M Sc CbD, Dip SEM	1
Chest injury		
Environmental factors	Dip SEM	1
Understanding of the role of pre-participation screening	Dip SEM	1
Skills		
Implement strategies to reduce risk of sudden death in sport	CbD, DOPS, mini- CEX	1,2,3
Ability to identify at risk athletes through history, examination and appropriate investigation	CbD, mini-CEX, MSF	1,3
Ability to manage athletes with known risk factors	CbD; MSF	1,2,3
Behaviour		
Demonstrates an understanding of the use and limitations of screening programmes to identify those at risk of sudden death in sport	CbD; MSF	1,2
Demonstrate an appreciation of the implications for the individual athlete of any findings of screening programmes	CbD; MSF, PS	1,3
Demonstrate respect for informed patient choice when discussing risk factors for sudden death in sport	CbD; MSF, PS	1,3

### **Resuscitation Training**

To develop the ability to provide emergency on-site treatment for the collapsed athlete.

To provide leadership to the medical team providing emergency care for the collapsed athlete. Whilst not mandatory, it is recognised that some trainees may wish to develop advanced skills (denoted as optional)

Knowledge	Assessment Methods	GMP
On field assessment including basic life support, advanced life support, shock, anaphylaxis, basic and advanced airway management, spinal immobilisation and principles of safe patient transfer	ALS, Dip SEM	1,2,3
Basic pharmacology of drugs used in resuscitation	ALS, Dip SEM	1,2
Thorough understanding of the principles of care for the unconscious patient	ALS, Dip SEM	1,2
Knowledge of the principles of trauma care	ALS, Dip SEM	1
Principles of the management of spinal injury, head injury, thermal injury, chest and abdominal injury eye trauma, dental trauma and genitourinary trauma	ALS, Dip SEM	1,2,3
Skills		
Ability to assess an accident scene and to optimise safety at accident scene for the injured and the rescue team	ALS, DOPS; MSF	1,2,3,4
Cardiopulmonary resuscitation: both expired air resuscitation and external cardiac compressions	ALS, DOPS	1
Competency in defibrillation: manual and automated external defibrillators	ALS, DOPS	1,2,3
Basic airway manoeuvres: jaw thrust, chin lift, head tilt	ALS, DOPS	1
Airway adjuncts: nasopharyngeal airways and oropharyngeal airways including sizing and indications for use	ALS, DOPS	1
Advanced airway techniques: laryngeal mask airways, combitubes, endotracheal intubation	ALS, DOPS	1
Needle thoracotomy (optional)	ALS, DOPS	1
Needle cricothyroidotomy (optional)	ALS, DOPS	1
Safe transfer onto spinal board	ALS, DOPS	1,2,3
Log roll	ALS, DOPS	1,2,3
Splinting of pelvic and lower limb fractures	ALS, DOPS	1,2,3
Emergency treatment of major open fractures	ALS, DOPS	1,2,3
Behaviour		
Demonstrates the ability to recognise and initiate appropriate, safe on-site treatment for the common medical emergencies encountered in sport	CbD, DOPS, mini- CEX	1,2
Demonstrates the ability to provide leadership to the medical team responsible for providing immediate care of the injured athlete	CbD; MSF	1,3,4

### Accident and Emergency Medicine

To develop the ability to work as part of the medical team providing immediate medical care for all common acute injuries, especially those encountered in sport.

To develop the ability to communicate effectively with colleagues in the immediate care of the acutely injured patient, and to consult with senior colleagues as appropriate to ensure optimum safe care of the injured patient.

Whilst not mandatory, some trainees may wish to develop advanced skills in regional anaesthesia (denoted as optional)

Knowledge	Assessment Methods	GMP
Basic triage of injuries	Dip SEM; mini- CEX	1,3
Acute assessment and treatment of soft tissue injuries	CbD, Dip SEM; mini-CEX; MSF	1,3
Principles of basic fracture management	Dip SEM	1
Knowledge of common fractures and dislocations in upper and lower limbs	Dip SEM	1
Assessment and treatment of minor and major head injuries	CbD, Dip SEM; mini-CEX	1
Differential diagnoses in acute eye trauma	Dip SEM	1
Differential diagnoses in acute ear, nose and throat trauma	Dip SEM	1
Understanding of the principles and practice of local anaesthetic use including field and regional anaesthesia	Dip SEM;	1
Common Competencies Framework		
Communication with Colleagues and Co-operation:		
Understands the section in 'Good Medical Practice' on Working with Colleagues, in particular:	CbD	
The roles played by all members of a multi-disciplinary team	CbD	1,3,4
The features of good team dynamics	CbD	1,3,4
<ul> <li>The principles of effective inter-professional collaboration to optimise patient, or population, care</li> </ul>	CbD	1,3,4
Skills		
Common fracture manipulations: fingers and ankles	CbD, DOPS	1
Reduction of common dislocations: shoulder, elbow, fingers, patella, ankle and toes	CbD, DOPS	1
Skin and subcutaneous suturing	CbD, DOPS	1
Examination of head and central nervous system to detect skull/ basal skull fractures and major intracranial pathology	CbD, DOPS, mini- CEX	1
Examination of external eye and retina	CbD, mini-CEX	1
Examination of nose: recognition of septal pathology	CbD, mini-CEX	1
Competency in use of sedation with thorough awareness of indications and contraindications	CbD, DOPS	1
Familiarity with use of different local anaesthetics	CbD, DOPS; MSF	1
Optional: Regional anaesthetic techniques: eye, axillary block, shoulder infiltration, femoral blocks, ankle blocks and ring blocks	CbD, DOPS	1

Common Competencies Framework		
Communication with Colleagues and Co-operation:		
Communicates accurately, clearly, promptly and comprehensively with relevant colleagues by means appropriate to the urgency of a situation (telephone, email, letter etc), especially where responsibility for a patient's care is transferred	CbD, mini-CEX	1,3,4
Utilises the expertise of the whole multi-disciplinary team as appropriate, ensuring when delegating responsibility that appropriate supervision is maintained	CbD, mini-CEX	1,3,4
Participates in and co-ordinates an effective hospital-at-night or hospital out-of-hours team where relevant.	CbD, mini-CEX	1,3,4
Communicates effectively with administrative bodies and support organisations	CbD, mini-CEX	1,3,4
Behaviour		
Demonstrates the ability to work safely and effectively within the Accident and Emergency Department and in partnership with other members of the medical team	CbD; MSF	1,2,3
Demonstrates the ability to prioritise one's time effectively to ensure efficient work practices	CbD; MSF	1
Shows willingness to consult with senior colleagues where appropriate	CbD; MSF	1,3

# **Drugs in Sport**

To develop a comprehensive understanding of the use and misuse of drugs within the athlete population.

To know the legal obligations of a doctor involved in the care of athletes with respect to drug use and to always work within this legal framework.

Knowledge	Assessment Methods	GMP
Understanding of effects of various pharmaceutical agents on exercise performance	Dip SEM	1,2
History of Drugs in Sport	Dip SEM	1
Banned substances/methods:	CbD, Dip SEM	
<ul> <li>Potential harmful side-effects of banned performance- enhancing substances/methods</li> </ul>	CbD, Dip SEM	1,2
<ul> <li>Procedures for obtaining accurate and current information regarding Drugs in Sport</li> </ul>	CbD, Dip SEM	1,2
Legal implications for the doctor and the athlete	CbD, Dip SEM	1,2,3,4
Sport-specific patterns of abuse	CbD, Dip SEM	1
Sport-specific regulations regarding specific substances	CbD, Dip SEM	1
Medical exceptions	CbD, Dip SEM	1
• Testing procedures, and the doctor's role in such procedures	CbD, Dip SEM	1
Therapeutic use of drugs for illness and injury:	Dip SEM	
Pharmacology of NSAIDs	CbD, Dip SEM	1
Effects of therapeutic medications on injury healing	CbD, Dip SEM	1
Effects of therapeutic medications on exercise performance	CbD, Dip SEM	1
Education of athletes and administrators – the doctor's roles & responsibilities	CbD, Dip SEM, MSF	1,3,4
Regulatory authorities including government, IOC, WADA and individual sporting organisations	Dip SEM	1,3
Understands the GMC guidance for doctors involved in prescribing drugs to athletes	CbD, Dip SEM, MSF	1,2,3,4
Understands the effects of alcohol abuse on health	Dip SEM	1,2
Understands the effects of smoking on health	Dip SEM	1,2
Common Competencies Framework		
Principles of Medical Ethics and Confidentiality:		
Demonstrates knowledge of the principles of medical ethics	CbD, mini-CEX	1,2,3,4
Outlines and follows the guidance given by the GMC on confidentiality	CbD, mini-CEX	1,2,3,4
Defines the provisions of the Data Protection Act and Freedom of Information Act	CbD, mini-CEX	1,2,3,4
Outlines situations where patient consent, while desirable, is not required for disclosure e.g. serious communicable diseases, public interest	CbD, mini-CEX	1,2,3,4

Outlines the procedures for seeking a patient's consent for disclosure of identifiable information	CbD, mini-CEX	1,2,3,4
Recognises the problems posed by disclosure in the public interest, without patient's consent	CbD, mini-CEX	1,2,3,4
Recognises the factors influencing ethical decision making, including religion, personal and moral beliefs, cultural practices	CbD, mini-CEX	1,2,3,4
Valid Consent:		
Outlines the guidance given by the GMC on consent, in particular:	CbD, mini-CEX	1,2,3,4
<ul> <li>Understands that consent is a process that may culminate in, but is not limited to, the completion of a consent form</li> </ul>		
• Understands the particular importance of considering the patient's level of understanding and mental state (and also that of the parents, relatives or carers when appropriate) and how this may impair their capacity for informed consent		
Skills		
Educate players and management regarding Drugs in Sport	CbD; MSF	1,2,3,4
Access current information regarding Drugs in Sport	CbD	1
Advise athletes regarding appropriate pharmacological treatment of medical conditions	CbD, PS	1,3
Clinically suspect use of banned substances/methods	CbD, mini-CEX	1,3,4
Adhere strictly to relevant government legislation and sporting regulations	CbD; MSF	1,2,3,4
Provide appropriate support to the athlete during testing procedures	CbD, DOPS; MSF, PS	1,3,4
Accessing specialist rehabilitation resources	CbD; MSF	1,3
Common Competencies Framework		
Principles of Medical Ethics and Confidentiality:		
Uses and shares information with the highest regard for confidentiality, and encourages such behaviour in other members of the team	CbD, mini-CEX, MSF	1,2,3,4
Uses and promotes strategies to ensure confidentiality is maintained e.g. anonymisation	CbD, mini-CEX, MSF	1,2,3,4
Counsels patients on the need for information distribution within members of the immediate healthcare team	CbD, mini-CEX, MSF	1,2,3,4
Valid Consent:		
Presents all information to patients (and carers) in a format they understand, checking understanding and allowing time for reflection on the decision to give consent	CbD, mini-CEX, MSF	1,2,3,4
Provides a balanced view of all care options	CbD, mini-CEX, MSF	1,2,3,4
Behaviour		
Demonstrates an awareness of the professional (GMC guidance) and legal responsibilities of a doctor involved in caring for athletes with respect to the use of drugs in sport	CbD; MSF	1
Demonstrates the ability to communicate effectively with athletes and coaches and to educate all those concerned in athlete care regarding the use of drugs in sport	CbD, MSF, PS	1,3

Respects patient confidentiality, except where others are endangered or where legal obligation prevents this	CbD, MSF, PS	1,3,4
Demonstrates an awareness of the influences of environment and behaviour on health including factors such as poverty and poor housing	CbD; MSF	1,3,4
Performs assessments and interventions which are respectful, inclusive and non-judgemental	CbD; MSF	1,3,4
Common Competencies Framework		
Principles of Medical Ethics and Confidentiality:		
Encourages informed ethical reflection in others	CbD, mini-CEX, MSF	1,2,3,4
Shows willingness to seek advice of peers, legal bodies, and the GMC in the event of ethical dilemmas over disclosure and confidentiality	CbD, mini-CEX, MSF	1,2,3,4
Shows willingness to share information regarding care with patients, unless they have expressed a wish not to receive such information	CbD, mini-CEX, MSF	1,2,3,4
Valid Consent:		
Respects a patient's rights of autonomy, even in situations where their decision might put them at risk of harm	CbD, mini-CEX, MSF	1,2,3,4
Does not exceed the scope of authority given by a competent patient	CbD, mini-CEX, MSF	1,2,3,4
Does not withhold information relevant to proposed care or treatment in a competent patient	CbD, mini-CEX, MSF	1,2,3,4
Does not seek to obtain consent for procedures which they are not competent to perform, in accordance with GMC/regulatory authorities	CbD, mini-CEX, MSF	1,2,3,4
Shows willingness to seek advance directives	CbD, mini-CEX, MSF	1,2,3,4
Shows willingness to obtain a second opinion, senior opinion and legal advice in difficult situations of consent or capacity	CbD, mini-CEX, MSF	1,2,3,4
Informs a patient and seeks alternative care where personal, moral or religious belief prevents a usual professional action	CbD, mini-CEX, MSF	1,2,3,4

# **Psychosocial Aspects of SEM**

To develop an awareness of the psychological and social factors that my influence an individual's ability to exercise or impact on athletic performance.

To develop the skills necessary to communicate effectively with athletes and others wishing to adopt a physically active lifestyle, having due respect for their cultural and religious beliefs.

Knowledge	Assessment Methods	GMP
Awareness of motor learning, selective attention and information processing theories and models	Dip SEM	1
Psychology of behavioural change – sedentary to active living	Dip SEM	1
Psychological aspects of stress, trauma, disability, rehabilitation, and failure in sport	CbD, Dip SEM	1
Psychological aspects of motivation, arousal and performance	Dip SEM	1
Group psychology of team, coach, medical team, group dynamics, behaviour remodelling	Dip SEM. MSF	1,3
Psychological/ mood effects of physical activity	Dip SEM	1
Sociology of sport: including violence in sport, behavioural norm and values in sport, effect of sport and physical activity on socialisation, influence of role models, drug issues in sport	Dip SEM	1
Psychosocial effects of retirement from sport	CbD, Dip SEM	1
Awareness of the doctor's role as advocate and manager	Dip SEM/ M Sc	1,3,4
Skills		
Interpretation of the results of psychological, psychometric, social and vocational assessments	CbD	1
Counselling skills, including understanding of its benefits and limitations	CbD; MSF	1,3
Recognition of psychosocial influences on performance	CbD; MSF	1
Management of psychological effects of failure	CbD; MSF	1,3,4
Management of multi-professional team including appreciation of the role of sports psychologist in group and individual performance	CbD; MSF, PS	1,3,4
Recognition, assessment and counselling of athletes with suspected eating disorders	CbD, mini-CEX; MSF	1,3,4
Recognition of the social biological and environmental determinants of health	CbD; MSF	1,3
Behaviour		
Recognises the psychosocial influences on athlete performance and demonstrate the ability to work within a multidisciplinary team to address these issues	CbD; MSF	1,3
Demonstrates good communication skills when dealing with athletes, coaches and members of the multi-disciplinary team involved in athlete care	PS; CbD; MSF	1,3
Respects the cultural and religious beliefs that an individual athlete may possess	CbD; MSF	

Shows empathy with patients having health issues related to social class	CbD; MSF	1,3,4
Carries out assessments and interventions which are inclusive, non- judgemental, respectful of diversity and patient-centred	CbD; MSF, PS	1,3
Is aware of how one's own behaviour might impact on patients health issues	CbD; MSF, PS	1,2,4
Accepts uncertainty	CbD; MSF	1,4
Uses appropriate methods of ethical reasoning to arrive at balanced judgements where complex and/or conflicting issues are involved.	CbD; MSF, PS	1,2

## **Investigations and Procedures**

To develop a comprehensive understanding of investigations commonly used in the assessment of the injured athlete and to be able to interpret the findings of these investigations appropriately to optimise patient care.

Whilst not a mandatory requirement, it is recognised that some trainees will wish to develop additional skills such as the ability to perform compartment pressure studies, diagnostic ultrasound and others techniques listed below.

Knowledge	Assessment Methods	GMP
Knowledge of muscle and nerve physiology – the motor unit	Dip SEM	1
Understanding of the methodology behind electrophysiological testing (NCS and EMG)	Dip SEM	1
An understanding of the indications for electrophysiological studies and their strengths and weaknesses	Dip SEM	1
Be able to describe the components of the normal EMG and NCS	Dip SEM; DOPS	1
Understanding of the EMG findings in denervated muscle, myopathy and inflammatory myositis	CbD, Dip SEM	1
Be able to describe the three main types of nerve injury (neuropraxia, axonotmesis, and neurotmesis)	Dip SEM	1
Thorough knowledge of muscle compartment anatomy, specifically related to possible complications of muscle compartment pressure testing	CbD, Dip SEM	1
Joint anatomy, specifically related to possible complications of aspiration/injection of joints	CbD, Dip SEM	1
Principles of lower limb biomechanics and the use of orthotics	Dip SEM	1
Principles and techniques of musculoskeletal ultrasonography	Dip SEM	1
Skills		
Skills (mandatory)		
Perform lower limbs biomechanical assessment and construct basic foot orthotics, as appropriate	CbD, DOPS, mini- CEX	1
Safely inject major joints including shoulder, elbow, knee and ankle	CbD, DOPS	1
Skills (optional)		
Perform EMG and nerve conduction studies	CbD, DOPS	1
Perform cardiological stress testing	CbD, DOPS	1
Perform injections with and without x-ray guidance of other joints including zygo-apophyseal, hip, sacroiliac, wrist etc	DOPS	1
Perform ultrasound examination for common musculoskeletal conditions	DOPS, mini-CEX	1
Perform compartment pressure tests for the four major compartments of the lower leg	CbD, DOPS; mini- CEX	1
Behaviour		
Demonstrates an understanding of the potential uses and limitations of individual investigations in the athlete population	CbD; MSF	1

Demonstrates a willingness to discuss with colleagues when deciding on the most appropriate investigation to be performed	CbD; MSF	1,3
Demonstrates an awareness of the principles of informed consent	CbD, DOPS; MSF	1,3,4
Demonstrates safe practice when performing injections and other procedures	CbD, DOPS; MSF	1,2

## Spinal Injuries, Amputee Rehabilitation and Disability Sport

To develop the ability to manage the medical problems and injuries commonly encountered in the disabled athlete. Assessment GMP Methods Knowledge CbD, Dip SEM Awareness of the special needs of disabled athletes and exercisers 1,3,4 e.g. cerebral palsy, amputees, visually and hearing impaired, learning difficulties etc Awareness of the special medical needs of disabled athletes and CbD, Dip SEM 1,3,4 exercisers e.g. knowledge of catheters, pressure sores, stump care etc Have an understanding of the physical problems experienced by CbD, Dip SEM 1,3 amputees and wheelchair users with everyday living and with respect to sport Have knowledge of the types of prosthesis available, particularly Dip SEM 1 those used for sport Have knowledge of the types of wheelchair available and adaptations 1 Dip SEM required for different sports Awareness of support groups and sports organisations for disabled CbD, Dip SEM 1 people Knowledge of the effects of spinal injury at different vertebral levels Dip SEM/M Sc 1 Awareness of disability classification and relevant competition rules CbD, Dip SEM 1 and regulations - Special Olympics, Paralympics Associations **Common Competencies Framework** Managing Long-Term Conditions and Promoting Self Care: 1,3,4 Describes the natural history of diseases and illnesses that run a CbD, mini-CEX 1,3,4 chronic course Defines the role of rehabilitation services and the multi-disciplinary CbD, mini-CEX 1,3,4 team to facilitate long-term care Outlines the concept of quality of life and how this can be measured, CbD, mini-CEX 1,3,4 whilst understanding the limitations of such measures for individual patients Outlines the concept of patient self-care and the role of the expert CbD, mini-CEX 1,3,4 patient Knows, understands and is able to compare and contrast the medical CbD, mini-CEX 1,3,4 and social models of disability Knows about the key provisions of disability discrimination legislation CbD, mini-CEX 1,3,4 Understands the relationship between local health, educational and CbD, mini-CEX 1,3,4 social service provision including the voluntary sector Skills Learn how to prescribe prostheses, orthoses, wheelchairs and other CbD, DOPS, mini-1,2,3 assistive devices CEX mini-CEX 1.3 Assessment of injuries in disabled athletes

Recognition and treatment of autonomic dys-reflexia	CbD, DOPS, mini- CEX	1,3
Common Competencies Framework		
Managing Long-Term Conditions and Promoting Self Care:		
Develops and agrees on a management plan with the patient (and carers), ensuring comprehension to maximise self-care within care pathways where relevant	CbD, mini-CEX	1,3,4
Develops and sustains supportive relationships with patients with whom care will be prolonged and potentially life long	CbD, mini-CEX	1,3,4
Provides relevant evidence-based information and, where appropriate, effective patient education, with support of the multi- disciplinary team	CbD, mini-CEX	1,3,4
Promotes and encourages involvement of patients in appropriate support networks, both to receive support and to give support to others	CbD, mini-CEX	1,3,4
Encourages and supports patients in accessing appropriate information	CbD, mini-CEX	1,3,4
Behaviour		
Demonstrates respect for and an appreciation of the physical and psychological needs of the athlete with a disability	CbD, MSF, PS	1,3,4
Demonstrates the ability to work with other members of the multi- disciplinary team caring for the disabled athlete	CbD; MSF	1,3
Maintains the principles of patient confidentiality	CbD; MSF	1,3,4
Common Competencies Framework		
Managing Long-Term Conditions and Promoting Self Care:		
Shows willingness and support for patient in his/her own advocacy, within the constraints of available resources and taking into account the best interests of the wider community	CbD, mini-CEX, MSF, PS	1,3,4
Recognises the potential impact of long term conditions on the patient, family and friends	CbD, mini-CEX	1,3,4
Provides relevant tools and devices when possible	CbD, mini-CEX	1,3,4
Ensures equipment and devices relevant to the patient's care are discussed	CbD, mini-CEX	1,3,4
Puts patients in touch with the relevant agency including the voluntary sector from where they can procure the items as appropriate	CbD, mini-CEX	1,3,4
Provides the relevant tools and devices when possible	CbD, mini-CEX	1,3,4
Shows willingness to facilitate access to the appropriate training and skills in order to develop the patient's confidence and competence to self care, and adapt appropriately as those members change over time	CbD, mini-CEX	1,3,4
Shows willingness to maintain a close working relationship with other members of the multi-disciplinary team, primary and community care	CbD, mini-CEX	1,3,4
Shows a willingness to engage with expert patients and representatives of charities or networks that focus on diseases and recognises their role in supporting patients and their families/carers	CbD, mini-CEX	1,3,4
Recognises and respects the role of family, friends and carers in the management of the patient with a long term condition	CbD, mini-CEX, PS	1,3,4

Puts patients in touch with the relevant agency, including the voluntary sector from where they can procure the items as appropriate CbD, mini-CEX

## **Physical Activity in Special Groups**

#### Women

To understand the unique physiological and anatomical characteristics of the female athlete, especially relating to training and the risk of injury during sports participation. To develop the ability to advise women on undertaking safe exercise programmes, including during pregnancy. To recognise the unique risks associated with excessive exercise in the female population.

Knowledge	Assessment Methods	GMP
Understanding on the effect of hormone cycles on performance	CbD, Dip SEM	1
Understanding the effects of exercise on the menstrual cycle	CbD, Dip SEM	1
Principles of manipulation of menstrual cycle	Dip SEM	1
Contraception options for athletes and the relevant merits & disadvantages in relation to performance	CbD, Dip SEM; DOPS	1
Understanding of the relationship between hormones, weight, osteoporosis and stress fractures in female athletes	CbD, Dip SEM	1
Relationship between pregnancy and exercise, in terms of both safety and performance	CbD, Dip SEM	1
Principles of return to exercise postpartum	CbD, Dip SEM	1
Understanding of gender differences in exercise	Dip SEM	1
Skills		
Ability to advise re:		
contraception including removal of coils etc	CbD; MSF	1,3
training through pregnancy	CbD; MSF	1,3
return to sport after pregnancy	CbD; MSF	1,3
Appropriately investigate athletes with menstrual problems and treat accordingly	CbD, mini-CEX	1,3
Behaviour		
Demonstrates an awareness of the physiological, physical and psychological issues relevant to sports participation in the female population	CbD; MSF	1
Encourages safe sports participation in females , mindful of the individual risks for injury and illness	CbD; MSF	1,2,3
Respects the privacy and beliefs of females and practices the principles of patient confidentiality	CbD; MSF, PS	1,3,4

#### **Older Athletes**

To develop an understanding of the effects that the ageing process and the presence of coexisting morbidities can have on an elderly individual's ability to exercise and take part in sport. To develop the ability to advise on safe exercise and sports participation for this age group.

Knowledge	Assessment Methods	GMP
Understanding of the effect of ageing on muscle bulk, cardiovascular fitness, endurance etc	CbD, Dip SEM	1
Knowledge of considerations when exercising with chronic diseases, and the effect of chronic diseases on performance	CbD, Dip SEM	1
Understanding of the risks and benefits of exercise in older people	CbD, Dip SEM	1
Knowledge of the effect of medications e.g. beta-blockers on exercise capacity	CbD, Dip SEM	1
Knowledge of exercise prescription	CbD, Dip SEM	1
Skills		
Medically assess older people wanting to participate in sport: elite athletes, recreational exercisers and new exercisers for potential risk factors	CbD, mini-CEX	1,3
Provide appropriate exercise prescription for the elderly athlete	CbD, MSF; PS	1,2,3
Prescribe appropriate levels of activity in older people with chronic diseases	CbD; MSF; PS	1,2,3
Behaviours		
Demonstrates an awareness of the physiological, physical and psychological issues relevant to sports participation in the elderly population	CbD; MSF	1
Encourages safe sports participation in the elderly, mindful of the individual risks for injury and illness	CbD; MSF	1,2,3
Respects the privacy and beliefs of individuals within this age group and practices the principles of patient confidentiality	CbD; MSF, PS	1,3,4

### **Children & Adolescents**

To understand the anatomical and physiological characteristics unique to the developing child and adolescent, and their relationship to athletic performance and the risk of injury.

To develop the ability to apply this knowledge when advising this group on age appropriate levels of training and sports participation.

Knowledge	Assessment Methods	GMP
Anatomical and physiological differences of the child and adolescent, in relation to the management of injury and illness	CbD, Dip SEM	1
Paediatric musculoskeletal injuries: epiphyseal plate injuries, traction apophysitis, common fractures and specific soft tissue injuries	CbD, Dip SEM	1
An understanding of non-accidental injury in all its forms, to include an appreciation of child protection issues and the relevant laws	CbD, Dip SEM	1
Understanding of Gillick competency and the legality of treating minors	CbD, Dip SEM	1

Basic knowledge of metabolic diseases encountered in children and adolescents	CbD, Dip SEM	1
Understanding and knowledge of the principles of pre participation screening in children, with particular emphasis on cardiology screens for HOCM	CbD, Dip SEM	1
Diagnosis and treatment of exercise induced asthma in childhood	CbD, Dip SEM	1
Application of appropriate training workloads to the developing skeleton and metabolism	CbD, Dip SEM	1
Identification of common eating and body perception disorders in the developing athlete, with particular reference to amenorrhoea (primary and secondary) and the female athlete triad	CbD, Dip SEM	1
Skills		
Identification and assessment of the sick child	CbD, mini-CEX	1,3
Interpretation of paediatric X-rays and scans	CbD, mini-CEX	1,3
Competency in examination of the paediatric skeleton	CbD, mini-CEX	1,3
Ability to take an effective adolescent psychiatric history	CbD, mini-CEX	1,3
Behaviours		
Demonstrates an awareness of the physiological, physical and psychological issues relevant to sports participation in children and adolescents	CbD; MSF	1
Encourages safe sports participation in these children and adolescents , mindful of the individual risks for injury and illness	CbD; MSF	1,2,3
Respects the privacy and beliefs of children and adolescents and practices the principles of patient confidentiality	CbD, MSF, PS	1,3,4

## **Research, Statistics and Audit**

To develop the ability to develop a research proposal and to undertake research within the accepted ethical guidelines.

To develop the ability to make the optimal use of current best evidence in making decisions about the care of patients.

To develop the ability to construct evidence based guidelines and protocols in relation to Sport and Exercise Medicine practice.

To develop the ability to perform an audit and to apply the findings appropriately to complete the audit cycle.

Knowledge	Assessment Methods	GMP
Ethics of clinical research	Dip SEM.	1,2
Types of study design – experimental, observational, controlled trial, single case	Dip SEM	1
Principles of statistics, trial design, randomisation and techniques of data analysis	Dip SEM	1
Epidemiology of sports injuries and health problems associated with exercise	Dip SEM	1
Principles of conducting an audit	AA, Dip SEM	
Objectives		1
• Design		1,2
Implementation		1,2,3
Reporting of results		1,3
Interventions		1,2,3
How healthcare governance influences patient care, research and educational activities at a local, regional and national level	Dip SEM	1,2
Quality improvement methodologies including a range of methods of obtaining feedback from patients, the public and staff	Dip SEM	1,2,3,4
The principles and processes of evaluation, audit and research and development, clinical guidelines and standard setting in improving quality	Dip SEM	1,2
Awareness and up-to-date knowledge of research evidence concerning the most important determinants of health data	Dip SEM	1,2
Common Competencies Framework		
Ethical Research:		
Outlines the GMC guidance on good practice in research	CbD	1,2
Understands the principles of research governance	CbD	1,2
Describes how clinical guidelines are produced	CbD	1,2
Outlines sources of research funding	CbD	1,2
Evidence and Guidelines:		
Understands of the application of statistics in scientific medical practice	CbD	1,2

Understands the advantages and disadvantages of different study methodologies (randomised control trials, case controlled cohort etc)	CbD	1,2
Understands the principles of critical appraisal	CbD	1,2
Understands levels of evidence and quality of evidence	CbD	1,2
Understands the role and limitations of evidence in the development of clinical guidelines and protocols	CbD	1,2
Understands the advantages and disadvantages of guidelines and protocols	CbD	1,2
Understands the processes that result in nationally applicable guidelines (e.g. NICE and SIGN)	CbD	1,2
Understands the relative strengths and limitations of both quantitative and qualitative studies, and the different types of each	CbD	1,2
Skills		
To be able to read scientific and clinical and other relevant papers and report critically	CbD, Dip SEM	1,2
To be able to evaluate the evidence presented in papers, literature reviews and meta-analysis	CbD, Dip SEM	1,2
To report research findings in written papers and at meetings	MSF; TO	1,2,3
To design and implement a clinical audit	AA. Dip SEM	1,2,3
To incorporate research findings into clinical practice	CbD; MSF	1,2,3
To take the appropriate action arising from the clinical audit	AA, CbD; MSF	1,2,3
To supervise a research project	MSF	1,2,3
To demonstrate an ability to design research	MSF	1,2,3
Contribute to meetings which cover audit, critical incident reporting, patient outcomes	MSF	1,2,3
Compare and benchmark healthcare services	CbD; MSF	1,2,3
Know how to access and use local health data	MSF	1
Common Competencies Framework		
Ethical Research:		
Demonstrates good verbal and written presentations skills	CbD, DOPS	1,2
Contributes to the construction, review and updating of local (and national) guidelines of good practice using the principles of evidence based medicine	CbD	1,2
Contributes to local and national audit projects as appropriate (e.g. NCEPOD, SASM)	CbD	1,2
Supports audit by junior medical trainees and within the multi- disciplinary team	CbD	1,2
Behaviour	-	
Shows willingness to promote ethical research	MSF	1,2
Follows guidelines in ethical research and in obtaining consent for research	MSF	1,2,3
Recognises the need for audit to promote standard setting and quality assurance	CbD; MSF	1,2
Shows willingness to take responsibility for clinical governance	CbD; MSF	1,2,4

activities, risk management and audit in order to improve the quality of the service		
Obtains the evidence base before declaring effectiveness of changes	MSF	1,2,3,4
Demonstrates attitudes and behaviours that assist dissemination of good practice	CbD; MSF	1,3,4
Identifies resources for community action and advocacy such as policy documents and legislation	MSF	1,3

# **Teaching and Presentational Skills**

To develop the ability to teach to a variety of different audiences using a variey of teaching tools appropriate to their learning needs.

To be able to assess the quality of teaching.

To be able to plan and deliver a training programme to a variety of trainees from different backgrounds using appropriate methods and assessments

Knowledge	Assessment Methods	GMP
Principles of presentation construction	Dip SEM. TO	1,3
Principles of customising information presentation to groups of varying levels of medical understanding (athletes, trainers, allied health professionals, other Sport and Exercise Medicine specialists etc)	Dip SEM; MSF. TO	1,3
Familiarity with commonly used software packages for presenting information	ТО	1
Common Competencies Framework		
Teaching and Training:		
Describes relevant educational theories and principles	CbD	1
Outlines adult learning principles relevant to medical education	CbD	1
Demonstrates knowledge of literature relevant to developments and challenges in medical education and other sectors	CbD	1
Outlines the structure of an effective appraisal interview	CbD	1
Defines the roles of the various bodies involved in medical education and other sectors	CbD	1
Identification of learning methods and effective learning objectives and outcomes	CbD	1
Describes the difference between learning objectives and outcomes	CbD	1
Differentiates between appraisal and assessment and performance review and is aware of the need for both	CbD	1
Differentiates between formative and summative assessment and defines their role in medical education	CbD	1
Outlines the structure of the effective appraisal review	CbD	1
Outlines the role of workplace-based assessments, the assessment tools in use, their relationship to course learning outcomes, the factors that influence their selection and the need for monitoring evaluation	CbD	1
Outlines the appropriate local course of action to assist a trainee experiencing difficulty in making progress within their training programme	CbD	1
Skills		
To be able to present educational information to audiences in a confident and competent manner	MSF, TO	1,3,4
To be able to effectively tailor a presentation to the level of medical understanding of a specific audience	MSF, TO	1,3

To be competent with using standard presentation software packages	MSF, TO	1,3
Show effective presentation skills (written and verbal).	MSF, TO	1,3
Common Competencies Framework		
Teaching and Training:		
Is able to critically evaluate relevant educational literature	CbD	1,3
Varies teaching format and stimulus, as appropriate to situation and subject	CbD, TO	1,3
Provides effective and appropriate feedback after teaching, and promotes learner reflection	CbD	1,3
Conducts developmental conversations as appropriate, for example, appraisal, supervision, mentoring	CbD, MSF	1,3
Demonstrates effective lecture, presentation, small group and bedside teaching sessions	CbD	1,3
Provides appropriate career support, or refers trainee to an alternative effective source of career information	CbD	1,3
Participates in strategies aimed at improving patient education e.g. talking at support group meetings	CbD	1,3
Is able to lead departmental teaching programmes, including journal clubs	CbD, TO	1,3
Recognises the trainee in difficulty and takes appropriate action, including where relevant referral to other services	CbD	1,3
Is able to identify and plan learning activities in the workplace	CbD, TO	1,3
Contributes to educational research or projects e.g. through the development of research ideas of data/information gathering	CbD	1,3
Is able to manage personal time and resources effectively to the benefit of the educational faculty and the need of the learners	CbD	1,3
Behaviour		
Ensures that the dignity and safety of patients are maintained at all times in training situations	MSF, PS, TO	1,2,3,4
Recognises the role of the physician as an educator within the multidisciplinary team and uses medical education to enhance the care of patients	CbD, MSF, PS, TO	1,2,3
Demonstrates willingness to teach in a variety of settings to maximise effective communication and practical skills and to improve patient care	CbD; MSF, TO	1,2,3
Encourages discussions with colleagues in clinical settings to share knowledge and understanding	CbD; MSF	1,2,3
Demonstrates consideration for learners and maintains honesty and objectivity during assessments	MSF, TO	1,3
Shows willingness to respond positively to feedback obtained after teaching sessions	MSF	1,2,3
Fosters an enthusiasm for medical education in others.	MSF	1,3
Common Competencies Framework		
Teaching and Training:		
In discharging educational duties acts to maintain the dignity and safety of patients at all times	CbD, MSF	1,3

Recognises the importance of the role of the physician as an educator within the multi-professional healthcare team and uses medical education to enhance the care of patients	CbD, MSF, TO	1,3
Balances the needs of service delivery with education	CbD, MSF	1,3
Demonstrates willingness to teach trainees and other health and social workers in a variety of settings to maximise effective communication and practical skills and to improve patient care	CbD, MSF, TO	1,3
Demonstrates consideration for learners, including their emotional, physical and psychological wellbeing, along with their development needs; acts to ensure equality of opportunity for students, trainees, staff and professional colleagues	CbD, MSF	1,3
Encourages discussions with colleagues in clinical settings to share knowledge and understanding	CbD, MSF	1,3
Maintains honesty and objectivity during appraisal and assessment	CbD, MSF	1,3
Shows willingness to participate in workplace-based assessments and demonstrates a clear understanding of their purpose	CbD, MSF	1,3
Shows willingness to take up formal training as a trainer and responds to feedback obtained after teaching sessions	CbD, MSF	1,3
Demonstrates a willingness to become involved in the wider medical education activities and fosters an enthusiasm for medical education activity in others	CbD, MSF	1,3
Recognises the importance of personal development as a role model to guide trainees in aspects of good professional behaviour	CbD, MSF	1,3
Demonstrates a willingness to advance own educational capability through continuous learning	CbD, MSF	1,3
Acts to enhance and improve educational provision through evaluation of own practice	CbD, MSF	1,3
Contributes to educational policy and development at local or national levels	CbD, MSF	1,3

## **Medical Management**

To understand the structure of the NHS and independent healthcare sector.

To be able to participate fully in the planning and delivery of healthcare and to understand the factors influencing the prioritisation of healthcare provision.

To develop the management skills necessary to work effectively within the healthcare system to ensure optimal service provision to your patient population.

Knowledge	Assessment Methods	GMP
Principles of personal effectiveness/ time management	MSF	1,2,3
Principles of business planning and marketing strategy	MSF	1,2,3
Priority setting and basic understanding of how to produce a business plan	MSF	1,2,3
Methodologies for developing creative solutions to improve services	MSF	1,2,3
Project management methodology	MSF	1,2,3,4
Understanding of IT in medical practice and potential for enhancing practice efficiency	MSF	1,2,3,4
Human Resources Issues:	Dip SEM, MSF, PS	
<ul> <li>Staff recruitment – person specification, job description, interview technique, equal opportunities</li> </ul>	Dip SEM, MSF, PS	1,2
Staff contracts	Dip SEM, MSF, PS	1,2
Staff development, appraisal	Dip SEM, MSF, PS	1,2
Disciplinary procedures, complaints procedures	Dip SEM, MSF, PS	1,2
<ul> <li>Individual performance review purpose, techniques and processes, including difference between appraisal, assessment and revalidation</li> </ul>	Dip SEM, MSF, PS	1,2,3,4
<ul> <li>The duties rights and responsibilities of an employer and of a co-worker (e.g. looking after occupational safety of fellow staff)</li> </ul>	Dip SEM, MSF, PS	1,2,3,4
<ul> <li>Relevant legislation (e.g. Equality and diversity, Health and safety, employment law) and local human resource policies</li> </ul>	Dip SEM, MSF, PS	1,2,3,4
Principles of good communication, counselling	MSF	1,2,3,4
Principles of good teamwork – group dynamics, leadership techniques, conflict resolution, motivation, promotion of team identity. The requirements of running a department / unit / practice relevant to the specialty	Dip SEM; MSF	1,2,3,4
Ability to work effectively within multidisciplinary teams around athletes and exercisers – physiotherapists, sports scientists, osteopaths, chiropractors, coaches and others.	MSF	1,2,3,4
Principles of effective financial accounting, planning, policy development and budgeting	MSF	1,2,3,4
Organisation of the NHS:	Dip SEM.	1,2,3,4
Role of health authorities	Dip SEM.	1,2,3,4
NHS reforms	Dip SEM.	1,2,3,4

•	Funding health care for sport and individual exercisers	Dip SEM.	1,2,3,4		
•	Possibilities and limitations of care from the National Health	Dip SEM.	1,2,3,4		
•	Private sports medicine services	Dip SEM.	1,2,3,4		
	Possibilities and limitations of care from the Private Sector and Voluntary Sector (St Johns, Red Cross, St Andrews)	Dip SEM.	1,2,3,4		
	Use of resources / rationing (including clinical resources in order to provide care).	Dip SEM.	1,2,3,4		
	Commissioning, funding and contracting arrangements relevant to the specialty	Dip SEM.	1,2,3,4		
	How financial pressures experienced by the specialty department and organisation are managed	Dip SEM.	1,2,3,4		
Organis	ations within the medical profession:	Dip SEM	1,2,3,4		
	GMC, Royal Colleges and Faculties, (JRCPTB and SAC), FSEM, GMC, BMA	Dip SEM	1,2,3,4		
•	Specialist societies – BASEM	Dip SEM	1,2,3,4		
	Professions allied or groups supplementary to medicine – physiotherapy, nursing, orthotists, biomechanists, sports scientists, psychologist, nutritionists	Dip SEM	1,2,3,4		
Clinical	Governance	MSF	1,2,3,4		
Organis	ational performance management techniques and processes	MSF	1,2		
How co	mplaints arise and how they are managed	CbD; MSF	1,3		
	nagement issues pertinent to specialty, understands potential of risk and risk management tools, techniques and protocols	CbD; MSF	1,2,3,4		
	outcome reporting systems within the specialty, and the ation and how these relate to national programmes	MSF	1,2,3,4		
Qualitat	ive methods to gather the experience of patients and carers	CbD, MSF; PS	1,2,3,4		
Apprais	al	MSF	1,2,3,4		
	es of planning and running a formal meeting with emphasis on tructure of the meeting	MSF	1,2,3,4		
Use of p	public and patients in decision making	MSF, PS	1,2,3,4		
The imp	lications of change on systems and people	MSF ; PS	2		
How de	cisions are made by individuals, teams and the organisation	CbD, MSF	2,3,4		
Effective	e communication strategies within the organisations	MSF	2,3		
Impact I	mapping of service change	Dip SEM;	2		
<u>Commo</u>	Common Competencies Framework				
Time M	anagement and Decision Making:				
Underst	ands that effective organisation is key to time management	CbD	1,2		
Underst than oth	ands that some tasks are more urgent and/or more important ers	CbD	1,2		
Underst importa	ands the need to prioritise work according to urgency and nce	CbD	1,2		
	ns focus on individual patient needs whilst balancing multiple ng pressures	CbD	1,2		

Unders others	tands that some tasks may have to wait or be delegated to	CbD	1,2
	tands the roles, competencies and capabilities of other sionals and support workers	CbD	1,2
Outline	s techniques for improving time management	CbD	1,2
	tands the importance of prompt investigation, diagnosis and ent in disease and illness management	CbD, mini-CEX	1,2
Compl	aints and Medical Error:		
	onsultation techniques and skills described for Foundation mme, including:	CbD, DOPS, MSF	
•	Describes the local complaints procedure	CbD, DOPS, MSF	1
•	Recognises factors likely to lead to complaints (poor communication, dishonesty, clinical errors, adverse clinical outcomes etc)	CbD, DOPS, MSF	1
•	Adopts behaviour likely to prevent causes for complaints	CbD, DOPS, MSF	1
•	Deals appropriately with concerned or dissatisfied patients or relatives	CbD, DOPS, MSF	1
•	Recognises when something has gone wrong and identifies appropriate staff to communicate this to	CbD, DOPS, MSF	1
•	Acts with honesty and sensitivity in a non-confrontational manner	CbD, DOPS, MSF	1
Outline	s the principles of an effective apology	CbD, DOPS, MSF	1
	es sources of help and support for patients and yourself when plaint is made about yourself or a colleague	CbD, DOPS, MSF	1
Manag	ement and NHS Structure:		
Unders GMC	tands the guidance given on management and doctors by the	CbD	1
	tands the local structure of NHS systems in the locality, ising the potential differences between the four countries of the	CbD	1
	tand, the structure and function of healthcare systems as they o your specialty	CbD	1
NHS ir	tands the consistent debates and changes that occur in the ncluding the political, social, technical, economic, sational and professional aspects that can impact on provision ice	CbD	1
	tands the importance of local demographic, socio-economic alth data and the use to improve system performance	CbD	1
Unders	tands the principles of:		
•	Clinical coding	CbD	1
•	European Working Time Regulations including rest provisions	CbD	1
•	National Service Frameworks	CbD	1
•	Health regulatory agencies (e.g., NICE, Scottish Government)	CbD	1
•	NHS Structure and relationships	CbD	1
•	NHS finance and budgeting	CbD	1

Consultant contract and the contracting process	CbD	1
Resource allocation	CbD	1
• The role of the Independent sector as providers of healthcare	CbD	1
Patient and public involvement processes and role	CbD	1
Understands the principles of recruitment and appointment procedures	CbD	1
Skills		
To communicate effectively – verbal, written	CbD; MSF	1,3
To write good medical records and reports	MSF	1
To promote activity in the general population	CbD; MSF, PS	1
To employ and encourage methods to prevent injury in athletes	CbD; MSF, PS	1
<ul> <li>To contribute to professional education for:</li> <li>medical undergraduates and postgraduates</li> <li>other health care personnel</li> </ul>	MSF	1
<ul> <li>others working in sports – athletes, coaches, sports scientists</li> </ul>		
To plan and manage own continuing professional development	MSF	1
To participate effectively in committees	MSF	1,3
Ability to plan and implement a formal meeting, adhering to formal requirements of accountability	MSF	1
Use and adhere to clinical guidelines and protocols, morbidity and mortality reporting systems, and complaints management systems	MSF	1,2,4
Develop protocols and guidelines, and implement them	AA; MSF	1
Use clinical audit with the purpose of highlighting resources required	AA; MSF	1
Analyse feedback and comments and integrate them into plans for the service	MSF	1,3
Prepare rotas; delegate; organise and lead teams	MSF	1
Manage time and resources effectively in terms of delivering services to patients	MSF	1
Question existing practice in order to improve services.	AA; MSF	1,2
Apply creative thinking approaches (or methodologies or techniques) in order to propose solutions to service issues	MSF	1
Monitor the quality of the equipment and safety of environment relevant to the specialty	MSF	1
Assess and analyse situations, services and facilities in order to minimise risk to patients and the public	MSF; PS	1
Report clinical incidents	CbD; MSF.	1
Provide medical expertise in situations beyond those involving direct patient care	CbD; MSF	1
Discuss the local, national and UK health priorities and how they impact on the delivery of health care relevant to the specialty	CbD; MSF	1
Identify trends, future options and strategy relevant to the specialty and delivering patient services	CbD.	1

Work collegiately and collaboratively with a wide range of people outside the clinical setting	MSF	1
Ability to understand the wider impact of implementing change in healthcare provision and the potential for opportunity costs	MSF	1
Common Competencies Framework		
Time Management and Decision Making:		
Identifies clinical and clerical tasks requiring attention or predicted to arise	CbD	1,2
Estimates the time likely to be required for essential tasks and plan accordingly	CbD	1,2
Groups together tasks when this will be the most effective way of working	CbD	1,2
Recognises the most urgent / important tasks and ensures that they managed expediently	CbD	1,2
Regularly reviews and re-prioritises personal and team work load	CbD	1,2
Organises and manages workload effectively and flexibly	CbD	1,2
Makes appropriate use of other professionals and support workers	CbD	1,2
Complaints and Medical Error:	CbD	1,2,3
Contributes to processes whereby complaints are reviewed and learned from	CbD	1
Explains comprehensibly to the patient the events leading up to a medical error or serious untoward incident, and sources of support for patients and their relatives	CbD	1
Delivers an appropriate apology and explanation (either of error or for process of investigation of potential error and reporting of the same)	CbD	1
Distinguishes between system and individual errors (personal and organisational)	CbD	1
Shows an ability to learn from previous error	CbD	1
Management and NHS Structure:	CbD	
Participates in managerial meetings	CbD	1
Takes an active role in promoting the best use of healthcare resources	CbD	1
Works with stakeholders to create and sustain a patient-centred service	CbD	1
Employs new technologies appropriately, including information technology	CbD	1
Conducts an assessment of the community needs for specific health improvement measures	CbD	1
Behaviour		
Recognises the importance of the role of doctors in medical management	CbD; MSF	1
Demonstrates willingness to improve managerial skills eg through management courses, and actively engages in management activities.	MSF	1
Recognises the role of patients and carers as active participants in healthcare systems and service planning.	CbD, MSF, PS	1,3

Awareness of equity in healthcare access and delivery.	MSF	1
Shows commitment to the proper use of public money. Showing a commitment to taking action when resources are not used efficiently or effectively.	MSF	1
Awareness that in addition to patient specific clinical records, clinical staff also have responsibility for other records (e.g. research)	MSF	1
A willingness to supervise the work of less experienced colleagues	MSF	1,4
Responding constructively to the outcome of reviews, assessments or appraisals of performance	CbD; MSF	1
Understanding the needs and priorities of non-clinical staff	CbD; MSF	1
Actively seeking advice / assistance whenever concerned about patient safety	MSF	1,2,3,4
Listening to and reflecting on the views of patients and carers, dealing with complaints in a sensitive and co-operative manner	CbD; MSF, PS	1,3,4
Acting as an advocate for the service	MSF	1
Being open minded to new ideas	MSF	1
A proactive approach to new technologies and treatments	CbD; MSF	1
Supporting colleagues to voice ideas	MSF	1
Being positive about improvement and change	MSF	1
Striving for continuing improvement in delivering patient care service	CbD; MSF	1
Compliance with national guidelines that influence healthcare provision.	CbD; MSF	1
Willingness to articulate strategic ideas and use effective influencing skills	MSF.	1
The ability to understand issues and potential solutions before acting	CbD; MSF	1
Appreciate the importance of involving the public and communities in developing health services	CbD; MSF, PS	1
Willingness to participate in decision making processes beyond the immediate clinical care setting	CbD; MSF	1
Commitment to implementing proven improvements in clinical practice and services	CbD; MSF	1
Common Competencies Framework		
Time Management and Decision Making:		
Ability to work flexibly and deal with tasks in an effective and efficient fashion	CbD, mini-CEX	1,2
Recognises when you or others are falling behind and take steps to rectify the situation	CbD, mini-CEX	1,2
Communicates changes in priority to others	CbD, mini-CEX	1,2
Remains calm in stressful or high pressure situations and adopts a timely, rational approach	CbD, mini-CEX	1,2
Appropriately recognises and handles uncertainty within the consultation	CbD, mini-CEX	1,2
Complaints and Medical Error:		
Takes leadership over complaint issues	CbD, mini-CEX	1

Recognises the impact of complaints and medical error on staff, patients, and the National Health Service	CbD, mini-CEX	1
Contributes to a fair and transparent culture around complaints and errors	CbD, mini-CEX	1
Recognises the rights of patients, family members and carers to make a complaint	CbD, mini-CEX	1
Recognises the impact of a complaint upon self and seeks appropriate help and support	CbD, mini-CEX	1
Management and NHS Structure:		
Recognises the importance of equitable allocation of healthcare resources and of commissioning	CbD, mini-CEX	1
Recognises the role of doctors as active participants in healthcare systems	CbD, mini-CEX	1
Responds appropriately to health service objectives and targets and take part in the development of services	CbD, mini-CEX	1
Recognises the role of patients and carers as active participants in healthcare systems and service planning	CbD, mini-CEX, PS	1
Shows willingness to improve managerial skills (e.g. management courses) and engage in management of the service	CbD, mini-CEX, MSF	1

# Ethical and Medico-legal Aspects of Practice

To understand and apply the principles, guidance and laws regarding medical ethics and	
confidentiality.	

Knowledge	Assessment Methods	GMP
Relevant EU legislation and medico-legal guidelines	Dip SEM.	1
Legislation regarding patient confidentiality	Dip SEM.	1
Legislation regarding keeping of medical records	Dip SEM	1
Requirements for patient consent	Dip SEM	1
Guidelines for dealing with minors and other potentially vulnerable individuals	Dip SEM	1
Strategies utilised by media and other interested parties to gain information in breach of patient confidentiality	Dip SEM	1
Privacy legislation	Dip SEM	1
Regulatory bodies including IOC (sporting), BMA and Medical Defence Unions	Dip SEM.	1
<ul> <li>Professional, legal and ethical codes of the GMC, e.g. Fitness to Practice and any other relevant codes (such as IOC anti- doping code etc)</li> </ul>		
Ways in which individual behaviours impact on others; personality types, group dynamics, learning styles, leadership styles	CbD, Dip SEM	3,4
Tools and techniques for managing stress	MSF	2
Role and responsibility of occupational health and other support networks	Dip SEM	1
Limitations of self professional competence	MSF	1,2
Prejudice and preferences within self, others, society and cultures	MSF	2,3,4
Ethical and equality aspects relating to management and leadership.	Dip SEM. MSF	2,3,4
Implications of inequality and discrimination	MSF	1,2,3
Professionalism and ethics in challenging situations.	MSF	1,4
Common Competencies Framework		
Principles of Medical Ethics and Confidentiality:		
Demonstrates knowledge of the principles of medical ethics	CbD, mini-CEX	1,2,4
Outlines and follows the guidance given by the GMC on confidentiality	CbD, mini-CEX	1,2,4
Defines the provisions of the Data Protection Act and Freedom of Information Act	CbD, mini-CEX	1,2,4
Defines the principles of Information Governance	CbD, mini-CEX	1,2,4
Defines the role of the Caldicott Guardian and Information Governance lead within an institution, and outlines the process of attaining Caldicott approval for audit or research	CbD, mini-CEX	1,2,4
Outlines situations where patient consent, while desirable, is not required for disclosure e.g. serious communicable diseases, public interest	CbD, mini-CEX	1,2,4

Outlines the procedures for seeking a patient's consent for disclosure of identifiable information	CbD, mini-CEX	1,2,4
Recalls the obligations for confidentiality following a patient's death	CbD, mini-CEX	1,2,4
Recognises the problems posed by disclosure in the public interest, without patient's consent	CbD, mini-CEX	1,2,4
Recognises the factors influencing ethical decision making, including religion, personal and moral beliefs, cultural practices	CbD, mini-CEX	1,2,4
Do not resuscitate – defines the standards of practice defined by the GMC when deciding to withhold or withdraw life-prolonging treatment	CbD, mini-CEX	1,2,4
Recognises the role and legal standing of advance directives	CbD, mini-CEX	1,2,4
Outlines the principles of the Mental Capacity Act	CbD, mini-CEX	1,2,4
Valid Consent:		
Outlines the guidance given by the GMC on consent, in particular:	CbD, mini-CEX	1,2
<ul> <li>Understands that consent is a process that may culminate in, but is not limited to, the completion of a consent form</li> </ul>		
<ul> <li>Understands the particular importance of considering the patient's level of understanding and mental state (and also that of the parents, relatives or carers when appropriate) and how this may impair their capacity for informed consent</li> </ul>		
Legal Framework for Practice:		
All decisions and actions must be in the best interests of the patient	CbD, mini-CEX	1,2
Understands the legislative framework within which healthcare is provided in the UK and/or devolved administrations, in particular death certification and the role of the Coroner/Procurator Fiscal; child protection legislation; mental health legislation (including powers to detain a patient and giving emergency treatment against a patient's will under common law); advanced directives and living Wills; withdrawing and withholding treatment; decisions regarding resuscitation of patients; surrogate decision making; organ donation and retention; communicable disease notification; medical risk and driving; Data Protection and Freedom of Information Acts; provision of continuing care and community nursing care by a local authorities	CbD, mini-CEX	1,2
Understands the differences between health related legislation in the four countries of the UK	CbD, mini-CEX	1,2
Understands sources of medical legal information	CbD, mini-CEX	1,2
Understands disciplinary processes in relation to medical malpractice	CbD, mini-CEX	1,2
Understands the role of the medical practitioner in relation to personal health and substance misuse, including understanding the procedure to be followed when such abuse is suspected	CbD, mini-CEX	1,2
Personal Behaviour:		
Recalls and builds upon the competencies defined in the Foundation Programme Curriculum:	CbD, mini-CEX	
Deals with inappropriate patient and family behaviour	CbD, mini-CEX	1,4
<ul> <li>Respects the rights of children, elderly, people with physical, mental, learning or communication difficulties</li> </ul>	CbD, mini-CEX	1,4
<ul> <li>Adopts an approach to eliminate discrimination against patients from diverse backgrounds including age, gender, race, culture, disability and sexuality</li> </ul>	CbD, mini-CEX	1,4

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	CbD, mini-CEX	1,4
, , , , , , , , , , , , , , , , , , ,	CbD, mini-CEX	1,4
Acts with honesty and sensitivity in a non-confrontational     manner	CbD, mini-CEX	1,4
<ul> <li>Knows the main methods of ethical reasoning: casuistry, ontology and consequential</li> </ul>	CbD, mini-CEX	1,4
Understands the overall approach of value-based practice     and how this relates to ethics, law and decision-making	CbD, mini-CEX	1,4
Defines the concept of modern medical professionalism	CbD, mini-CEX	1,4
Outlines the relevance of professional bodies (Royal Colleges, JRCPTB, GMC, Postgraduate Dean, BMA, specialist societies, medical defence societies)	CbD, mini-CEX	1,4
Skills		
Abide by legislative and medico-legal guidelines	CbD; MSF	1,2,4
Deal appropriately with minors and other potentially vulnerable of individuals	CbD; MSF	1,2,3,4
Know when it is appropriate to have a chaperone present	CbD; MSF	1,2,3,4
Maintain legible and accurate medical records at all times	CbD, DOPS; MSF	1,2,3,4
Obtain patient consent where appropriate C	CbD, DOPS; MSF	1,2,3,4
Respect patient confidentiality and resist coercion by media and other of interested parties	CbD; MSF	1,2,3,4
Abide by privacy legislation with regard to all individuals and parties	CbD; MSF, PS	1,2,3,4
Show awareness of and sensitivity to the way in which cultural and religious beliefs affect approaches and decisions and to respond respectfully	CbD; MSF, PS	1,2,3,4
Recognise the manifestations of stress on self and others and know where and when to look for support	CbD; MSF	1,2,3,4
Balance personal and professional responsibilities. Prioritise tasks, having realistic expectations of what can be completed by self and others	CbD; MSF	1,2,3,4
Recognise, analyse and know how to deal with unprofessional behaviours in clinical practice, taking into account local and national regulations	CbD; MSF	1,2,3,4
Create open and non discriminatory professional working C relationships with colleagues; awareness of the need to prevent bullying and harassment.	CbD; MSF	1,2,3,4
Demonstrates an understanding of the implications of discrimination legislation for healthcare.	MSF	1,2
Ensures that all decisions and actions are in the best interests of the patient and public.	MSF	1,2,3,4
Common Competencies Framework		
Principles of Medical Ethics and Confidentiality:		
Uses and shares information with the highest regard for confidentiality, and encourages such behaviour in other members of the team	CbD, mini-CEX, MSF	1,2,4
Uses and promotes strategies to ensure confidentiality is maintained	CbD, mini-CEX, MSF	1,2,4

e.g. anonymisation					
Counsels patients on the need for information distribution within members of the immediate healthcare team	CbD, mini-CEX, MSF	1,2,4			
Counsels patients, family, carers and advocates tactfully and effectively when making decisions about resuscitation status, and withholding or withdrawing treatment	CbD, mini-CEX, MSF	1,2,4			
Valid Consent:					
Presents all information to patients (and carers) in a format they understand, checking understanding and allowing time for reflection on the decision to give consent	CbD, mini-CEX, MSF	1,2,3,4			
Provides a balanced view of all care options	CbD, mini-CEX, MSF	1,2,3,4			
Legal Framework for Practice:					
Ability to cooperate with other agencies with regard to legal requirements, including reporting to the Coroner's/Procurator Officer, the Police or the proper officer of the local authority in relevant circumstances	CbD, mini-CEX, MSF	1,2			
Ability to prepare appropriate medical legal statements for submission to the Coroner's Court, Procurator Fiscal, Fatal Accident Inquiry and other legal proceedings	CbD, mini-CEX, MSF	1,2			
Is prepared to present such material in Court	CbD, mini-CEX, MSF	1,2			
Incorporates legal principles into day-to-day practice	CbD, mini-CEX, MSF	1,2			
Practices and promotes accurate documentation within clinical practice	CbD, mini-CEX, MSF	1,2			
Personal Behaviour:					
Practises with professionalism including:	CbD, mini-CEX, MSF				
Integrity	CbD, mini-CEX, MSF	1,4			
Compassion	CbD, mini-CEX, MSF	1,4			
Altruism	CbD, mini-CEX, MSF	1,4			
Continuous improvement	CbD, mini-CEX, MSF	1,4			
Aspiration to excellence	CbD, mini-CEX, MSF	1,4			
Respect of cultural and ethnic diversity	CbD, mini-CEX, MSF	1,4			
Regard to the principles of equity	CbD, mini-CEX, MSF	1,4			
Works in partnership with patients and members of the wider healthcare team	CbD, mini-CEX, MSF	1,4			
Liaises with colleagues to plan and implement work rotas	CbD, mini-CEX, MSF	1,4			
Promotes awareness of the doctor's role in utilising healthcare resources optimally and within defined resource constraints	CbD, mini-CEX, MSF	1,4			
Recognises and responds appropriately to unprofessional behaviour in others	CbD, mini-CEX, MSF	1,4			
If appropriate and permitted, is able to provide specialist support to hospital and community-based services	CbD, mini-CEX, MSF	1,4			
Is able to handle enquiries from the press and other media effectively CbD, mini-CEX, MSF 1,4					
Behaviour					
Respects patient's requests for information not to be shared, unless this puts the patient or others at risk of harm	CbD, MSF, PS	1,3,4			

Demonstrates willingness to seek the advice of peers, legal bodies and the GMC in the event of an ethical dilemma over disclosure and confidentiality	CbD; MSF	1,2,3,4
Shows willingness to share information about their care with patients, unless they have expressed a wish not to receive such information	CbD; MSF	1,3,4
Makes decisions and performs actions in the best interests of the patient	CbD; MSF	1,3,4
Promotes informed reflection on legal issues by members of the medical team	CbD; MSF	1,2,3,4
Adopts a patient-focussed approach to decisions that acknowledges the right values and strengths of patients and the public	CbD, MSF, PS	1,3,4
Recognises and shows respect for diversity and differences of others	CbD, MSF, PS	3,4
Being conscientious, able to manage time and delegate	CbD; MSF	1,3,4
Recognises personal health as an important issue	CbD; MSF	1,2,3,4
Acceptance of professional regulation	CbD; MSF	1,2,4
Promotion of professional attitudes and values	CbD; MSF	1,2,3,4
Probity and the willingness to be truthful and to admit to errors	CbD; MSF	1,2,4
Actively working to minimise discrimination which denies people opportunities because of myths, stigma, dogma and insufficient advocacy	CbD; MSF	1,3,4
Practising in accordance with an appropriate knowledge and contemporary legislation	CbD; MSF	1,2
Common Competencies Framework		
Principles of Medical Ethics and Confidentiality:		
Encourages informed ethical reflection in others	CbD, MSF	1,2,4
Shows willingness to seek advice of peers, legal bodies, and the GMC in the event of ethical dilemmas over disclosure and confidentiality	CbD, mini-CEX, MSF	1,2,4
Respects patient's requests for information not to be shared, unless this puts the patient, or others, at risk of harm	CbD, PS	1,2,4
Shows willingness to share information regarding care with patients, unless they have expressed a wish not to receive such information	CbD, PS	1,2,4
Shows willingness to seek the opinion of others when making decisions about resuscitation status, and withholding or withdrawing treatment	CbD, PS	1,2,4
Valid Consent:		
Respects a patient's rights of autonomy, even in situations where their decision might put them at risk of harm	CbD, mini-CEX, PS	1,2,3,4
Does not exceed the scope of authority given by a competent patient	CbD, mini-CEX, PS	1,2,3,4
Does not withhold information relevant to proposed care or treatment in a competent patient	CbD, mini-CEX, PS	1,2,3,4
Does not seek to obtain consent for procedures which they are not competent to perform, in accordance with GMC/regulatory	CbD, mini-CEX, PS	1,2,3,4
Shows willingness to seek advance directives	CbD, mini-CEX, PS	1,2,3,4

Shows willingness to obtain a second opinion, senior opinion and legal advice in difficult situations of consent or capacity	CbD, mini-CEX, PS	1,2,3,4
Informs a patient and seeks alternative care where personal, moral or religious belief prevents a usual professional action	CbD, mini-CEX, PS	1,2,3,4
Legal Framework for Practice:		
Shows willingness to seek advice from the employer, appropriate legal bodies (including defence societies), and the GMC on medico-legal matters	CbD, mini-CEX	1,2
Promotes informed reflection on legal issues by members of the team; all decisions and actions must be in the best interests of the patient	CbD, mini-CEX	1,2
Personal Behaviour:		
Recognises personal beliefs and biases and understands their impact on the delivery of health services	CbD, mini-CEX, MSF	1,4
Where personal beliefs and biases impact upon professional practice, ensures appropriate referral of the patient	CbD, mini-CEX	1,4
Recognises the need to use all healthcare resources prudently and appropriately	CbD, mini-CEX	1,4
Recognises the need to improve clinical leadership and management skill	CbD, mini-CEX	1,4
Recognises situations when it is appropriate to involve professional and regulatory bodies	CbD, mini-CEX	1,4
Shows willingness to act as a leader, mentor, educator and role model	CbD, mini-CEX, MSF	1,4
Is willing to accept mentoring as a positive contribution to promote personal professional development	CbD, mini-CEX	1,4
Participates in professional regulation and professional development	CbD, mini-CEX, MSF	1,4
Takes part in 360 degree feedback as part of appraisal	CbD, mini-CEX, MSF	1,4
Recognises the right for equity of access to healthcare	CbD, mini-CEX	1,4
Recognises need for reliability and accessibility throughout the healthcare team	CbD, mini-CEX	1,4

# **Self-Directed Learning**

To develop a commitment to lifelong learning and ongoing professional development. To develop the ability to critically assess one's own learning needs and to incorporate these within a personal development plan which is continually updated throughout the trainees' professional career.

Knowledge	Assessment Methods	GMP
Objective understanding of own strengths and weaknesses in relation to Sport and Exercise Medicine training	MSF	1,2,4
Identifies potential resources for gaining further training in area of weakness or in area of special interest	MSF	1,2,4
Knows procedures for obtaining prospective approval of elective activities	MSF	1,3,4
Skills		
Ability to identify and use appropriate resources (e.g. mentors) for objective feedback on strengths and weaknesses	MSF	1,2,3,4
Ability to use information technology and medical networks to gain more information about potential elective activities	MSF	1,3
Ability to design and implement elective activities while complying with procedures for Sport and Exercise Medicine training	MSF	1,3,4
Behaviour		
Demonstrates the ability to honestly appraise own educational needs and to develop an appropriate personal development plan	MSF	1,2,4
Responds positively to feedback received from mentors and others regarding learning needs	MSF	1,3,4
Demonstrates awareness of the need for lifelong learning and that education needs will differ at various times during a professional career	MSF	1,2,4
Demonstrates the ability to use time and resources effectively to enhance learning opportunities.	MSF	1,2,4

# 4 Learning and Teaching

# 4.1 The Training Programme

The organisation and delivery of postgraduate training is the statutory responsibility of the General Medical Council (GMC) which devolves responsibility for the local organisation and delivery of training to the deaneries. Each deanery oversees a "School of Medicine" which is comprised of the regional Specialty Training Committees (STCs) in each medical specialty. Responsibility for the organisation and delivery of specialty training in Sport and Exercise Medicine in each deanery is, therefore, the remit of the regional Sport and Exercise Medicine STC. Each STC has a Training Programme Director who coordinates the training programme in the specialty.

The following is an example of an existing training programme (Northern Ireland Region) and is used to illustrate how the entire syllabus would be delivered, regardless of the entry pathway to Specialty Training in SEM. Individual programmes and regions will differ in their delivery of the curriculum reflecting local arrangements but all will be structured to ensure that the entire syllabus is covered. The SAC will oversee all training programmes within the UK to ensure quality of training.

<sup>1</sup>Upon entering specialty training trainees will be asked to develop an Educational Plan for each component of the programme to be agreed by their Training Programme Director and Educational Supervisor. Guidelines developed by the SAC for training posts will be utilised to inform both trainees and trainers. Trainees will take part in relevant core study activities for each individual attachment of the training programme. Assessments will include the following agreed methods: - mini-CEX, CbD, DOPS, MSF and Patient Survey as well as systematic audit, both clinical and administrative.

The SEM training programme to which the trainee is appointed will have named approved trainers (educational supervisors) for each element of the programme. In addition, one consultant / specialist within the same deanery or group of deaneries will act as Training Programme Director. Specialty training in SEM may provide experience in both the National Health Service and the private sector within approved clinics / settings. All training is overseen by the Specialist Advisory Committee (SAC) in SEM and the Postgraduate Dean for SEM.

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

# <u>ST3</u>

The first year of training will comprise 6 months of primary care medicine (GP) and 6 months of Public Health medicine. Support has already been sought from the Programme Directors of both specialties and educational supervisors agreed. The training plan within each 6 months programme will reflect the trainee's previous experience and the curriculum requirements.

# ST4

The focus for the second year of HST will be in the management of acute emergency presentations and an introduction to sport and exercise related problems in order to prepare the trainee to successfully complete the Diploma in SEM. This year will comprise of two 6 months attachments, one in Accident and Emergency Medicine and one within the Department of Sport and Exercise Medicine at MPH. During this latter attachment trainees will have the opportunity to gain experience of Sports Science at the University of Ulster and the Sports Institute NI.

The second year of training will see the successful completion of the diploma in SEM.

<u>ST5</u> The third year of training will provide the trainee with an opportunity to gain additional Educational Supervisors, trainees will develop a portfolio job plan, which will see them attached to a range of consultants with subspecialty interests and clinical commitments. All areas of elective orthopaedic surgery are provided at MPH and trainees will gain exposure to a wide range of outpatient clinics and surgical practices. Medical attachments will cover all relevant areas e.g. cardiology and respiratory medicine, rheumatology, diabetes and endocrinology, neurology and neurophysiology etc.

# ST6

The clinical component of the final year of training will focus entirely on Sport and Exercise Medicine. As well as working within the Department of SEM at MPH, the trainee will have the opportunity to experience other sports medicine settings e.g. in elite and professional sport at SINI and with the Ulster rugby team. Opportunities for team attachments and travelling with a team will be available. Funding for attendance at a major multidisciplinary sporting competition (e.g. Commonwealth or Olympic Games) will be sought. Clinical attachments in the Spinal Injuries Unit at MPH will include exposure to disability sport'.

Teaching and learning methods

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

Trainees will achieve the competencies described in the curriculum 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.

### Acting up as a consultant (AUC)

"Acting up" provides doctors in training coming towards the end of their training with the experience of navigating the transition from junior doctor to consultant while maintaining an element of supervision.

Although acting up often fulfills a genuine service requirement, it is not the same as being a locum consultant. Doctors in training acting up will be carrying out a consultant's tasks but with the understanding that they will have a named supervisor at the hosting hospital and that the designated supervisor will always be available for support, including out of hours or during on-call work. Doctors in training will need to follow the rules laid down by the Deanery / LETB within which they work and also follow the JRCPTB rules which can be found at

## 4.2 Teaching and Learning Methods

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

**Learning with Peers** - There are many opportunities for trainees to learn with their peers. Local postgraduate teaching opportunities allow trainees of varied levels of experience to come together for small group sessions. Examination preparation encourages the formation of self-help groups and learning sets.

Trainee led sessions are included in the Annual Congress and Spring meeting of the British Association of Sport and Exercise Medicine, allowing core specialist areas of the curriculum to be delivered (eg drugs and sport, ethics, appraisal, job planning). Teleconferencing and internet discussion forums offer the opportunity for trainees from all training regions to regularly interact and learn in a supportive environment.

**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. After initial induction, trainees will
  review patients in outpatient clinics, under direct supervision. The degree of
  responsibility taken by the trainee will increase as competency increases. As
  experience and clinical competence increase trainees will assess 'new' and
  'review' patients and present their findings to their clinical supervisor.
- Specialty-specific takes
- Post-take consultant ward-rounds
- Personal ward rounds and provision of ongoing clinical care on specialist medical ward attachments. Every patient seen, on the ward or in out-patients, 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 of clinical problems.
- Consultant-led ward rounds. Every time a trainee observes another doctor, consultant or fellow trainee, seeing a patient or their relatives there is an opportunity for learning. Ward rounds, including those post-take, should be led by a consultant and include feedback on clinical and decision-making skills.
- Multi-disciplinary 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 in-patients. This includes dayto-day review of clinical conditions, note keeping, and the initial management of the acutely ill patient 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 as learning outcomes are achieved (see Section 5: Feedback and Supervision).

**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, BASEM and FSEM.

Suggested activities include:

- A programme of formal bleep-free regular teaching sessions to cohorts of trainees (e.g. a weekly core training hour of teaching within a Trust)
- Case presentations
- Journal clubs
- Research and audit projects
- Lectures and small group teaching
- Grand Rounds
- Clinical skills demonstrations and teaching
- Critical appraisal and evidence based medicine and journal clubs
- Specialty meetings, e.g. BASEM Annual Congress
- 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.

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

**Formal Study Courses** - Time to be made available for formal courses is encouraged, subject to local conditions of service. Examples include management courses and communication courses.

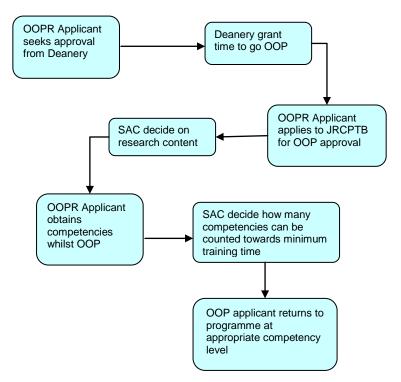
# 4.3 Research

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

Upon completion of the research period the competencies achieved will be agreed by the OOP Supervisor, Educational Supervisor and communicated to the SAC, accessing the facilities available on the JRCPTB ePortfolio. The competencies

achieved will determine the trainee's position on return to programme; for example if an ST3 trainee obtains all ST4 competencies then 12 months will be recognised towards the minimum training time and the trainee will return to the programme at ST5. This would be corroborated by the subsequent ARCP.

This process is shown in the diagram below:



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

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

# 5 Assessment

# 5.1 The Assessment System

The purpose of the assessment system is to:

- enhance learning by providing formative assessment, enabling trainees to receive immediate feedback, measure their own performance and identify areas for development;
- drive learning and enhance the training process by making it clear what is required of trainees and motivating them to ensure they receive suitable training and experience;
- provide robust, summative evidence that trainees are meeting the curriculum standards during the training programme;
- ensure trainees are acquiring competencies within the domains of Good Medical Practice;
- assess trainees' actual performance in the workplace;

- ensure that trainees possess the essential underlying knowledge required for their specialty;
- inform the Annual Review of Competence Progression (ARCP), identifying any requirements for targeted or additional training where necessary and facilitating decisions regarding progression through the training programme;
- identify trainees who should be advised to consider changes of career direction.

The integrated assessment system comprises a series of workplace-based and the knowledge-based assessment for the specialty, the UK FSEM Diploma in Sport and Exercised Medicine. Individual assessment methods are described in more detail below.

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

## 5.2 Assessment Blueprint

In the syllabus (3.3) the "Assessment Methods" shown are those that are appropriate as **possible** methods that could be used to assess each competency. It is not expected that all competencies will be assessed and that where they are assessed not every method will be used.

## 5.3 Assessment Methods

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

### **Examinations and Certificates**

On entry to specialty training in Sport and Exercise Medicine at ST3 level, trainees must have achieved the required ST2 competencies, including any relevant examinations, appropriate to their entry pathway (CMT, ACCS or GP). Trainees are also expected to hold a valid ALS or equivalent qualification throughout training.

The Diploma in Sport and Exercise Medicine of the UK FSEM should be attained by the completion of ST4 however if trainees are unsuccessful they will be allowed to progress to ST5 with an ARCP 2 outcome and given another opportunity to take the diploma in ST5. The aim of this examination is to ensure that trainees have the specific knowledge and skills to allow them to progress to the final years of training, when they will be expected to have greater sports specific involvement, e.g. as a team doctor, travelling with a team, providing medical cover to sporting events etc. This is not an exit examination but is matched to the level that an ST4 trainee should have attained at that stage of training. Trainees will be awarded Membership of the UK Faculty of Sport and Exercise Medicine (MFSEM) on successful completion of the diploma examination.

The delivery of the Diploma examination is the responsibility of the Examinations Committee of the UK Faculty of Sport and Exercise Medicine. All examiners undergo appropriate training and are mandated to repeat this on a five year cycle. All examinations are supervised by the Chairperson of the Examinations Committee and feedback is routinely given to examiners on their performance.

The structure of the examination has been informed and shaped by advice from educational experts from the Royal College of Surgeons of Edinburgh and is

subjected to regular formal review. The examination has both written and clinical components. Significant changes to the written examination took place in January 2009 based on this expert advice to ensure fitness for modern medical practice and alignment to the specialty training curriculum for Sport and Exercise Medicine. These included replacing the traditional short essay questions by extended matching items (EMIs). The rationale for this change was that EMIs provide a more objective method of testing breadth and depth of knowledge as well as application of knowledge. It is also considered to be a suitable method of assessing areas not easily covered elsewhere in the examination, particularly through MCQs.

Information about the Diploma, including guidance for candidates, is available on the FSEM (UK) website <u>www.fsem.co.uk</u>.

#### **Workplace-Based Assessments**

- Multi-Source Feedback (MSF)
- Mini-Clinical Evaluation Exercise (mini-CEX)
- Direct Observation of Procedural Skills (DOPS)
- Case-Based Discussion (CbD)
- Patient Survey (PS)
- Audit Assessment (AA)
- Teaching Observation (TO)

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

#### Multisource Feedback (MSF)

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

#### mini-Clinical Evaluation Exercise (mini-CEX)

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

#### **Direct Observation of Procedural Skills (DOPS)**

A DOPS is an assessment tool designed to assess 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.

#### Case based Discussion (CbD)

The CbD assesses the performance of a trainee in their management of a patient to provide an indication of competence in areas such as clinical reasoning, decision-making and application of medical knowledge in relation to patient care. It also

serves as a method to document conversations about, and presentations of, cases by trainees. The CbD should include discussion about a written record (such as written case notes, out-patient letter, discharge summary). A typical encounter might be when presenting newly referred patients in the out-patient department.

### Patient Survey (PS)

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

#### Audit Assessment Tool (AA)

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

#### **Teaching Observation (TO)**

The Teaching Observation form is designed to provide structured, formative feedback to trainees on their competence at teaching. The Teaching Observation can be based on any instance of formalised teaching by the trainee which has been observed by the assessor. The process should be trainee-led (identifying appropriate teaching sessions and assessors).

# 5.4 Decisions on progress (ARCP)

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

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

# 5.5 ARCP Decision Aid Sport and Exercise Medicine ARCP Decision Aid

This decision aid is intended for guidance only. It is recognised that regions may vary in the way that their training programmes are structured and that at any point in their training, trainees may be exposed to different areas of the curriculum compared to their peers at a similar level. Individual deaneries should therefore modify this grid to reflect their individual training programmes.

	ST3	ST4	ST5	ST6
Examinations		FSEM Diploma attempted/passed	FSEM Diploma passed	
ALS Certificate	Valid	Valid	Valid	Valid
Scientific Knowledge		All scientific knowledge competencies should be achieved as evidenced by the attainment of the FSEM Diploma examination.	Ongoing evidence of the application of scientific principles in patient and athlete care.	Ongoing evidence of the application of scientific principles in patient and athlete care.
Population Health	All competencies to be achieved by completion of Public Health Medicine and General Practice attachments, generally by end of ST3.			
Musculoskeletal Medicine	Some competencies to be achieved during General Practice attachment.	Competent in the assessment and management of common sports related injuries as evidenced by the attainment of the FSEM Diploma examination	70% of competencies to be achieved.	100% of competencies to be achieved.
Working within the Team Environment			50% of competencies to be achieved	All competencies to be achieved
Medical Emergencies	Valid ALS	Valid ALS. FSEM Diploma examination.	Valid ALS Evidence of managing on field emergencies as team physician.	Valid ALS Evidence of managing on field emergencies as team physician.

Drugs in Sport	Awareness of regulations regarding the use of drugs by athletes and doctor's responsibilities in this area – attained during GP attachment.	Knowledge competencies to be achieved – FSEM Diploma examination.	Has attained practical experience of drugs in sport through working with athletes and teams.	All competencies to be achieved.
Psychosocial Aspects of SEM	Demonstrates an awareness of the psychosocial influences that affect exercise participation and adherence to exercise prescription.	Demonstrates an awareness of the psychosocial influences that affect exercise participation and adherence to exercise prescription.	Demonstrates the ability to communicate effectively with athletes and their coaches, both within the individual and team environment. Shows an awareness of the psychosocial factors influencing athletic performance.	Demonstrates the ability to communicate effectively with athletes and their coaches, both within the individual and team environment. Shows an awareness of the psychosocial factors influencing athletic performance.
Investigations and Procedures		Should be familiar with the investigations commonly used in the assessment of the injured athlete – FSEM Diploma examination	Should be competent to perform a biomechanical assessment. Should be competent to safely perform injections of at least two joints.	All competencies to be achieved
Spinal Injuries, Amputee Rehabilitation and Disability		Should be aware of the challenges facing the disabled individual with respect to exercise and sports participation – FSEM Diploma examination	Evidence of managing exercise related problems in these groups.	All competencies to be achieved
Physical Activity in Special Groups		Should be aware of the challenges facing these groups with respect to exercise and sports participation – FSEM Diploma examination	Evidence of managing exercise related problems in these groups.	Evidence of managing exercise related problems in these groups. All competencies to be achieved.
Research, Statistics and Audit	Evidence of participation in an audit	Evidence of completion of an audit – with major involvement in design, implementation, analysis and presentation of results and	Evidence of ongoing involvement in audit and of critical thinking in clinical practice.	Satisfactory portfolio of audit involvement,

		recommendations Evidence of critical thinking around relevant clinical questions		
Teaching and Presentational Skills		Evidence of participation in teaching of medical students, junior doctors and other AHPs	Evidence of participation in teaching with results of students' evaluation of that teaching Evidence of understanding of the principles of adult education	Portfolio evidence of ongoing evaluated participation in teaching Evidence of implementation of the principles of adult education
Medical Management		Evidence of participation in, and awareness of, some aspect of management – examples might include responsibility for organising rotas, teaching sessions or journal clubs	Evidence of awareness of managerial structures and functions within the NHS. Such evidence might include attendance at relevant courses, participation in relevant local management meetings with defined responsibilities.	Evidence of understanding of managerial structures e.g. by reflective portfolio entries around relevant NHS management activities.
Ethical and Medicolegal Aspects	Demonstrates knowledge of the principles of medical ethics and shows evidence of applying these principles in clinical practice, eg patient confidentiality, consent procedures, medical records etc.	Demonstrates knowledge of the principles of medical ethics and shows evidence of applying these principles in clinical practice, eg patient confidentiality, consent procedures, medical records etc.	Demonstrates knowledge of the principles of medical ethics and shows evidence of applying these principles in clinical practice, including when working in the sports environment, eg patient confidentiality, consent procedures, medical records etc.	Demonstrates knowledge of the principles of medical ethics and shows evidence of applying these principles in clinical practice, including when working in the sports environment, eg patient confidentiality, consent procedures, medical records etc.
Self Directed Learning	Evidence of satisfactory CPD activity and reflective learning, mapping CPD requirements to ongoing training needs	Evidence of satisfactory CPD activity and reflective learning, mapping CPD requirements to ongoing training needs.	Evidence of satisfactory CPD activity and reflective learning, mapping CPD requirements to ongoing training needs.	Evidence of satisfactory CPD activity and reflective learning, mapping CPD requirements to ongoing training needs.

#### Notes:

- 1. All competencies to be matched against the appropriate assessment tools detailed in the training syllabus and evidence of satisfactory progression to be included in the trainee's portfolio at each ARCP. It is recognised that the assessment tool used will vary depending on the trainee's experience during a particular year, however an average of 6 MiniCEX, 6 CbDs, 6 DOPS, 1 MSF and 1 PS should be performed per annum,
- 2. Relevant aspects of the Common Competencies Framework, Medical Leadership Curriculum and Health Inequalities Curriculum are detailed in the training syllabus and trainees are expected to show a progression in attaining these competencies throughout training, It is recognised that many aspects of the Common Competencies Framework and Health Inequalities Curriculum will be covered during the early years of training prior to entering specialty training and evidence of continued application of these principles to clinical practice in Sport and exercise Medicine should be evident in a trainee's portfolio. Trainees would be expected to show an increasing leadership role as they progress through the training programme.

# 5.6 Penultimate Year Assessment (PYA)

The penultimate ARCP prior to the anticipated CCT date will include an external assessor from outside the training programme. JRCPTB and the deanery will coordinate the appointment of this assessor. This is known as "PYA". Whilst the ARCP will be a review of evidence, the PYA will include a face to face component.

# 5.7 Complaints and Appeals

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

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

The complaints and appeals procedures relevant to the FSEM Diploma examination may be accessed at <u>https://www.rcsed.ac.uk/exams/exam-policies-and-procedures</u>.

# 6 Supervision and Feedback

# 6.1 Supervision

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

Trainees will at all times have a named Educational Supervisor and Clinical Supervisor, responsible for overseeing their education. Depending on local arrangements these roles may be combined into a single role of Educational Supervisor.

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

### Educational supervisor

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

#### **Clinical supervisor**

A trainer who is selected and appropriately trained to be responsible for overseeing a specified trainee's clinical work and providing constructive feedback during a training placement. Some training schemes appoint an Educational Supervisor for each placement. The roles of Clinical and Educational Supervisor may then be merged.

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

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

# 6.2 Appraisal

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

## **Induction Appraisal**

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

### **Mid-Point Review**

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

# **End of Attachment Appraisal**

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

# 7 Managing Curriculum Implementation

# 7.1 Intended Use of Curriculum by Trainers and Trainees

This curriculum and ePortfolio are web-based documents which are available from the Joint Royal Colleges of Physicians Training Board (JRCPTB) website <a href="https://www.jrcptb.org.uk">www.jrcptb.org.uk</a>.

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

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

# 7.2 Recording Progress

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

The trainee's main responsibilities are to ensure 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.

# 8 Curriculum Review and Updating

The specialty curriculum will be reviewed and updated with minor changes on an annual basis. The curriculum should be regarded as a fluid, living document and the SAC will ensure to respond swiftly to new clinical and service developments. In addition, the curriculum will be subject to three-yearly formal review within the SAC. This will be informed by curriculum evaluation and monitoring. The SAC will have available:

- The trainees' survey, which will include questions pertaining to their specialty (GMC to provide)
- Specialty-specific questionnaires ( if applicable)
- Reports from other sources such as educational supervisors, programme directors, specialty deans, service providers and patients.
- Trainee representation on the Deanery STC and the SAC of the JRCPTB
- Informal trainee feedback during appraisal.

Evaluation will address:

- The relevance of the learning outcomes to clinical practice
- The balance of work-based and off-the-job learning
- Quality of training in individual posts

- Feasibility and appropriateness of on-the-job assessments in the course of training programmes
- Availability and quality of research opportunities
- Current training affecting the service

Evaluation will be the responsibility of the JRCPTB and GMC. These bodies must approve any significant changes to the curriculum.

Interaction with the NHS will be particularly important to understand the performance of specialists within the NHS and feedback will be required as to the continuing needs for that specialty as defined by the curriculum. It is likely that the NHS will have a view as to the balance between generalist and specialist skills, the development of generic competencies and, looking to the future, the need for additional specialist competencies and curricula. In establishing specialty issues which could have implications for training, the SAC will produce a summary report to discuss with the NHS employers and ensure that conclusions are reflected in curriculum reviews.

Trainee contribution to curriculum review will be facilitated through the involvement of trainees in local faculties of education and through informal feedback during appraisal and College meetings.

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

# 9 Equality and Diversity

The Royal Colleges of Physicians will comply, and ensure compliance, with the requirements of equality and diversity legislation, such as the:

- Race Relations (Amendment) Act 2000
- Disability Discrimination Act 1995
- Human Rights Act 1998
- Employment Equality (Age) Regulation 2006
- Special Educational Needs and Disabilities Act 2001
- Data Protection Acts 1984 and 1998

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

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

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 must ensure that educational supervisors have had equality and diversity training (at least as an e learning module) every 3 years
- Deaneries must ensure that any specialist participating in trainee interview/appointments committees or processes has had equality and diversity training (at least as an e module) every 3 years.
- ensuring trainees have an appropriate, confidential and supportive route to report examples of inappropriate behaviour of a discriminatory nature. 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.
- monitoring of College Examinations;
- ensuring all assessments discriminate on objective and appropriate criteria and do not unfairly disadvantage trainees because of gender, ethnicity, sexual orientation or disability (other than that which would make it impossible to practise safely as a physician). All efforts shall be made to ensure the participation of people with a disability in training.