SPECIALTY TRAINING CURRICULUM

FOR

ALLERGY

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Joint Royal Colleges of Physicians Training Board

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1 Introduction

Allergy is a speciality which has its scientific roots in the discipline of immunology, but is concerned largely, but not totally with clinical problems arising from the propensity of some patients to have inappropriate Immunoglobulin E (IgE) responses to various proteins ("allergens" encountered at the mucosal surfaces of the respiratory tract (respiratory allergy) and the gut (food allergy). In addition, some individuals have IgE responses to certain drugs, whether ingested or injected, and insect venom following stings. Some diseases within the realm of the allergist are definitely not or not obviously IgE-mediated, such as urticaria, idiopathic anaphylaxis and some adverse reactions to drugs. It is the business of the allergist to identify such allergens, provide advice on avoidance where possible, institute active treatment to reduce allergen sensitisation or its consequences, advise on the safety of alternative drugs in the case of drug allergy and help the patient to manage the consequences of accidental allergen exposure. It is practised largely in an outpatient setting (although ward based emergency management of some allergic diseases such as drug allergy is occasionally required). It requires expertise and training unique to allergy. Allergists may be called upon to manage allergic aspects of respiratory tract disease, including asthma and rhinoconjunctivitis, allergic aspects of atopic dermatitis (eczema), food allergy and intolerance, drug and vaccine allergy, insect venom allergy, urticaria and angioedema, anaphylaxis and latex allergy and to prescribe and administer allergen immunotherapy. Allergy shares with immunology a number of laboratory diagnostic techniques, but those who practice clinically in the speciality are unlikely to be called upon to direct service laboratory departments. They may, however, run research laboratories.

This document presents an objective-based approach to the curriculum for the management of allergic diseases in adults. It provides guidance to both trainees and educational supervisors as to the required content of the training programme.

Allergic diseases may manifest in a multitude of organs, including the respiratory tract, skin and gut. In addition, they may present in both adult and paediatric patients. For this reason, allergy overarches many other medical specialities, and collaborative training in relevant aspects of these specialities, particularly paediatrics, dermatology, respiratory medicine and ENT, is an essential aspect of the programme. There is close collaboration with clinical immunologists who also manage allergic disease. Conversely, allergists should have some knowledge of other immunological diseases such as immunodeficiency, systemic autoimmune disease and vasculitis but management of these diseases lies more clearly within the realm of the clinical immunologist.

2 Rationale

2.1 Purpose of the curriculum

The curriculum is appropriate for trainees preparing to practise as an independent consultant allergist in the UK. 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 allergy. The curriculum has been designed to build upon the knowledge and core competencies in general internal medicine that trainees will bring with them as they enter allergy training. Throughout specialty training, the curriculum provides a structured framework to enable incremental learning and reflection across the entire breadth of clinical and laboratory allergy.

On completion of training, trainees will:

- Be able to make a specific diagnosis of allergy and identify diseases not known to be mediated by IgE, and to exclude allergy as a cause of disease.
- Recognise the role of allergens in all relevant diseases, identify clinically significant allergens and provide advice on avoidance wherever appropriate.
- Demonstrate the performance, and describe the interpretation of skin prick tests, intradermal tests and RAST as applied to allergy diagnosis.
- Be aware of the definition, diagnosis, differential diagnosis and management of asthma and seasonal and perennial rhinitis and conjunctivitis. This includes principles of patient education, management of acute and chronic severe disease and management of unwanted effects of therapy, and familiarity with the principles and scopes of rhinoscopy, rhinomanometry, ciliary motility tests and general ENT examination procedures when assessing a patient with chronic rhinitis.
- Be able to define atopic dermatitis and distinguish between this and contact dermatitis and other causes of dermatitis, and be familiar with the principles of therapy of atopic dermatitis, the role of allergen avoidance, the identification of allergic triggers, the complications of therapy and the need for referral for specialist investigation of contact dermatitis.
- Be able to recognise the clinical sequelae of IgE-mediated food allergy, and to distinguish these from intolerance syndromes, to state the advantages and disadvantages of skin prick testing, exclusion diets, diet diaries and single and double-blind placebo-controlled food challenge in the diagnosis of food allergy and to recognise gastrointestinal disorders which may mimic food allergy and refer patients for appropriate specialist investigation.
- Be able to analyse and manage adverse reactions to drugs, including general and local anaesthetics, antibiotics analgesics and other drugs, to describe the principles of drug challenge and desensitisation and provide advice on the use of alternative drugs in allergic patients.
- Be able to describe the clinical features of local and systemic reactions to insect stings, and recognise when these are IgE-mediated; to recount the natural history of these reactions in adults and children and be able to provide patients with insect venom allergy advice on avoidance and emergency treatment, as well as when immunotherapy is and is not indicated.
- Be able to describe the mechanisms, common causes, clinical features and differential diagnosis of anaphylactic reactions, and to organise a systematic approach to the identification of aetiology, to explain allergen avoidance strategies where appropriate, emergency treatment plans, including self-administration of adrenaline in adults and children and to provide management plans to patients prescribed adrenaline auto-injectors, written where necessary, with appropriate liaison between allergist, general practitioner, community paediatrician and school where appropriate.
- Be able to diagnose urticaria and angioedema, state its causes where known, provide management advice and distinguish it from life threatening anaphylaxis.
- Be able to diagnose and latex allergy and provide individual and occupation-related advice as to its management.
- Have good knowledge of cross-reactivity between allergens and when these cause reactions of clinical relevance.
- Be able to describe the efficacy, limitations, indications and contra-indications for allergen immunotherapy, different desensitisation regimens, the advantages and disadvantages of different allergen preparations for immunotherapy and appropriate monitoring prior to, during and after desensitisation injections, including the management of trivial and severe reactions.
- Be able to manage allergic diseases in children as well as adults, and to recognise the differences in the natural history of allergic diseases and approaches to allergen avoidance and treatment in children, and to diagnose and manage allergic diseases affecting the respiratory tract, skin and gut in children.

- Be able to recognise unproven procedures for allergy diagnosis and treatment, and to exclude allergy as a cause of polysymptomatic illness and psychiatric illness.
- Have a sound knowledge of basic immunological mechanisms with particular reference to IgE-mediated mechanisms and the cellular and molecular pathology of organ-based allergic diseases such as asthma, rhinitis, food and drug allergy and atopic dermatitis.
- Be able to describe laboratory methods used in immunology and in particular allergy diagnosis, with knowledge of the concepts of internal quality control and external quality assessment, precision, accuracy, sensitivity, specificity and predictive values of the tests.
- Be able to liaise with other clinical colleagues for the optimum management of patients under their care.
- Have the ability to work as part of a multi-disciplinary team within the clinical sphere of their activity.
- Be able to explain the details of diagnosis, natural history, outcome and required therapeutic measures to their clinical colleagues, along with patients and their carers.
- Be aware of relevant sources of information including computerised databases and have the skills to use information resources to keep up to date with the latest developments in this rapidly developing field.
- Be aware of patient support organisations and how to liaise effectively with them.
- Have the requisite skills to maintain their Continuing Professional Development.

2.2 Development

This curriculum was developed by the Specialty Advisory Committee (SAC) for Allergy under the direction of the Joint Royal Colleges of Physicians Training Board (JRCPTB). It replaces the previous version of the curriculum dated May 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 leadership, health inequalities competencies and common competencies.

In addition to clinical specialists in Allergy, the SAC includes representatives of allergy trainers and trainees who were consulted in the development of the curriculum. Also consulted was the British Society for Allergy and Clinical Immunology (www.bsaci.org), the professional society for medical and allied health professional practising allergists in the UK. The BSACI is in close contact with a number of lay organisations for allergy sufferers such as Allergy UK (www.allergyuk.org) and the Anaphylaxis Campaign (www.anaphylaxis.org), enabling it to identify patient needs and priorities when developing the curriculum. The syllabus content of the curriculum is also congruent with that of European training programmes (for example, the member countries of the European Academy of Allergy and Clinical Immunology, (www.eaaci.org)) and with the key Clinical Competencies for physician training in allergy set out in a position statement of the World Allergy Organisation (www.worldallergy.org).

2.3 Training Pathway

Specialty training in Allergy Medicine 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 Allergy.

Core training may be completed in either a Core Medical Training (CMT) or Acute Care Common Stem (ACCS) programme. The full curriculum for specialty training in Allergy

therefore consists of the curriculum for either CMT or ACCS plus this specialty training curriculum for Allergy.

Core Medical training programmes are designed to deliver core training for specialty training by acquisition of knowledge and skills as assessed by workplace based assessments and the MRCP. Programmes are usually for two years and are broad based consisting of four to six placements in medical specialties. These placements over the two years must include direct involvement in acute medical “take”. In some instances, depending on local circumstances, these rotations may be themed to include specialities relevant to allergy such as respiratory medicine or dermatology. Trainees are asked to document their record of workplace based assessments in an ePortfolio which will then be continued to document assessments in specialty training. Trainees completing core training will have a solid platform of common knowledge and skills from which to continue into Specialty Training at ST3, where these skills will be developed and combined with specialty knowledge and skills in order to award the trainee with a certificate of completion of training (CCT).

There are common competencies that should be acquired by all physicians during their training period starting within their undergraduate careers and developed throughout their postgraduate careers, such as communication, examination and history taking skills. These are initially defined for CMT and then developed further in the specialty. This part of the 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.

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.

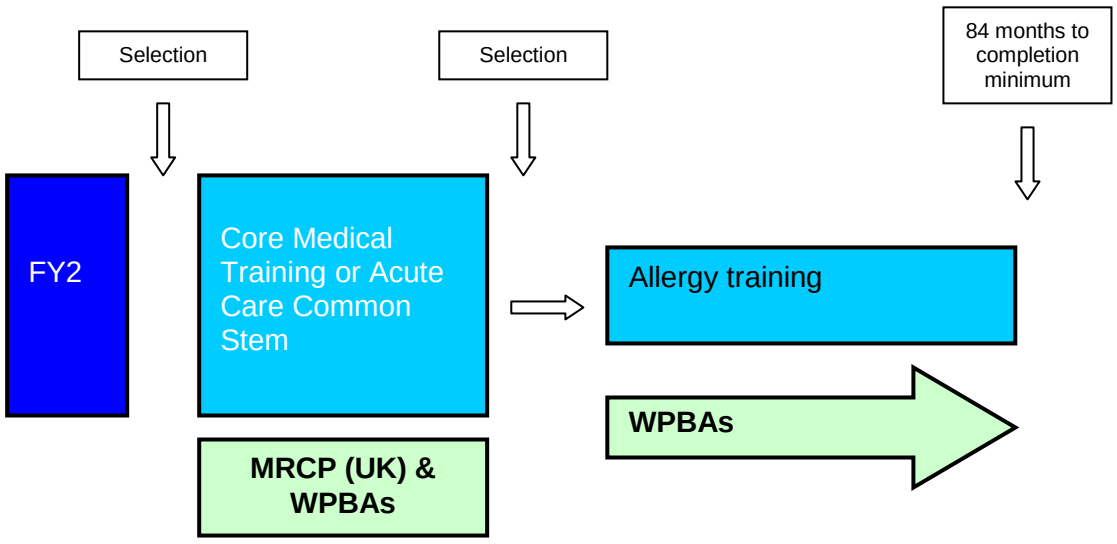

Fig 1. Diagrammatic representation of the training pathway for Allergy Medicine

Patients expect medical specialists to be highly competent, knowledgeable and intelligent, good communicators, professional, compassionate and committed to their speciality. For this reason, adequate evidence of successful completion of core medical training (which will include evidence of completion of membership of the Royal College of Physicians (MRCP) is essential.

2.4 Enrolment with JRCPTB

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

2.5 Duration of training

The SAC has advised that allergy training from ST1 will usually require 7 (seven) years in full time training (2 years core plus 5 (five) years specialty training).

2.6 Less Than Full Time Training (LTFT)

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

- LTFT shall meet the same requirements as full-time training, from which it will differ only in the possibility of limiting participation in medical activities.
- The competent authorities shall ensure that the 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 www.jrcptb.org.uk .

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

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

3 Content of learning

3.1 Programme content and objectives

There are three main areas of subject matter included within the specialist curriculum for allergy:

- Provision of a comprehensive body of knowledge of the workings of the human immune system in health and disease, with particular reference to IgE-mediated diseases.
- Knowledge of the full range of laboratory tests relevant to the diagnosis and management of immunological and allergic diseases. All trainees will be expected to have knowledge of the concepts of internal quality control and external quality assessment, precision, accuracy, sensitivity, specificity and the predictive value of laboratory tests. They will be become familiar with the role of the diagnostic laboratory in supporting hospital and general practice services, including the interpretation of tests, provision of clinical advice regarding test selection, and clinical liaison. It is accepted that, while trainees might benefit from some practical knowledge of performing immunological laboratory tests, they will not be required to be able to perform these tests personally or oversee the performance of these tests in a hospital laboratory setting.
- Diagnosis, investigation and management of patients with a full range of disorders that might be referred to an allergy specialist as detailed below.

In addition the curriculum will continue to deliver knowledge, skills and behaviours appropriate for the common competencies of a physician, including health inequality and medical leadership competencies. Acquisition of learning to acquire these competencies should occur throughout training and indeed throughout the duration of a physician's career.

A full summary of the knowledge, skills and behaviours required by the curriculum is set out in Tables 1.1-1.26 (Common Competencies, including awareness of health inequalities), Tables 2.1-2.5 (Medical Leadership competencies), Table 3 (Core Immunological Knowledge), Table 4 (Fundamental Immunological Knowledge), Table 5.1 (Laboratory Experience) Tables 5.2-5.14 (Specialist Knowledge of Allergic Diseases). See section 3.3 below.

The order in which these learning experiences are provided is not critical and will depend on local circumstances, except that it is generally desirable for the trainee to begin to accrue theoretical immunological knowledge and laboratory experience (Tables 3-5) from the beginning of the training period. Training in paediatric allergy would normally follow training in adult allergy. In keeping with the principles of a spiral curriculum, the competencies of knowledge, skills and attitudes should be maintained and built upon throughout training in all of the fields shown in the Tables. Opportunity is provided in the training logbook to assess competency at various levels, which should progress to satisfactory in all aspects by the time the training period is completed. Common competencies are acquired throughout training.

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
http://www.gmc-uk.org/Framework_4_3.pdf_25396256.pdf

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 (section 3.3 following) 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 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.

This specialty curriculum includes common competencies which apply to all 28 physicianly specialties and sub-specialties. The common competencies follow the headings of good medical practice and run through from core training to CCT. Common competencies are required at all stages of training.

Where there is a * in the syllabus this competency will be assessed, in the future, by a knowledge-based assessment method

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1. Common Competencies

1.1 History Taking

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 and formulate a management plan that takes account of likely clinical evolution

Knowledge	Assessment Methods	GMP
Comprehends the importance of different elements of the history	mini-CEX	1
Comprehends that patients do not always present their history in a structured fashion	mini-CEX	1,3
Knows the likely causes and risk factors for conditions relevant to mode of presentation	mini-CEX	1
Recognises that the patient's wishes and beliefs and the history should inform examination, investigation and management	mini-CEX	1
Recognises the importance of social and cultural issues and practices that may have an impact on health	mini-CEX	1
Skills		
Identifies and overcomes possible barriers to effective communication	mini-CEX	1, 3
Communicates effectively with patients from diverse backgrounds and those with special communication needs, such as those who need interpreters	mini-CEX	1,3
Manages time and draws consultation to a close appropriately	mini-CEX	1, 3
Comprehends that effective history taking in non-urgent cases may require several discussions with the patient and other parties, over time	mini-CEX	1,3
Supplements history with standardised instruments or questionnaires when relevant	mini-CEX	1,3
Manages alternative and conflicting views from family, carers, friends and members of the multi-professional team and maintains focus	mini-CEX	1, 3
Assimilates history from the available information from patient and other sources including members of the multi-professional team.	mini-CEX	1, 3
Where values and perceptions of health and health promotion conflict, facilitates balanced and mutually respectful decision making	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	mini-CEX	1, 3
Behaviours		
Shows respect and behaves in accordance with Good Medical Practice	mini-CEX	3, 4

1.2 Clinical Examination

To perform focussed, 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 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	CbD, mini-CEX	1
Comprehends constraints (including those that are cultural or social) on performing physical examination and strategies that may be used to overcome them	CbD, mini-CEX	1
Comprehends the limitations of physical examination and the need for adjunctive forms of assessment to confirm diagnosis	CbD, mini-CEX	1
Recognises when the offer/use of a chaperone is appropriate or required	CbD, mini-CEX	1
Skills		
Performs a valid, targeted and time efficient examination relevant to the presentation and risk factors	CbD, mini-CEX	1
Recognises the possibility of deliberate harm (both self harm and harm by others) in vulnerable patients and reports to appropriate agencies	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
Considers social, cultural and religious boundaries to clinical examination, appropriately communicates and makes alternative arrangements where necessary	CbD, mini-CEX, MSF	1,4

1.3 Therapeutics and Safe Prescribing

To prescribe, review and monitor appropriate therapeutic interventions relevant to clinical practice including non – medication based therapeutic and preventative indications

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

trainees practice		
Understands the roles of regulatory agencies involved in drug use, monitoring and licensing (e.g. National Institute for Clinical Excellence (NICE), Medical Healthcare Products Regulatory Agency (MHRA) and hospital formulary committees	CbD, mini-CEX	1, 2
Understands the importance of non-medication based therapeutic interventions including the legitimate role of placebos	CbD, mini-CEX	1, 2
Recalls in detail the propensity of drugs to elicit IgE-mediated and non-IgE mediated systemic anaphylactic reactions in certain individuals and the capacity of structurally related drugs to cross-react	CbD, mini-CEX	1
Recalls a rational basis for the use of alternative drugs in drug allergic patients	CbD, mini-CEX	1
Is familiar with the indications, products, modes of delivery and dosage regimens for allergen immunotherapy	CbD, mini-CEX	1
Skills		
Reviews the continuing need for, effect of and adverse effects of long term medications relevant to the trainees clinical practice	CbD, mini-CEX	1, 2
Anticipates and avoid defined drug interactions, including complementary medicines	CbD, mini-CEX	1
Advises patients (and carers) about important interactions and adverse drug effects	CbD, mini-CEX	1, 3
Prescribes appropriately in pregnancy, and during breast feeding	CbD, mini-CEX	1
Makes appropriate dose adjustments following therapeutic drug monitoring, or physiological change (e.g. deteriorating renal function)	CbD, mini-CEX	1
Uses IT prescribing tools where available to improve safety	CbD, mini-CEX	1, 2
Employs validated methods to improve patient concordance with prescribed medication	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	CbD, mini-CEX	1, 3
Ensures safe systems for monitoring, review and authorisation where involved in “repeat prescribing”	CbD, mini-CEX	1
Recognises the importance of resources when prescribing, including the role of a Drug Formulary and electronic prescribing systems	CbD, mini-CEX	1
Is able to provide advice on, and perform relevant skin prick and other challenge tests for drug allergy and interpret the results	CbD, mini-CEX, DOPS	1,2
Behaviours		
Minimises the number of medications taken by a patient to a level compatible with best care	CbD, mini-CEX	1
Appreciates the role of non-medical prescribers	CbD, mini-CEX	1, 3
Remains open to advice from other health professionals on medication issues	CbD, mini-CEX	1, 3
Ensures prescribing information is shared promptly and accurately between a patient’s health providers, including between primary and secondary care	CbD	1, 3
Participates in adverse drug event reporting mechanisms	CbD	1
Takes particular care to disseminate information about drug allergies	mini-CEX, CbD	1

appropriately and instructs patients to do the same		
Remains up to date with therapeutic alerts, and responds appropriately	CbD	1

1.4 Time Management and Decision Making

Learn how to prioritise and organise clinical and clerical duties in order to optimise patient care and make appropriate clinical and clerical decisions in order to optimise the effectiveness of the clinical team resource.

Knowledge	Assessment Methods	GMP
Understands that effective organisation is key to time management	CbD	1
Understands that some tasks are more urgent and/or more important than others	CbD	1
Understands the need to prioritise work according to urgency and importance	CbD	1
Understands that some tasks may have to wait or be delegated to others	CbD	1
Understands the roles, competences and capabilities of other professionals and support workers	CbD	1
Outlines techniques for improving time management	CbD	1
Understands the importance of prompt investigation, diagnosis and treatment in disease and illness management	CbD, mini-CEX	1, 2
Skills		
Maintains focus on individual patient needs whilst balancing multiple competing pressures	CbD	1
Identifies clinical and clerical tasks requiring attention or predicted to arise	CbD, mini-CEX	1,2
Estimates the time likely to be required for essential tasks and plans accordingly	CbD, mini-CEX	1
Groups together tasks when this will be the most effective way of working	CbD, mini-CEX	1
Recognises the most urgent / important tasks and ensures that they managed expediently	CbD, mini-CEX	1
Regularly reviews and re-prioritises personal and team work load	CbD, mini-CEX	1
Organises and manages workload effectively and flexibly	CbD mini- CEX	1
Makes appropriate use of other professionals and support workers	CbD, mini-CEX	1
Behaviours		
Works flexibly and deals with tasks in an effective and efficient fashion	CbD, MSF	3
Recognises when self or others are falling behind and takes steps to rectify the situation	CbD, MSF	3
Communicates changes in priority to others	MSF	1
Remains calm in stressful or high pressure situations and adopts a timely, rational approach	MSF	1
Appropriately recognises and handles uncertainty within the consultation	MSF	1

1.5 Decision Making and Clinical Reasoning

Acquire the ability to formulate a diagnostic and therapeutic plan for a patient according to the clinical information available.

Acquire the ability to prioritise the diagnostic and therapeutic plan.

Acquire the ability to communicate a diagnostic and therapeutic plan appropriately.

Knowledge	Assessment Methods	GMP
Defines the steps of diagnostic reasoning	CbD, mini-CEX	1
Conceptualises clinical problems in a medical and social context	CbD, mini-CEX	1
Understands the psychological components of disease and illness presentation	CbD, mini-CEX	1
Recognises how to use expert advice, clinical guidelines and algorithms	CbD, mini-CEX	1
Recognises and appropriately responds to sources of information accessed by patients	CbD, mini-CEX	1
Defines the concepts of disease natural history and assessment of risk	CbD, mini-CEX	1, 2
Outlines methods and associated problems of quantifying risk e.g. cohort studies	CbD, mini-CEX	1
Outlines the concepts and drawbacks of quantitative assessment of risk or benefit e.g. numbers needed to treat	CbD	1
Describes commonly used statistical methodology	CbD	1
Knows how relative and absolute risks are derived and the meaning of the terms predictive value, sensitivity and specificity in relation to diagnostic tests	mini-CEX	1
Skills		
Interprets clinical features, their reliability and relevance to clinical scenarios including recognition of the breadth of presentation of common disorders	CbD, mini-CEX	1
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	1
Interprets history and clinical signs	CbD, mini-CEX	1
Generates hypothesis within context of clinical likelihood	CbD, mini-CEX	1
Tests, refines and verifies hypotheses	CbD, mini-CEX	1
Develops problem list and action plan	CbD, mini-CEX	1
Comprehends the need to determine the best value and most effective treatment both for the individual patient and for a patient cohort	CbD, mini-CEX	1
Recognises critical illness and respond with due urgency	CbD, mini-CEX	1
Generates plausible hypotheses following patient assessment	CbD, mini-CEX	1
Constructs a concise and applicable problem list using available information	CbD, mini-CEX	1
Constructs an appropriate management plan in conjunction with the patient, carers and other members of the clinical team and communicate this effectively to the patient, parents and carers where	CbD, mini-CEX	1, 3, 4

relevant		
Applies the relevance of an estimated risk of a future event to an individual patient	CbD, mini-CEX	1
Uses risk calculators appropriately	CbD, mini-CEX	1
Considers the risks and benefits of screening investigations	CbD, mini-CEX	1
Applies quantitative data to assess the risks and benefits of therapeutic intervention in an individual patients	CbD, mini-CEX	1
Searches and comprehends the medical literature to guide reasoning	CbD, mini-CEX	1
Behaviours		
Recognises the difficulties in predicting occurrence of future events	CbD, mini-CEX	1
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	3
Shows willingness to adapt and adjust approaches according to the beliefs and preferences of the patient and/or carers	CbD, mini-CEX	3
Shows willingness to facilitate patient choice	CbD, mini-CEX	3
Shows willingness to search for evidence to support clinical decision making	CbD, mini-CEX	1, 4
Demonstrates ability to identify one's own biases and inconsistencies in clinical reasoning	CbD, mini-CEX	1, 3

1.6 The Patient as Central Focus of Care

Prioritises the patient's wishes encompassing their beliefs, concerns, expectations and needs		
Knowledge	**Assessment Methods**	**GMP**
Outlines health needs of particular populations e.g. ethnic minorities and recognise the impact of health beliefs, culture and ethnicity in presentations of physical and psychological conditions	CbD	1
Ensures that all decisions and actions are in the best interests of the patient and the public good	CbD	1
Skills		
Gives adequate time for patients and carers to express their beliefs ideas, concerns and expectations	mini-CEX	1, 3, 4
Encourages the health care team to respect the philosophy of patient focussed care	CbD, mini-CEX, MSF	3
Develops a self-management plan with the patient	CbD, mini-CEX	1,3
Supports patients, parents and carers where relevant to comply with management plans	CbD, mini-CEX, PS	3
Encourages patients to voice their preferences and personal choices about their care	mini-CEX, PS	3
Behaviours		
Supports patient self-management	CbD, mini-CEX, PS	3
Responds to questions honestly and seeks advice if unable to answer	CbD, mini-CEX	3
Recognises the duty of the medical professional to act as patient advocate	CbD, mini-CEX, MSF, PS	3, 4

Responds to people in an ethical, honest and non-judgmental manner
Adopts assessments and interventions that are inclusive, respectful of diversity and patient-centred

1.7 Prioritisation of Patient Safety in Clinical Practice

To understand that patient safety depends on:

- **the effective and efficient organisation of care**
- **health care staff working well together**
- **safe systems not just individual competency and safe practice**

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

To understand that all staff should be made aware of risks and work together to minimise risk

To act always to promote patient safety

Knowledge	Assessment Methods	GMP
Outline the features of a safe working environment	CbD, mini-CEX	1
Outlines the hazards of medical equipment in common use	CbD	1
Recalls unwanted effects and contraindications of medications prescribed	CbD, mini-CEX	1
Recalls principles of risk assessment and management	CbD	1
Recalls the components of safe working practice in personal, clinical and organisational settings	ACAT, CbD	1
Outlines human factors theory and understands its impact on safety	CbD	1
Knows about root cause analysis	CbD	1
Knows about significant event analysis	CbD	1
Outlines local procedures and protocols for optimal practice e.g. GI bleed protocol, safe prescribing	CbD, mini-CEX	1
Understands the investigation of significant events, serious untoward incidents and near misses	CbD, mini-CEX	1
Is very familiar with the principles of management of systemic anaphylaxis and the governance required to deal with the possibility of anaphylaxis in the allergen challenge clinic	CbD, mini-CEX	1
Skills		
Recognises limits of own professional competence and practises only within these	ACAT, CbD, mini-CEX	1
Recognises when a patient is not responding to treatment, reassesses the situation and encourages others to do so	CbD, mini-CEX	1
Ensures the correct and safe use of medical equipment, ensuring faulty equipment is reported appropriately	CbD, mini-CEX	1
Improves patients' and colleagues' understanding of the side effects and contraindications of therapeutic intervention	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	CbD	3
Recognises and respond to the manifestations of a patient's deterioration or lack of improvement (symptoms, signs, observations,	CbD, mini-CEX, MSF	1

and laboratory results) and supports other members of the team to act similarly		
Behaviours		
Maintains a high level of safety awareness and consciousness at all times	CbD, mini-CEX	2
Encourages feedback from all members of the team on safety issues	CbD, mini-CEX, MSF	3
Reports serious untoward incidents and near misses and co-operates with the investigation of the same	CbD, mini-CEX, MSF	3
Shows willingness to take action when concerns are raised about performance of members of the healthcare team, and act appropriately when these concerns are voiced to you by others	CbD, mini-CEX, MSF	3
Continues to be aware of own limitations, and operates within them competently	CbD, mini-CEX	1

1.8 Team Working and Patient Safety

To work well in a variety of different teams and team settings and to contribute to discussion on the team's role in patient safety

To display the leadership skills necessary to lead teams so that they are more effective and better able to deliver safer care

Knowledge	Assessment Methods	GMP
Outlines the components of effective collaboration and team working	CbD	1
Describes the roles and responsibilities of members of the healthcare team	CbD	1
Outlines factors adversely affecting a doctor's and team performance and methods to rectify these	CbD	1
Skills		
Practises with attention to the important steps of providing good continuity of care	CbD, mini-CEX	1,3.4
Keeps accurate and attributable notes including appropriate use of electronic clinical record systems	CbD, mini-CEX	1, 3
Demonstrates leadership and management in education and training of junior colleagues and other members of the healthcare team	CbD, mini-CEX	1, 2, 3
Recognises deteriorating performance of colleagues (e.g. stress, fatigue)	CbD, mini-CEX	1, 2, 3
Provides high quality care	CbD, mini-CEX	1, 2, 3
Leads and participates in interdisciplinary team meetings	CbD, mini-CEX	3
Provides appropriate supervision to less experienced colleagues	CbD, MSF	3
Behaviours		
Encourages an open environment to foster and explore concerns and issues about the functioning and safety of team working	CbD, MSF	3
Recognises limits of own professional competence and practises within these	CbD, MSF	3
Recognises and respect the request for a second opinion	CbD, MSF	3
Recognises the importance of induction for new members of a team	CbD, MSF	3
Recognises the importance of prompt and accurate information	CbD, mini-CEX ,	3

sharing with Primary Care team following hospital discharge	MSF

1.9 Principles of Quality and Safety Improvement

To recognise the desirability of monitoring performance, learning from mistakes and adopting a 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
Defines local and national significant event reporting systems relevant to allergy	CbD, mini-CEX	1
Outlines local health and safety protocols (fire, manual handling etc)	CbD	1
Understands risks associated with training in allergy including biohazards and mechanisms to reduce risk	CbD	1
Outlines the use of patient early warning systems to detect clinical deterioration	CbD, mini-CEX	1
Keeps abreast of national patient safety initiatives including National Patient Safety Agency , NCEPOD reports, NICE guidelines etc	CbD, mini-CEX	1
Skills		
Adopts strategies to reduce risk	CbD	1, 2
Recognises that governance safeguards high standards of care and facilitates the development of improved clinical services	CbD	1,2
Recognises importance of evidence-based practice in relation to clinical effectiveness	CbD	1
Reflects regularly on personal 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 self performance in the light of feedback and assessment	CbD, MSF	3
Contributes to quality improvement processes such as: • Audit of personal and departmental/directorate/practice performance • Errors / discrepancy meetings • Critical incident and near miss reporting • Unit morbidity and mortality meetings • Local and national databases	CbD, MSF	3
Maintains a portfolio of information and evidence drawn from personal medical practice	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

1.10 Infection Control

To learn how 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	CbD, mini-CEX	1
Understands the principles of preventing infection in high risk groups (eg managing antibiotic use to reduce *Clostridium difficile* infection) including understanding the local antibiotic prescribing policy	CbD, mini-CEX	1
Understands the role of Notification of diseases within the UK and identify the principle notifiable diseases for UK and international purposes	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, mini-CEX	1
Understands the role of the local authority in relation to infection control	CbD, mini-CEX	1
Knows how to access and use local health data	CbD, mini-CEX	1
Skills		
Recognises the potential for infection within patients being cared for	CbD	1, 2
Counsels patients on matters of infection risk, transmission and control	CbD, mini-CEX, PS	2, 3
Recognises potential for cross-infection in clinical settings	CbD, mini-CEX	1, 2
Practices aseptic technique whenever relevant	DOPS	1
Behaviours		
Actively engages in local infection control procedures	CbD	1
Actively engages in local infection control monitoring and reporting processes	CbD	1,2
Prescribes antibiotics according to local antibiotic guidelines and works with microbiological services where this is not possible	CbD	1
Encourages all staff, patients and relatives to observe infection control principles	CbD, MSF	1
Recognises personal ill-health as a risk to patients and colleagues and its effect on performance	CbD, MSF	1,3

1.11 Managing Long-Term Conditions and Promoting Patient Self-Care

To learn how to pursue a holistic and long term approach to the planning and implementation of patient care, in particular to identify and facilitate the role of the patient, the family and other carers in the long term management of severe allergic diseases

Knowledge	Assessment Methods	GMP
Describes the natural history of allergic diseases that run a chronic course	CbD, mini-CEX	1
Defines the role of services and the multi-disciplinary teams to facilitate long-term care of patients with allergic diseases	CbD, mini-CEX	1
Outlines the concept of quality of life and how this can be measured whilst understanding the limitations of such measures for individual patients	CbD, mini-CEX	1
Outlines the concept of patient self-care and the role of the expert patient	CbD, mini-CEX	1
Works with an appropriate knowledge of guidance documents on supporting people with long term conditions to self care	CbD, mini-CEX	1
Knows, understands and is able to compare and contrast the medical and social models of disability	CbD, mini-CEX	1
Knows about and practises within the key provisions of disability discrimination and other contemporary legislation	CbD, mini-CEX	1
Understands the relationship between local health, educational and social service provision including the voluntary sector and how they can be accessed	CbD, mini-CEX	1
Is familiar with the range of agencies that can provide care and support in and out of hospital and how they can be accessed	CbD, mini-CEX	1
Skills		
Develops and agrees a management plan with the patient (and carers), ensuring awareness of alternatives to maximise self-care within care pathways where relevant	CbD, mini-CEX	1, 3
Assesses the patient's ability to access various services in the health and social system and offer appropriate assistance	CbD, mini-CEX	1, 3
Advocates and facilitates appropriate self care	CbD, mini-CEX	1, 3
Develops and sustains supportive relationships with patients with whom care will be prolonged and potentially life long	CbD, mini-CEX	1, 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
Provides relevant and evidence based information in an appropriate medium to enable sufficient choice, when possible	CbD PS	1, 3
Behaviours		
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	1,3
Promotes and encourages involvement of patients in appropriate support networks, both to receive support and to give support to others	CbD, mini-CEX	3, 4
Recognises the potential impact of long term conditions on the	CbD	1

patient, family and friends		
Ensures equipment and devices relevant to the patient's care are discussed	CbD, mini-CEX	1,2, 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
Provides the relevant tools and devices when possible	CbD, mini-CEX	1, 2
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 needs change with time	CbD, mini-CEX, PS	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, MSF	3
Shows willingness to engage with expert patients and representatives of charities or networks that focus on diseases and comprehends their role in supporting patients and their families/carers		
Recognises and respect the role of family, friends and carers in the management of the patient with a long term condition	CbD, mini-CEX, PS	1,3
Puts patients in touch with the relevant agencies including the voluntary sector from where they can procure the items as appropriate		

1.12 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

Knowledge	Assessment Methods	GMP
Demonstrates how to structure a consultation appropriately	CbD, mini-CEX, PS	1
States the importance of the patient's background, culture, education and preconceptions (beliefs, ideas, concerns, expectations) to the process	CbD, mini-CEX, PS	1
Skills		
Establishes a rapport with the patient and any relevant others Utilises open and closed questioning appropriately	CbD, mini-CEX, PS	1, 3
Listens actively and questions sensitively to guide the patient and to clarify information	mini-CEX, PS	1, 3
Identifies and manages communication barriers, tailoring language to the individual patient and others and using interpreters when indicated	CbD, mini-CEX, PS	1, 3
Delivers information compassionately, being alert to and managing personal and patients emotional responses	mini-CEX	1, 3,4
Uses, and refers patients to, appropriate written and other evidence based information sources	CbD, mini-CEX	1, 3
Checks the patient's/carer's understanding, ensuring that all their concerns/questions have been covered	CbD, mini-CEX	1, 3
Indicates when the consultation nearing its end and conclude with a summary and appropriate action plan; ask the patient to summarise back to check his/her understanding	CbD, mini-CEX	1, 3
Makes accurate contemporaneous records of the discussion	CbD, mini-CEX	1, 3

Manages follow-up effectively and safely utilising a variety of methods Ensures appropriate referral and communications with other healthcare professional resulting from the consultation are made accurately and in a timely manner	CbD, mini-CEX	1
Behaviours		
Approaches situations with courtesy, empathy, compassion and professionalism, especially by appropriate body language and endeavouring to ensure an appropriate physical environment, acting as an equal not a superior Ensures appropriate personal language and behaviour	CbD, mini-CEX, MSF, PS	1, 3, 4
Ensures that the approach is inclusive and patient centred and respects the diversity of values in patients, carers and colleagues.	CbD, mini-CEX, MSF, PS	1, 3
Is willing to provide patients with a second opinion	CbD, mini-CEX, MSF, PS	1, 3
Uses different methods of ethical reasoning to come to a balanced decision where complex and conflicting issues are involved	CbD, mini-CEX, MSF	1, 3
Is confident and positive in personal values	CbD, mini-CEX	1, 3

1.13 Breaking Bad News

To recognise the fundamental importance of breaking bad news

To use strategies for skilled delivery of bad news according to the needs of individual patients and their relatives and/or carers

Knowledge	Assessment Methods	GMP
Understands that how bad news is delivered irretrievably affects the subsequent relationship with the patient	CbD, mini-CEX, MSF, PS	1
Appreciates that every patient may desire different levels of explanation and have different responses to bad news	CbD, mini-CEX, PS	1, 4
Knows that although bad news is confidential the patient may wish to be accompanied	CbD, mini-CEX, PS	1
Appreciates that breaking bad news can be extremely stressful for the doctor or professional involved	CbD, mini-CEX	1, 3
Appreciates that once the news is given, patients are unlikely to take anything subsequent in, so an early further appointment should be made	CbD, mini-CEX	1, 3
Is aware that the interview during which bad news is delivered may be an educational opportunity	CbD, mini-CEX	1
States and understands the importance of adequate preparation for breaking of bad news	CbD, mini-CEX	1, 3
Knows that “bad news” may be expected or unexpected and cannot always be predicted	CbD, mini-CEX	1
Knows that sensitive communication of bad news is an essential part of professional practice	CbD, mini-CEX	1
Knows that “bad news” has different connotations depending on the context, individual, social and cultural circumstances	CbD, mini-CEX, PS	1
Understands that a post mortem examination may be required and what this involves	CbD, mini-CEX, PS	1

Is familiar with the local organ retrieval process	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
Comprehends the impact of the bad news on the patient, carer, supporters, staff members and self	CbD, DOPS, MSF	1, 3, 4
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
In preparing to break bad news: • Sets aside sufficient uninterrupted time • Chooses an appropriate private environment and ensures that there will be no unplanned disturbances • Has sufficient information regarding prognosis and treatment • Ensures the individual has appropriate support if desired • Structures the interview • Is honest, factual, realistic and empathic	CbD, DOPS, MSF	1, 3
Is aware of relevant guidance documents	CbD	1
Structures the interview: • Sets the scene • Establishes understanding • Discusses diagnosis, implications, treatment, prognosis and subsequent care	CbD	1,3
Behaviours		
Take 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

1.14 Complaints and Medical Error

To recognise causes of error and to learn from them, and to realise the importance of honesty and effective apology and to take a leadership role in the handling of complaints

Knowledge	Assessment Methods	GMP
Describes the local complaints procedure	CbD, MSF	1
Recognises factors likely to lead to complaints (poor communication, dishonesty, clinical errors, adverse clinical outcomes etc)	CbD, MSF	1
Outlines the principles of an effective apology	CbD, MSF	1
Identifies sources of help and support for patients and doctors when a complaint is made about self or a colleague	CbD, MSF	1
Skills		
Contributes to processes whereby complaints are reviewed and	CbD, DOPS, MSF	1

learned from		
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, DOPS, MSF	1, 3
Recognises when something has gone wrong and identifies appropriate staff with whom to communicate this	CbD, DOPS, MSF	1
Delivers an appropriate apology and explanation	CbD, DOPS, MSF	1, 3, 4
Distinguishes between system and individual errors (personal and organisational)	CbD, DOPS, MSF	1
Shows ability to learn from previous errors	CbD, DOPS, MSF	1
Behaviours		
Takes leadership over complaint issues	CbD, DOPS, MSF	1
Adopts behaviour likely to prevent causes for complaints	CbD, DOPS, MSF	1, 3
Deals appropriately with concerned or dissatisfied patients or relatives	CbD, DOPS, MSF	1
Acts with honesty and sensitivity in a non-confrontational manner	CbD, DOPS, MSF	1
Acts with honesty and sensitivity in a non-confrontational manner	CbD, DOPS, MSF	1
Recognises the impact of complaints and medical error on staff, patients and the National Health Service	CbD, DOPS, MSF	1
Contributes to a fair and transparent culture around complaints and errors	CbD, DOPS, MSF	1
Recognises the rights of patients, family members and carers to make a complaint	CbD, DOPS, MSF	1, 4
Recognises the impact of a complaint upon self and seeks appropriate help and support	CbD, DOPS, MSF	1, 4

1.15 Communication with colleagues and cooperation

To recognise and accept the responsibilities and role of the doctor in relation to other healthcare professionals

To communicate succinctly and effectively with other professionals as appropriate

Knowledge	Assessment Methods	GMP
Has a good understanding of the section in "Good Medical Practice" on Working with Colleagues, in particular:	CbD, MSF	1
States the roles played by all members of a multi-disciplinary team	CbD, MSF	1
States the features of good team dynamics	CbD, MSF	1
States the principles of effective inter-professional collaboration to optimise patient, or population, care	CbD, MSF	1
Understands the principles of confidentiality that provide boundaries to communication	CbD, MSF	1
Acts with appropriate knowledge of professional and ethical conduct in challenging situations	CbD	1
Knows techniques to manage anger and aggression in self and colleagues	CbD	1
Knows personal responsibilities when managing physical and/or mental ill health in self and colleagues	CbD	1

Skills		
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
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
Communicates effectively with administrative bodies and support organisations	CbD, mini-CEX, MSF	1, 3
Employs behavioural management skills with colleagues to prevent and resolve conflict and enhance collaboration	CbD, mini-CEX, MSF	1, 3
Behaviours		
Shows awareness 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	3
Fosters a supportive and respectful environment where there is open and transparent communication between all team members	CbD, mini-CEX, MSF	1, 3
Ensures appropriate confidentiality is maintained during communication with any member of the team	CbD, mini-CEX, MSF	1, 3
Recognises the need for a healthy work/life balance for the entire team, but takes any personal leave only after giving appropriate notice to ensure that cover is in place	CbD, mini-CEX, MSF	1
Accepts additional duties in situations of unavoidable and unpredictable absence of colleagues ensuring that the best interests of the patient are paramount	CbD, MSF	1

1.16 Health Promotion and Public Health

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

Knowledge	Assessment Methods	GMP
Understands the factors which influence the incidence and prevalence of common conditions	CbD, mini-CEX	1
Understands the factors which influence health and illness – psychological, biological, social, cultural and economic especially poverty and unemployment	CbD, mini-CEX	1
Understands the influence of lifestyle on health and the factors that influence an individual to change their lifestyle	CbD, mini-CEX	1
Understands the influence of culture and beliefs on patients perceptions of health	CbD, mini-CEX	1
Understands the purpose of screening programmes and knows in outline the common programmes available within the UK	CbD, mini-CEX	1
Understands the positive and negative effects of screening on the individual	CbD, mini-CEX	1
Understands the possible positive and negative implications of health promotion activities (e.g. immunisation)	CbD, mini-CEX	1

Understands the relationship between the health of an individual and that of a community and vice versa	CbD, mini-CEX	1
Knows key local concerns about health of communities such as smoking and obesity and the potential determinants	CbD, mini-CEX	1
Understands the role of other agencies and factors including the impact of globalisation in increasing disease and in protecting and promoting health	CbD, mini-CEX	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	CbD, mini-CEX	1
Outlines the major causes of global morbidity and mortality and effective, affordable interventions to reduce these	CbD, mini-CEX	1
Recalls the effect of addictive and self harming behaviours, especially substance misuse and gambling, on personal and community health and poverty	CbD, mini-CEX	1
Skills		
Identifies opportunities to prevent ill health and disease in patients	CbD Mini CEX, PS	1, 2
Identifies opportunities to promote changes in lifestyle and other actions which will positively improve health and/or disease outcomes.	CbD, mini-CEX	1, 2
Identifies the interaction between mental, physical and social wellbeing in relation to health.	CbD, mini-CEX	1
Counsels patients appropriately on the benefits and risks of screening and health promotion activities	CbD, mini-CEX, PS	1, 3
Identifies patient's ideas, concerns and health beliefs regarding screening and health promotions programmes and is capable of responding appropriately	mini-CEX, CbD	1,3
Works collaboratively with other agencies to improve the health of communities	CbD, mini-CEX	1
Behaviours		
Engages in effective team-working around the improvement of health	CbD, MSF	1, 3
Encourages where appropriate screening to facilitate early intervention	CbD	1
Seeks out and utilises opportunities for health promotion and disease prevention	CbD	1

1.17 Environmental Protection and Emergency Planning

To understand the relationship of the physical environment to health

To be able to identify situations where environmental exposure may be the cause of ill health and to relate to emergency planning arrangements both in relation to environmental matters and other issues in clinical practice

Knowledge	Assessment Methods	GMP
Understands in outline the mechanisms by which environmental chemicals have an impact on human health	CbD	1
Understands in outline the mechanisms by which adverse chemical exposure can be mitigated (decontamination, specific antidotes)	CbD	1
Knows the potential sources of information and guidance to manage	CbD	1

a case of chemical etc exposure. (including local, regional and national sources)		
Understands the principles of emergency planning	CbD	1
Knows in outline the emergency plan for health care organisation they currently work for and specifically knows their duties and responsibilities within the plan	CbD	1
Skills		
Recognises the potential for chemical or other hazardous environmental exposure in relation to an individual patient.	CbD	1,2
Manages patients in an appropriate manner according to guidance	CbD, mini-CEX	1,2
Appropriately performs duties and tasks when required in accordance with Trust emergency plans	CbD	1,3
Behaviours		
Actively engages in emergency planning arrangements including exercises in accordance with Trust plans	CbD, MSF	2,3
Openly considers the possibility of chemical or environmental exposure in clinical work	CbD	1,2

1.18 Principles of Medical Ethics and Confidentiality

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

Knowledge	Assessment Methods	GMP
• Demonstrates knowledge of the principles of medical ethics	CbD	1
• Outlines and follows the guidance given by the GMC on confidentiality	CbD	1
• Defines the provisions of the Data Protection Act and Freedom of Information Act	CbD	1
• Defines the principles of Information Governance	CbD	1
• Defines the role of the Caldicott Guardian and Information Governance lead within an institution, and outline the process of attaining Caldicott approval for audit or research	CbD	1, 4
• Outlines situations where patient consent, while desirable, is not required for disclosure e.g. serious communicable diseases, public interest	CbD	1, 4
• Outlines the procedures for seeking a patient's consent for disclosure of identifiable information	CbD	1
• Recalls the obligations for confidentiality following a patient's death	CbD	1, 4
• Defines the standards of practice defined by the GMC when deciding to withhold or withdraw life-prolonging treatment	CbD	1
• Knows the role and legal standing of advance directives	CbD	1
• Outlines the principles of the Mental Capacity Act	CbD	1
Skills		
• 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
• Recognises the problems posed by disclosure in the public interest, without the patient's consent	CbD, mini-CEX, MSF	1,4
• Recognises the factors influencing ethical decision making: including religion, personal and moral beliefs, cultural practices	CbD, mini-CEX, MSF	1
• Uses and promotes strategies to ensure that confidentiality is maintained, for example anonymisation	CbD	1
• Counsels patients on the need for information distribution within members of the immediate healthcare team	CbD, MSF	1, 3
• Counsels patients, family, carers and advocates tactfully and effectively when making decisions about resuscitation status, and withholding or withdrawing treatment	CbD, mini-CEX, PS	1, 3
Behaviours		
• Encourages informed ethical reflection in others	CbD, MSF	1
• 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
• Respects patient's requests for information not to be shared,	CbD, mini-CEX, PS	1, 4

unless this puts the patient, or others, at risk of harm		
• Shows willingness to share information about care with patients unless they have expressed a wish not to receive such information	CbD, mini-CEX	1, 3
• Shows willingness to seek the opinion of others when making decisions about resuscitation status, and withholding or withdrawing treatment	CbD, mini-CEX, MSF	1, 3

1.19 Obtaining of consent

To understand the necessity of obtaining valid consent from the patient, and when and how to obtain it

Knowledge	Assessment Methods	GMP
Outlines the guidance given by the GMC on consent, in particular:	CbD, MSF	1
Understands that consent is a process that may culminate in, but is not limited to, the completion of a consent form	CbD, MSF	1
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	CbD, MSF	1
Understands the social and cultural issues that might affect consent	CbD, MSF	1
Skills		
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, PS	1, 3
Provides a balanced view of all care options	CbD, mini-CEX, PS	1, 3, 4
Behaviours		
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
Keeps within the scope of authority given by a competent patient	CbD, mini-CEX, PS	1
Provides all information relevant to proposed care or treatment in a competent patient	CbD, mini-CEX	1, 3, 4
Seeks consent for procedures within own capabilities	CbD, mini-CEX	1, 3
Shows willingness to seek advance directives		
Shows willingness to obtain a second opinion, senior opinion, and legal advice in difficult situations of consent or capacity	CbD, mini-CEX, MSF	1, 3
Informs patients and seeks alternative care where personal, moral or religious belief prevents a usual professional action	CbD, mini-CEX, PS	1, 3, 4

1.20 Legal framework for practice

To understand the legal framework within which healthcare is provided in the UK and/or devolved administrations in order to ensure that personal clinical practice is always provided in line with this legal framework.

Knowledge	Assessment Methods	GMP
Knows that all decisions and actions must be in the best interests of the patient	CbD, mini-CEX	1

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
Is familiar with disability and other equality legislation	CbD, mini-CEX	1, 2
Understands the differences between health related legislation in the four countries of the UK	CbD	1
States sources of medical legal information	CbD, mini-CEX	1
Understands disciplinary processes in relation to medical malpractice	CbD, mini-CEX, MSF	1
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, MSF	1
Skills		
Cooperates 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	1
Prepares appropriate medical legal statements for submission to the Coroner's Court, Procurator Fiscal, Fatal Accident Inquiry and other legal proceedings and be prepared to present such material in court	CbD, MSF	1
Incorporates legal principles into day to day practice	CbD, mini-CEX	1
Practices and promotes accurate documentation within clinical practice	CbD, mini-CEX	1, 3
Behaviour		
Shows willingness to seek advice from employer, appropriate legal bodies (including defence societies), and the GMC on medico-legal matters	CbD, mini-CEX, MSF	1, 3
Promotes informed reflection on legal issues by members of the team	CbD, mini-CEX, MSF	1, 3
Demonstrates that all decisions and actions must be in the best interests of the patient	CbD, mini-CEX, MSF	1, 3

1.21 Ethical Research

To be equipped to ensure that research is undertaken using relevant ethical guidelines.

Knowledge	Assessment Methods	GMP
Outlines the GMC guidance on good practice in research	CbD	1
Knows about local and national research guidelines	CbD	1
Knows the principles of research governance Outlines the differences between audit and research	AA, CbD, mini-CEX	1
Describes how clinical guidelines are produced	CbD	1
Demonstrates a knowledge of research principles	CbD, mini-CEX	1

Outlines the principles of formulating a research question and designing a project	CbD, mini-CEX	1
Comprehends the principal qualitative, quantitative, bio-statistical and epidemiological research methods	CbD	1
Outlines sources of research funding	CbD	1
Skills		
Uses critical appraisal skills and applies these when reading literature	CbD	1
Demonstrates the ability to write a scientific paper	CbD	1
Applies for appropriate ethical research approval	CbD	1
Demonstrates the use of literature databases	CbD	1
Demonstrates good verbal and written presentations skills	CbD, DOPS	1
Understands the difference between population-based assessment and unit-based studies and be able to evaluate outcomes for epidemiological work	CbD	1
Behaviour		
Follows guidelines on ethical conduct in research and consent for research	CbD	1
Shows willingness to encourage and take part in research	CbD	1

1.22 Evidence and Guidelines

To learn 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 medical practise

Knowledge	Assessment Methods	GMP
Outlines the principles of critical appraisal	CbD	1
Knows the advantages and disadvantages of different study methodologies (quantitative and qualitative) for different types of questions	CbD	1
Outlines levels of evidence and quality of evidence	CbD	1
Knows how to apply statistics in scientific medical practice	CbD	1
Understands the use and differences between the basic measures of risk and uncertainty	CbD	1
Describes the role and limitations of evidence in the development of clinical guidelines and protocols	CbD	1
Understands the processes that result in nationally applicable guidelines (eg NICE and SIGN)	CbD	1
Skills		
Searches medical literature with relevant tools including PubMed, Medline, Cochrane reviews and the internet	CbD	1
Appraises retrieved evidence to address a clinical question	CbD	1
Applies conclusions from critical appraisal into clinical care	CbD	1
Contributes to the construction, review and updating of local (and national) guidelines of good practice using the principles of evidence	CbD	1

based medicine		
Behaviours		
Aims for best clinical practice (clinical effectiveness) at all times, as informed by evidence based medicine	CbD, mini-CEX	1
Recognises knowledge gaps and keeps a logbook of clinical questions	CbD, mini-CEX	1
Keeps up to date with national reviews, key new relevant research, and guidelines of practice (e.g. NICE and SIGN)	CbD	1
Recognises the common need to practise outside clinical guidelines	CbD, mini-CEX	1
Communicates risk information, and risk-benefit trade-offs in ways appropriate for individual patients	CbD, mini-CEX	
Encourage discussion amongst colleagues on evidence-based practice	CbD, mini-CEX, MSF	1

1.23 Audit

To learn how to audit clinical practice and to apply the findings appropriately to complete the audit cycle.

Knowledge	Assessment Methods	GMP
Understands the different methods of obtaining data for audit including patient feedback questionnaires, hospital sources and national reference data	AA, CbD	1
Understands the role of audit (improving patient care and services, risk management etc)	AA, CbD	1
Understands the steps involved in completing the audit cycle	AA, CbD	1
Describes the working and uses of national and local databases used for audit such as specialty data collection systems, cancer registries etc. and for reporting and learning from clinical incidents and near misses in the UK	AA, CbD	1
Skills		
Designs, implements and completes audit cycles	AA, CbD	1, 2
Contributes to local and national audit projects as appropriate (e.g. NCEPOD, SASM)	AA, CbD	1, 2
Supports audit by junior medical trainees and within the multi-disciplinary team	AA, CbD	1, 2
Behaviours		
Recognises the need for audit in clinical practice to promote standard setting and quality assurance	AA, CbD	1, 2

1.24 Teaching and Training

To teach a variety of different audiences in a variety of different ways.
To assess the quality of the teaching.
To plan and deliver a training programme with appropriate assessments.
To supervise, teach and mentor learners (trainees) in a work setting.

Knowledge	Assessment Methods	GMP
• Describes relevant educational theories and principles • Outlines adult learning principles relevant to medical education:	CbD	1
• Demonstrates knowledge of relevant 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 to the various bodies involved in medical education and other sectors • Recalls learning methods and effective learning objectives and outcomes • Describes the differences between learning objectives and outcomes	CbD	1
• Differentiates between appraisal and assessment and performance review and aware of the need for both • Differentiates between formative and summative assessment and define their role in medical education • 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		
Critically evaluates relevant educational literature Varies teaching formats and stimuli, appropriate to the situation and the audience	CbD	1
Provides effective and appropriate feedback after teaching, and promotes learner reflection	CbD, TO	1
Conducts developmental conversations as appropriate eg: appraisal, supervision, mentoring	CbD	1
Demonstrates effective lecture, presentation, small group and bed side teaching sessions	TO	1, 3
Provides appropriate career support, or refers trainee to an alternative effective source of career information	CbD, MSF	1, 3
Participates in strategies aimed at improving patient education e.g. talking at support group meetings	CbD, MSF	1
Leads departmental teaching programmes including journal clubs	TO	1
Recognises the trainee in difficulty and take appropriate action	CbD, TO	1

including where relevant referral to other services		
Is able to identify and plan learning activities in the workplace	CbD	1
Contributes to educational research or projects eg: through the development of research ideas of data/information gathering. Is able to manage personal time and resources effectively to the benefit of the educational faculty and the need of the learners	CbD, TO	1
Factors in safeguards to protect the patient when teaching and training is being conducted using patients	CbD	1
Behaviour		
Maintains the dignity and safety of patients at all times in discharging educational duties	MSF	1, 4
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	MSF	1
Balances the needs of service delivery with education	CbD	1
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	1
Demonstrates consideration for learners including their emotional, physical and psychological well being with their development needs. Acts to endure equality of opportunity for students, trainees, staff and professional colleagues	MSF	1
Encourages discussions with colleagues in clinical settings to colleagues to share knowledge and understanding	CbD, MSF	1, 3
Maintains honesty and objectivity during appraisal and assessment	MSF	1
Shows willingness to participate in workplace-based assessments and demonstrates a clear understanding of their purpose	MSF	1
Shows willingness to take up formal training as a trainer and respond to feedback obtained after teaching sessions	TO	1, 3
Demonstrates willingness to become involved in the wider medical education activities and fosters an enthusiasm for medical education activity in others	TO	1
Recognises the importance of personal development as a role model to guide trainees in aspects of good professional behaviour	TO	1
Demonstrates willingness to advance own educational capability through continuous learning	CbD, MSF	1
Acts to enhance and improve educational provision through evaluation of own practice	CbD, MSF	1
Contributes to educational policy and development at local or national levels	CbD, MSF	1

1.25 Personal Behaviour

To acquire and nurture behaviours that will enable the trainee to become a senior leader able to deal with complex situations and difficult behaviours and attitudes

To learn how to work increasingly effectively with many teams to put the quality and safety of patient care as a prime objective

To demonstrate the attributes of someone who is trusted to be able to manage complex human, legal and ethical problems

To strive to be someone who is trusted and known to act fairly in all situations

Knowledge	Assessment Methods	GMP
Recalls and build upon the competences defined in the Foundation Programme Curriculum	CbD, mini-CEX	1, 2, 3, 4
Outlines the main methods of ethical reasoning: casuistry, ontology and consequential	CbD, mini-CEX	1, 2, 3, 4
Is familiar with the overall approach of value based practice and how this relates to ethics, law and decision-making	CbD, mini-CEX	1, 2, 3, 4
Defines the concept of modern medical professionalism	CbD	1
Outlines the relevance of professional bodies (Royal Colleges, NHSMEE , GMC, Postgraduate Dean, BMA, specialist societies, medical defence societies etc)	CbD	1
Skills		
Practises with professionalism including: • Integrity • Compassion • Altruism • A view to continuous improvement • Aspiration to excellence • Respect of cultural and ethnic diversity • Regard to the principles of equity	CbD, mini-CEX, MSF, PS	1, 2, 3, 4
Works in partnership with patients and members of the wider healthcare team	CbD, mini-CEX, MSF	3
Liaises with colleagues to plan and implement work rotas	MSF	3
Promotes awareness of the doctor's role in utilising healthcare resources optimally and within defined resource constraints	CbD, mini-CEX, MSF	1, 3
Recognises and responds appropriately to unprofessional behaviour in others	CbD	1
Provides specialist support to hospital and community based services if appropriate and permitted	CbD, MSF	1
Handles enquiries from the press and other media effectively	CbD, DOPS	1, 3
Behaviour		
Recognises personal beliefs and biases and understands their impact on the delivery of health services	CbD, mini-CEX, MSF	1
Appropriately refers patients where personal beliefs and biases could impact upon professional practice	CbD, mini-CEX	1, 3
Uses all healthcare resources prudently and appropriately	CbD, mini-CEX	1, 2
Improves clinical leadership and management skill	CbD, mini-CEX	1

Recognises situations when it is appropriate to involve professional and regulatory bodies	CbD, mini-CEX	1
Acts as a leader, mentor, educator and role model	CbD, mini-CEX, MSF	1
Reviews competences defined in the Foundation programme: • Deals with inappropriate patient and family behaviour • Respects the rights of children, elderly, people with physical, mental, learning or communication difficulties • Adopts an approach to eliminate discrimination against patients from diverse backgrounds including age, gender, race, culture, disability, spirituality and sexuality • Places needs of patients above own convenience • Behaves with honesty and probity • Acts with honesty and sensitivity in a non-confrontational manner	CbD, mini-CEX	1
Accepts mentoring as a positive contribution to promote personal professional development	CbD, mini-CEX, MSF	1
Participates in professional regulation and professional development		
Takes part in 360 degree feedback as part of appraisal	CbD, MSF	1, 2, 4
Promotes the right for equity of access to healthcare	CbD, mini-CEX	1
Demonstrates reliability and accessibility throughout the healthcare team	CbD, mini-CEX, MSF	1

1.26 Management and NHS Structure

Understand the structure of the NHS and the management of local healthcare systems in order to be able to participate fully in managing healthcare provision

Knowledge	Assessment Methods	GMP
Understands the guidance given on management and doctors by the GMC	CbD	1
Understands the local structure of NHS systems recognising the potential differences between the four countries of the UK	CbD	1
Recalls the range of agencies that can provide care and support in and out of hospital, and how they can be accessed	CbD	1
Understands the structure and function of healthcare systems as they apply to your specialty	CbD	1
Understands the consistent debates and changes that occur in the NHS including the political, social, technical, economic, organisational and professional aspects that can impact on provision of service	CbD	1
Understands the importance of local demographic, socio-economic and health data and the use to improve system performance	CbD	1
Understands the principles of: • Clinical coding • European Working Time Regulations including rest provisions • National Service Frameworks • Health regulatory agencies (e.g., NICE, Scottish Government) • NHS Structure and relationships	CbD, mini-CEX	1

• NHS finance and budgeting • Consultant contract and the contracting process • Resource allocation • The role of the Independent sector as providers of healthcare • Patient and public involvement processes and role		
Understands the principles of recruitment and appointment procedures	CbD	1
Skills		
Participates in managerial meetings	CbD	1
Works with stakeholders to create and sustain a patient-centred service	CbD, mini-CEX	1
Employs new technologies appropriately, including information technology	CbD, mini-CEX	1
Conducts an assessment of the community needs for specific health improvement measures	CbD, mini-CEX	1
Behaviour		
Recognises the importance of equitable allocation of healthcare resources and of commissioning	CbD	1, 2
Recognises the role of doctors as active participants in healthcare systems	CbD, mini-CEX	1, 2
Responds appropriately to health service objectives and targets and take part in the development of services	CbD, mini-CEX	1, 2
Recognises the role of patients and carers as active participants in healthcare systems and service planning	CbD, mini-CEX, PS	1, 2, 3
Takes an active role in promoting the best use of healthcare resources	CbD	1
Shows willingness to improve leadership and managerial skills (e.g. management courses) and engage in leadership and management of the service	CbD, MSF	1

2. Medical Leadership and Management

The Medical Leadership Competency Framework, developed by the Academy of Medical Royal Colleges and the NHS Institute for Innovation and Improvement, has informed the inclusion of leadership competencies in this curriculum. The Framework identified possible assessment methods, but in reviewing these we identified a need for more specific methods. JRCPTB and the RCP Education Department has established a working group to develop and evaluate leadership assessment methods. These may include variants of CbD and ACAT, as well as the Case Conference Assessment Tool currently being piloted.

2.1 Personal qualities

To identify personal strengths, limitations and the impact of personal behaviour and to be able to change this in the light of feedback and reflection

Knowledge	Assessment Methods	GMP
Demonstrates different methods of obtaining feedback	MSF, CbD	1
Demonstrates awareness of personal values and principles and how these may differ from those of other individuals and groups		1,3,4
Realises the importance of best practice transparency and consistency		1
Skills		
Maintains and routinely practices critical self awareness, including being able to discuss strengths and weaknesses with supervisor and recognising external influences and changing behaviour accordingly		1
Uses assessment, appraisal, complaints and other feedback to discuss and develop an understanding of personal development needs		1.3
Identifies personal strengths and weaknesses	MSF	1,3
Organises and manages workload effectively and flexibly	CbD, MSF	1, 3
Behaviours		
Recognising and showing respect for diversity and differences in others		1
Shows commitment to continuing professional development which involves seeking training and self development opportunities, learning from colleagues and accepting criticism		1,3
Demonstrate self management: organising and managing themselves while taking account of the needs and priorities of others.	CbD PS	3

2.2 Working with others

To adopt a team approach, acknowledging and appreciating efforts, contributions and compromises. To continue to recognise the common purpose of the team and respect the decisions of its members

Knowledge	Assessment Methods	GMP
Demonstrates a wide range of leadership styles and approaches and the applicability to different situations and people	MSF	1
Skills		
Enables individuals, groups and agencies to implement plans and		1,3

make decisions		
Assesses and appraises of more junior clinical colleagues or students		1, 3
Builds and maintains relationships by listening, supporting others, gaining trust and showing understanding	MSF	3
Shows willingness to act as a leader, mentor, educator and role model		3
Behaviours		
Shows recognition of a team approach, respecting colleagues, including non-medical professionals		1,3

2.3 Managing Services

To support team members to develop their roles and responsibilities and continue to review performance of team members to ensure that planned service outcomes are met

Knowledge	Assessment Methods	GMP
Demonstrates knowledge of relevant legislation and HR policies		1
Shows knowledge of the duties, rights and responsibilities of an employer and co-worker		1
Demonstrates knowledge of individual performance review		1
Comprehends the roles, competences and capabilities of other professionals and support workers		1,3,4
States the role of audit (improving patient care and services, risk management etc).		1
States the steps involved in completing the audit cycle		1
Skills		
Continues to contribute towards staff development and training, including mentoring, supervision and appraisal		1,3
Is able to write a job description, including person specification and short listing criteria		1
Contributes to the development of an organisational response to emerging health policy.		1
Behaviours		
Commitment to good communication whilst also inspiring confidence and trust		1,3
Managing resources: knowing what resources are available and using influence to ensure that resources are used efficiently and safely		1
Managing people: providing direction, reviewing performance and motivating others		1, 3
Managing performance: holding self and others accountable for service outcomes.		1, 3

2.4 Improving Services

To ensure patient safety at all times, continue to encourage innovation and facilitate transformation		
Knowledge	**Assessment Methods**	**GMP**
Demonstrates knowledge of risk management issues and risk management tools		1,2
Demonstrates understanding of how healthcare governance influences patient care		1
Demonstrates knowledge of a variety of methodologies for developing creative solutions to improving services		1,2
Recalls principles of risk assessment and management		1, 2
Identifies risk management guidance such as safe prescribing, sharps disposal, needle stick injury		1, 2
Skills		
Reports clinical incidents	.	1,2
Assesses and manages risk to patients		2
Monitors the quality of equipment and safety of the environment relevant to the specialty		1,2
Ensures the correct and safe use of medical equipment, ensuring faulty equipment is reported appropriately		2
Questions existing practice in order to improve the services		1,2
Behaviours		
Seeks advice and or assistance whenever concerned about patient safety		1,2,3
Supports colleagues to voice new ideas and is open minded to new thoughts		1,3

2.5 Setting Direction

To be able to identify contexts for change and make decisions		
Knowledge	**Assessment Methods**	**GMP**
Demonstrates knowledge of the functions and responsibilities of national bodies, College and faculties, representatives, regulatory bodies		1
Demonstrates effective communication strategies within organisations		1
Skills		
The ability to discuss the local, national and UK health priorities and how they impact on the delivery of health care relevant to the specialty	.	1
Is able to run committee meetings and work collegiately and collaboratively with a wide range of people outside the immediate clinical setting		1,3
Behaviours		

Willingness to articulate strategic ideas and use effective influencing skills	1,3
Willingness to participate in decision making processes beyond the immediate clinical care setting	1,3
Applies knowledge and evidence to construct an evidence-based challenge to systems and processes in order to identify opportunities for service improvements	1
Makes decisions: integrates values with evidence to inform decisions	1, 3

3. Core Immunological Knowledge

The trainee will acquire a sound knowledge of fundamental immunology required to underpin clinical and laboratory practice.		
Knowledge	**Assessment Methods**	**GMP**
The core body of immunological knowledge (Table 4 below)	CbD, *	1
Type I hypersensitivity reactions	CbD, *	1
Hypersensitivity reactions other than Type I	CbD, *	1
T and B lymphocytes	CbD, *	1
The mechanisms of allergic inflammation: T cells, eosinophils, mast cells and their products, cytokines, lipid mediators	CbD, *	1
Regulation of IgE synthesis	CbD, *	1
The cellular and molecular immunology of asthma, rhinitis, urticaria, reactions to drugs	CbD, *	1
Postulated immunological mechanisms of allergen immunotherapy	CbD, *	1
Key targets for anti-allergic drugs and their mechanisms of action	CbD, *	1
The biology, aerobiology and antigenicity of allergens	CbD, *	1
The concept of major and minor allergenic determinants	CbD, *	1
The epidemiology of atopy and asthma	CbD, *	1
New developments in therapy, including immunotherapy and primary prevention of allergic disease	CbD, *	1
Skills		
Demonstrates knowledge of the immunological basis of allergy	CbD	1
Evaluates review articles	CbD	1
Demonstrates ability to perform literature searches	CbD	1
Critically analyses and evaluates guidelines	CbD	1
Discusses hypotheses regarding immunological mechanisms in allergy	CbD	1
Behaviours		
Exhibits continual willingness to increase knowledge	CbD, MSF	1,2,3
Recognises the limitations of knowledge regarding the immunopathogenesis of allergic disease	CbD, MSF	1,2,3
Consults colleagues for further clarification/understanding	CbD, MSF	1,2,3

4: Fundamental Immunological Knowledge

Principles of body defence

Cell injury/death and inflammation
Non-specific defence mechanisms (barriers/humoral/cellular)
Specific defence mechanisms (humoral/cellular)

Complement

Genetics, structure, function, control in defence and in disease
Deficiencies

The acute phase response and inflammation

Cells of myelomonocytic lineage, NK cells and non-specific defence

Ontogeny, structure, phenotype, function and activation
Chemokines and migration from the blood vasculature
Complement and Fc receptors, adhesion molecules
Phagocytosis, intracellular/extracellular killing
Respiratory burst and secretory products

The basis of specific immunity

Antigens: types, structures, processing and presentation
Immunogenetics: polymorphisms, generation of diversity and rearranging gene families
Immunoglobulins: structure, function and antigen binding
Major Histocompatibility Complex: structure, function and regulation
T cell receptors: structure, function and antigen binding

T and B Lymphocytes

Ontogeny, phenotype, subpopulations
Receptor/ligand interactions and cell activation
Effector functions

Organisation of the lymphoid system

Primary and secondary lymphoid organs
Population dynamics
Lymphocyte migration
Mucosal and other compartments of the lymphoid system

Cytokines, chemokines and immunomodulators

Cytokines and Chemokines: origin, structure, effects, site(s) of action (receptor), metabolism regulation and gene activation
Inflammatory mediators (e.g. leukotrienes, prostaglandins and platelet-activating factor): origin, structure, effect, site(s) of action (receptor), metabolism and regulation

Hypersensitivity mechanisms

IgE mediated: acute and late phase reactions
IgE, IgA-, and IgM-mediated: opsonisation, complement fixation, antibody dependent, cell-mediated cytotoxicity, stimulation and blocking
Immune complex mediated: physicochemical properties and clearance
Cell-mediated: participating cells, effector mechanisms and granuloma formation
Other: natural killer cells; lymphokine-activated killer cells and cutaneous basophil hypersensitivity

Immunoregulation

Tolerance: clonal selection, suppression and antigen paralysis
Cell-cell interactions: help and suppression
Idiotype networks: inhibition and stimulation
Mechanisms of autoimmunity

Transplantation immunology

Histocompatibility: major and minor antigens and principles of cross matching
Graft rejection: mechanisms
Graft-versus-host reactions and their mechanisms

Tumour immunology

Tumour markers: leukaemias and lymphomas; cancer immunology
Oncogenes: translocation and breakpoints

Immunotoxicology

Mechanisms of adverse reactions to xenobiotics
In vivo and *in vitro* evaluation of immunotoxic compounds
Clinical aspects of immune disorders induced by drugs or environmental chemicals

Immunotherapy

Drugs
Antibodies
Recombinant molecules
Vaccines including allergens
Others

5. Specialist Knowledge of Allergic Diseases

5.1 Laboratory Investigations

The trainee will acquire knowledge of the application, limitations, interpretation and sources of error in laboratory tests relevant to allergy diagnosis.

Knowledge	Assessment Methods	GMP
Describes the principles and identifies sources of error and interpretation of the following laboratory tests:	DOPS, CbD	1,2
IMMUNOCHEMISTRY/SEROLOGY • Immunoglobulins • Immunoglobulin subclasses • Total and specific IgE • Mast cell tryptase • ECP • Autoantibodies • ANCA • Precipitins • Paraprotein assessment • Cryoglobulin assessment • Complement components • CI esterase inhibitor • Specific IgG titres		
IMMUNOHISTOLOGY	DOPS, CbD, *	1,2
CELLULAR STUDIES • Cell markers/sub-populations (immunodeficiency, reactive,neoplastic states) • Lymphocyte function/activation • Neutrophil function • In vivo/in vitro cytokine production		
MOLECULAR STUDIES • Southern/Northern/Western blotting • PCR • Ig/T cell receptor gene rearrangement	DOPS, CbD, *	1,2
Skills		
Demonstrates familiarity with Health and Safety Regulations and COSHH assessments	DOPS, *	1,2,4
Discusses the indications for laboratory based tests	DOPS, *	1
Analyses the results of investigations and evaluates their clinical significance	DOPS, *	1
Demonstrates knowledge of Standard Operating Procedures	DOPS, *	1,2
Evaluates the accuracy, sensitivity and specificity of laboratory investigations	DOPS, *	1,2
Behaviours		
Recognises the indications for laboratory investigations	CbD, mini-CEX, *	1,2
Exhibits awareness of the limitations of laboratory investigations in terms of clinical significance, sensitivity and specificity	CbD, mini-CEX, *	1,2

Contributes to the development of laboratory testing procedures	CbD, mini-CEX, *	1,2,3

5.2 Asthma

The trainee will acquire and be able to supply a comprehensive body of knowledge relating to the clinical presentation, investigation and management of patients with asthma, with particular reference to the role of allergens		
Knowledge	**Assessment Methods**	**GMP**
Defines asthma and distinguishes it from other causes of cough, SOB, wheeze and airways obstruction	mini-CEX, CbD	1,3
Explains how to assess asthma severity	mini-CEX, CbD	1,3
Identifies triggering/exacerbating factors	mini-CEX, CbD	1,3
Explains how to educate patients in self management (self administration of therapy, monitoring of PEF, symptom diary, crises)	mini-CEX, CbD	1,3
Identifies and manages occupational asthma	mini-CEX, CbD	1,3
Describes principles of therapy, including acute and chronic severe disease according to current guidelines (BTS, GINA)	mini-CEX, CbD	1,3
Describes unwanted effects of therapy	mini-CEX, CbD	1,3
Skills		
Takes a focused history and performs an examination, linking findings to establish diagnosis and formulate a management plan	mini-CEX, CbD, TO, MSF	1,3
Performs SPT/RAST	DOPS	1,2
Selects appropriate laboratory and ancillary investigations	mini-CEX, CbD, *	1
Performs sputum induction	DOPS	1
Demonstrates knowledge of aeroallergens and occupational allergens	CbD, TO, *	1
Discusses relevant allergen avoidance	CbD, TO	1
Performs and evaluates lung function testing	mini-CEX, DOPS	1
Interprets relevant imaging	mini-CEX, DOPS	1
Teaches PEF monitoring	mini-CEX, DOPS	1,3
Discusses principles of therapy (BTS/GINA guidelines)	mini-CEX, CbD, TO, *	1
Demonstrates drug delivery devices	mini-CEX, DOPS	1,2,3
Evaluates effects and unwanted effects of therapy	mini-CEX, CbD	1,2,4
Discusses management of acute, severe asthma	CbD	1
Performs aspirin desensitisation	DOPS	1,2
Behaviours		
Recognises the importance of environmental, including occupational allergens as triggers for asthma	CbD	1
Recognises the importance of patient-based variables (compliance, understanding, inhaler technique) in asthma control	mini-CEX, DOPS	1,2,3
Consults other experts regarding patient management, such as occupational physicians, speech therapists, where necessary	mini-CEX, CbD, MSF	1,2,3
Recognises the importance of making optimal use of current best evidence when managing asthma	mini-CEX, CbD	1,2

5.3 Rhinitis, Sinusitis and Rhinoconjunctivitis

The trainee will acquire and be able to supply a comprehensive body of knowledge relating to the clinical presentation, investigation and management of patients with rhinitis, sinusitis and rhinoconjunctivitis, with particular reference to the role of allergens

Knowledge	Assessment Methods	GMP
Defines seasonal and perennial rhinitis and conjunctivitis, and distinguishes between these and other causes of acute and chronic rhinitis and conjunctivitis	mini-CEX, CbD	1
Identifies triggering/exacerbating factors	mini-CEX, CbD	1
Describes the investigation and management of chronic and recurrent sinusitis (structural nasal blockage, cystic fibrosis, ciliary dyskinesia, congenital and acquired immune deficiency)	mini-CEX, CbD	1
Sates the causes and clinical features of occupational rhinitis	mini-CEX, CbD	1
Explains the indications for, and principles of management according to current guidelines, including allergen avoidance and immunotherapy	mini-CEX, CbD	1
Skills		
Takes a focused history in the context of possible causes of rhinitis, sinusitis and conjunctivitis and performs an appropriate examination, linking findings to establish the diagnosis and formulate a management plan	mini-CEX, DOPS, CbD	1,2
SPT/RAST	mini-CEX, DOPS, CbD	1,2
Performs and interprets allergen and occupational challenge	mini-CEX, DOPS, CbD	1,2
Identifies and manages occupational rhinitis	mini-CEX, DOPS, CbD	1,2
Performs rhinoscopy and evaluates the nasal airways	mini-CEX, DOPS, CbD	1,2
Performs and interprets rhinomanometry	mini-CEX, DOPS, CbD	1,2
Performs and interprets saccharin test	mini-CEX, DOPS, CbD	1,2
Performs and interprets ciliary motility tests	mini-CEX, DOPS, CbD	1,2
Discusses nasal potential measurements	mini-CEX, DOPS, CbD	1,2
Interprets sweat sodium test	mini-CEX, DOPS, CbD	1,2
Interprets relevant imaging	mini-CEX, DOPS, CbD	1,2
Discusses principles of therapy (BSACI/ARIA guidelines)	mini-CEX, DOPS, CbD	1,2
Behaviours		
Recognises the importance of concurrent management of the nasal and bronchial airways	mini-CEX, CbD	1,2

Recognises when specialised ENT referral is indicated	mini-CEX, CbD	1,3
Contributes to multi-disciplinary approach	mini-CEX, CbD	1,3,4

5.4 Atopic Dermatitis

The trainee will acquire and be able to supply a comprehensive body of knowledge relating to the clinical presentation, investigation and management of patients with atopic dermatitis, with particular reference to the role of allergens and distinction from other common forms of dermatitis

Knowledge	Assessment Methods	GMP
Defines atopic dermatitis and distinguish between this and other causes of dermatitis	CbD, *	1,2,3
Describes rick factors for atopic dermatitis in the context of the allergic march	CbD, *	1,2,3
Describes complications of atopic dermatitis and its treatment	CbD, *	1,2,3
Identifies triggering/exacerbating factors	CbD, *	1,2,3
Describes the principles of therapy according to current guidelines	CbD, *	1,2,3
Explains when to refer for specialist management	CbD, *	1,2,3
Distinguishes between atopic dermatitis and contact dermatitis, and recognises the need for referral for specialist investigation of contact dermatitis	CbD, *	1,2,3
Skills		
Takes a focused history in the context of risk factors and performs an appropriate examination, linking findings to the history to establish the diagnosis and formulate a management plan	mini-CEX, DOPS, CbD	1,2,3
Performs SPT/RAST	mini-CEX, DOPS, CbD	1,2,3
Discusses trials of allergen avoidance, including food allergens	mini-CEX, DOPS, CbD	1,2,3
Behaviours		
Recognises the social/psychological problems caused by chronic skin disease	CbD, mini-CEX	2,3,4
Contributes to multi-disciplinary approach	CbD, mini-CEX	2,3,4
Recognises when specialist referral is indicated	CbD, mini-CEX	2,3,4

5.5 Food Allergy and Intolerance

The trainee will acquire and be able to supply a comprehensive body of knowledge relating to the clinical presentation, investigation and management of patients with suspected food allergy or intolerance, with particular reference to the role of allergen avoidance, emergency management of allergic reactions and distinction from other related gastrointestinal disorders

Knowledge	Assessment Methods	GMP
Describes the clinical sequelae of IgE-mediated food allergy, and distinguishes these from intolerance syndromes	CbD	1,2
Describes the natural history of food allergy in the context of risk factors and the allergic march	CbD	1,2
Describes key food allergy syndromes (peanut, milk, etc.)	CbD	1,2
Explains the value and limitations of skin prick testing and RAST in food allergy diagnosis	CbD	1,2
Describes the advantages and limitations of specialised dietary intervention in food allergic/intolerant patients	CbD	1,2
Explains the management of severe food allergy of syndromes in the community	CbD	1,2
Identifies GI disorders which may mimic food allergy (coeliac disease, lactose intolerance, dumping syndromes, IBD, etc.)	CbD	1,2
Skills		
Takes a focused history in the context of the suspected food-induced syndrome to guide clinical examination and the formulation of differential diagnoses	mini-CEX, DOPS, CbD	1,2,3,4
Performs an appropriate clinical examination to clarify the diagnosis and formulate a management plan	mini-CEX, DOPS, CbD	1,2,3,4
Performs SPT/RAST, including prick-prick testing	mini-CEX, DOPS, CbD	1,2,3,4
Selects and interprets planned exclusion/reintroduction diets	mini-CEX, DOPS, CbD	1,2,3,4
Interprets diet diaries	mini-CEX, DOPS, CbD	1,2,3,4
Performs single and double blind, placebo controlled food challenge	mini-CEX, DOPS, CbD	1,2,3,4
Demonstrates emergency therapy for severe food-induced reactions	mini-CEX, DOPS, CbD	1,2,3,4
Behaviours		
Chooses appropriate goals in assisting with dietary problems	CbD, mini-CEX	1,3,4
Recognises cultural and racial differences in attitudes to diet	CbD, mini-CEX	1,3,4
Recognises when specialist referral is indicated	CbD, mini-CEX	1,3,4
Encourages patient contact with lay support groups	CbD, mini-CEX	1,3,4

5.6 Drug and Vaccine Allergy

The trainee will acquire and be able to supply a comprehensive body of knowledge relating to the clinical presentation, investigation and management of patients with suspected drug or vaccine allergy, with particular reference to the role of avoidance and advice as to the use of alternative drugs/vaccines

Knowledge	Assessment Methods	GMP
Describes the mechanisms of different types of reaction to drugs and their natural history	CbD, *	1,2,3,4
Explains patterns of adverse reactions to different drugs	CbD, *	1,2,3,4
Describes mechanisms of unwanted effects of drugs	CbD, *	1,2,3,4
Explains how to manage systemic adverse drug reactions during general and local anaesthesia	CbD, *	1,2,3,4
Explains the value and limitations of SPT/RAST testing with drugs	CbD, *	1,2,3,4
Describes the principles of drug challenge and drug desensitisation	CbD, *	1,2,3,4
Provides advice on the use of alternative drugs	CbD, *	1,2,3,4
Identifies multiple drug allergy syndromes	CbD, *	1,2,3,4
Describes the use of vaccines, their unwanted effects and contraindications	CbD, *	1,2,3,4
Skills		
Takes a systematised history of drug exposure, enabling identification of suspect drugs particularly in cases where multiple drugs are implicated	mini-CEX, DOPS, CbD	1,2,3,4
Performs relevant examination	mini-CEX, DOPS, CbD	1,2,3,4
Performs SPT/RAST with drugs and derivatives (e.g. major/minor penicillin determinants)	mini-CEX, DOPS, CbD	1,2,3,4
Demonstrates knowledge of tests of cell-mediated drug reactions	mini-CEX, DOPS, CbD	1,2,3,4
Selects and applies drug challenge and desensitisation protocols	mini-CEX, DOPS, CbD	1,2,3,4
Discuss strategies to prevent allergic drug reactions	mini-CEX, DOPS, CbD	1,2,3,4
Analyses the immune response to vaccines	mini-CEX, DOPS, CbD	1,2,3,4
Investigates possible allergic responses to vaccines	mini-CEX, DOPS, CbD	1,2,3,4
Advises patients and other carers about drug/vaccine avoidance (MedicAlert, etc.)	mini-CEX, DOPS, CbD	1,2,3,4
Behaviours		
Recognises the urgency of timely investigation of patients awaiting operations or needing particular antibiotics	MSF, CbD	1,2,3,4
Recognises the importance of helping patients, their families and other carers avoid drugs to which they are allergic	MSF, CbD	1,2,3,4

Chooses appropriate alternative therapies for drug allergic patients	MSF, CbD	1,2,3,4
Recognises importance of service leadership and audit of clinical practice	MSF, CbD	1,2,3,4

5.7 Insect Venom Allergy

The trainee will acquire and be able to supply a comprehensive body of knowledge relating to the clinical presentation, investigation and management of patients with suspected allergic reactions to insect stings, with particular reference to the role of avoidance, possible underlying systemic disease such as mastocytosis, emergency management of sting reactions and the appropriateness of allergen immunotherapy

Knowledge	Assessment Methods	GMP
Describes the biology and classification of the hymenoptera, including geographical variations	CbD, *	1,2
Explains the clinical features of local and systemic reactions to insect stings, and recognition of when these are IgE-mediated	CbD, *	1,2
Explains the relevance of possible underlying mastocytosis	CbD, *	1,2
Describes the natural history of venom allergy in adults and children	CbD, *	1,2
Explains the interpretation and limitations of skin prick and *in vitro* tests in diagnosing insect venom allergy	CbD, *	1,2
Outlines principles of insect avoidance	CbD, *	1,2
Describes the emergency management of an insect sting causing a systemic reaction in allergic patients	CbD, *	1,2
Explains when and when not to prescribe immunotherapy	CbD, *	1,2
Explains the likely outcome of insect venom immunotherapy	CbD, *	1,2
Skills		
Takes a focused history to establish or eliminate the diagnosis, uncover systemic disease, guide clinical examination and formulate a management plan	mini-CEX, DOPS, CbD	1,2,3,4
Performs a targeted and relevant clinical examination, linking findings to the history to establish the diagnosis and formulate a management plan	mini-CEX, DOPS, CbD	1,2,3,4
Performs SPT/RAST	mini-CEX, DOPS, CbD	1,2,3,4
Discusses principles of insect avoidance	mini-CEX, DOPS, CbD	1,2,3,4
Applies most appropriate management decision	mini-CEX, DOPS, CbD	1,2,3,4
Demonstrates emergency treatment	mini-CEX, DOPS, CbD	1,2,3,4
Arranges appropriate follow up and further treatment if applicable	mini-CEX, DOPS, CbD	1,2,3,4
Behaviours		
Recognises and addresses anxiety caused by insect venom allergy	CbD, TO	1,3,4
Chooses a management pathway appropriate to the individual patient	CbD, TO	1,3,4

5.8 Urticaria/Angioedema

The trainee will acquire and be able to supply a comprehensive body of knowledge relating to the clinical presentation, investigation and management of patients with urticaria and/or angioedema, with particular reference to appropriate long term management and the identification of possible concomitant allergy or other underlying systemic disease

Knowledge	Assessment Methods	GMP
Describes the pathogenesis, clinical sequelae and natural history of the urticaria/angioedema syndromes	CbD, *	1,2
Recognises physical precipitants and other precipitating/exacerbating factors	CbD, *	1,2
Explains how to recognise and manage underlying vasculitis	CbD, *	1,2
Explains when and when not to investigate and which investigations are appropriate	CbD, *	1,2
Explains the principles of management	CbD, *	1,2
Justifies referral for more specialised therapy	CbD, *	1,2
Describes specialist therapy (immunosuppressive therapy, plasmapheresis PUVA etc.)	CbD, *	1,2
Describes the diagnosis, prophylaxis and management of hereditary angioedema	CbD, *	1,2
Skills		
Takes a focused history with particular regard to differentiating “idiopathic” disease from disease associated with allergy or underlying systemic disease in order to guide clinical examination and formulate a differential diagnosis	mini-CEX, DOPS, CbD	1,2,3,4
Performs a targeted and relevant clinical examination, linking findings to the history to establish the diagnosis and formulate a management plan	mini-CEX, DOPS, CbD	1,2,3,4
Performs SPT	mini-CEX, DOPS, CbD	1,2,3,4
Performs and evaluates physical challenge tests	mini-CEX, DOPS, CbD	1,2,3,4
Analyses and interprets relevant laboratory investigations (thyroid function/antibodies, complement proteins, C1 esterase inhibitor concentration/activity, autoantibodies, viral screens, serum immunoglobulins and paraproteins)	mini-CEX, DOPS, CbD	1,2,3,4
Performs oral challenge with foods/drugs/food additives	mini-CEX, DOPS, CbD	1,2,3,4
Performs skin biopsy	mini-CEX, DOPS, CbD	1,2,3,4
Evaluates when CXR or other further investigation is necessary	mini-CEX, DOPS, CbD	1,2,3,4
Behaviours		
Recognises and addresses anxiety and stress caused by chronic urticaria/angioedema	mini-CEX, MSF, CbD PS	1,3,4
Provides reassurance and encouragement	mini-CEX, MSF, CbD	1,3,4

	PS	
Recognises when referral for specialist therapy is required	mini-CEX, MSF, CbD PS	1,3,4

5.9 Anaphylaxis

The trainee will acquire and be able to supply a comprehensive body of knowledge relating to the clinical presentation, investigation and management of patients with systemic anaphylactic reactions with particular reference to verification of the diagnosis, appropriate investigation, management of systemic reactions and long term management and the identification of possible concomitant allergy or other underlying systemic disease

Knowledge	Assessment Methods	GMP
Describes the mechanisms, causes, clinical features and differential diagnosis of anaphylactic reactions	CbD, *	1,2,3
Explains how to differentiate anaphylaxis from diseases with some similar features (idiopathic urticaria/angioedema, acute severe asthma, etc.)	CbD, *	1,2,3
Explains a systematic approach to identification of aetiology	CbD, *	1,2,3
Explains how to recognise “at risk” patients and provides advice on prevention	CbD, *	1,2,3
Explains when further investigation (SPT, laboratory investigations) is necessary	CbD, *	1,2,3
Describes desensitisation protocols where relevant	CbD, *	1,2,3
Explains emergency treatment plans, including self-administration of adrenaline	CbD, *	1,2,3
Describes how to manage acute anaphylaxis in adults and children, including avoidance of trigger factors where relevant and liaison with community physicians and other key carers	CbD, *	1,2,3
Skills		
Takes a focused and comprehensive relevant history (drugs, vaccines, latex, biological fluids, insects, foods exercise) with the aim of identifying a possible trigger factor and life threatening features, and to guide clinical examination and formulation of differential diagnoses	mini-CEX, DOPS, CbD	1,2,3,4
Performs a targeted and relevant clinical examination, linking findings to the history	mini-CEX, DOPS, CbD	1,2,3,4
Performs SPT/RAST	mini-CEX, DOPS, CbD	1,2,3,4
Evaluates serum tryptase	mini-CEX, DOPS, CbD	1,2,3,4
Performs challenge tests (drugs, exercise, food, etc)	mini-CEX, DOPS, CbD	1,2,3,4
Teaches self-administration of adrenaline	mini-CEX, DOPS, CbD	1,2,3,4
Behaviours		
Recognises the urgency of timely investigation and management of anaphylaxis	MSF, CbD, DOPS	1,2,3,4
Provides practical advice and reassurance	MSF, CbD, DOPS	1,2,3,4
Communicates with other key carers	MSF, CbD, DOPS	1,2,3,4
Makes patients aware of lay support groups (Anaphylaxis Campaign)	MSF, CbD, DOPS	1,2,3,4

5.10 Latex Allergy

The trainee will acquire and be able to supply a comprehensive body of knowledge relating to the clinical presentation, investigation and management of patients with latex allergy with particular reference to verification of the diagnosis, appropriate investigation, allergen avoidance and long term management of systemic reactions

Knowledge	Assessment Methods	GMP
Describes the natural history, aetiology and spectrum of clinical sequelae of latex reactions	CbD, *	1,3
Defines “at risk” groups	CbD, *	1,3
Explains routes of exposure to latex	CbD, *	1,3
Explains cross-reactivity of latex allergen with other allergens	CbD, *	1,3
Describes the practical management of latex allergy, including management of acute systemic reactions	CbD, *	1,3
Describes the principles of latex avoidance and the use of latex alternatives at home and at work	CbD, *	1,3
Discusses occupational strategies for prevention of latex allergy in staff	CbD, *	1,3
Skills		
Takes a comprehensive and focused history with the aim of verifying or excluding the diagnosis and formulating a management plan based on avoidance	mini-CEX, DOPS, CbD	1,2,3,4
Performs a targeted and relevant clinical examination	mini-CEX, DOPS, CbD	1,2,3,4
Performs SPT and orders *in vitro* tests appropriately	mini-CEX, DOPS, CbD	1,2,3,4
Performs latex challenge tests	mini-CEX, DOPS, CbD	1,2,3,4
Evaluates the need for patch testing	mini-CEX, DOPS, CbD	1,2,3,4
Teaches advice about hospital care, including avoidance of exposure to latex rubber	mini-CEX, DOPS, CbD	1,2,3,4
Behaviours		
Recognises the importance of helping patients to avoid latex exposure	mini-CEX CbD	1,3,4
Consults with other health care professionals, such as occupational physicians, where appropriate	mini-CEX CbD	1,3,4
Encourages patient contact with lay support groups (Latex Allergy Support Group)	mini-CEX CbD	1,3,4

5.11 Allergen Immunotherapy

The trainee will acquire and be able to supply a comprehensive body of knowledge relating to the clinical presentation, investigation and management of patients suitable for allergen immunotherapy with clear knowledge of the benefits and risks of the procedure

Knowledge	Assessment Methods	GMP
Describes postulated immunological mechanisms of immunotherapy	CbD, *	1,2
Describes the efficacy and limitations of immunotherapy in the short and long term	CbD, *	1,2
Describes the principles of selection of suitable patients for immunotherapy	CbD, *	1,2
States the indications and contraindications for immunotherapy	CbD, *	1,2
Describes different desensitisation regimens and their relative advantages and disadvantages	CbD, *	1,2
Describes different immunotherapy vaccine preparations and their relative merits and disadvantages	CbD, *	1,2
Explains appropriate monitoring prior to, during and after desensitisation injections	CbD, *	1,2
Explains the advantages and disadvantages of different allergen preparations for immunotherapy (adsorbed, soluble, allergoids, etc)	CbD, *	1,2
Describes experimental immunotherapy regimens (oral, sublingual, etc.)	CbD, *	1,2
Skills		
Takes a relevant and focused history with the aim of determining the suitability or otherwise of patients for allergen immunotherapy, the precise allergens to be employed and any particular risks or contraindications	mini-CEX, DOPS, CbD, TO	1,2,3,4
Demonstrates knowledge of monitoring patients before, during and after immunotherapy	mini-CEX, DOPS, CbD, TO	1,2,3,4
Discusses preparation and administration of allergen vaccines	mini-CEX, DOPS, CbD, TO	1,2,3,4
Discusses appropriate timing and choice of desensitisation regimens	mini-CEX, DOPS, CbD, TO	1,2,3,4
Manages trivial and severe reactions, including anaphylaxis	mini-CEX, DOPS, CbD, TO	1,2,3,4
Applies dosage adjustments according to previous reactions or other intervening circumstances	mini-CEX, DOPS, CbD, TO	1,2,3,4
Provides appropriate and detailed informed consent taking account of the perceived benefits and particular risks in each individual patient	mini-CEX, DOPS, CbD, TO	1,2,3,4
Behaviours		
Chooses regimens to suit individual patients	mini-CEX, CbD	1,2,3,4
Recognises which patients are likely to do well	mini-CEX, CbD	1,2,3,4
Clarifies for the patient what are realistic outcome expectations	mini-CEX, CbD	1,2,3,4
Ensures adequate clinical governance and ancillary support for the safe administration of immunotherapy	mini-CEX, CbD	1,2,3,4

Recognises importance of service leadership and audit of clinical practice	mini-CEX, CbD	1,2,3,4

5.12 Paediatric Allergy

The trainee will acquire and be able to supply a comprehensive body of knowledge relating to the clinical presentation, investigation and management of children with allergic diseases		
Knowledge	**Assessment Methods**	**GMP**
Describes risk factors for allergy in children, the classical presentation of the “allergic march” and possible approaches to primary prevention	CbD, *	1,2
Explains the special considerations for the management of allergic disease (asthma, eczema, rhinitis, food allergy) in children	CbD, *	1,2
Describes the dietary requirements of the infant and the child	CbD, *	1,2
Explains the distinction between IgE-mediated and non-IgE mediated milk allergy syndromes and differential diagnosis from inflammatory bowel disease, lactose intolerance and other congenital and acquired food allergy/intolerance syndromes	CbD, *	1,2
Describes the management of food allergy/intolerance and the use of milk formulae	CbD, *	1,2
Recognises congenital immune deficiency syndromes (immunoglobulin deficiency) and other congenital syndromes which may present to an allergist (cystic fibrosis, etc)	CbD, *	1,2
Explains how to manage paediatric allergy in the community: liaison with key carers (parents, schools, sports)	CbD, *	1,2
Skills		
Takes a paediatric history and performs relevant and focused clinical examination, including milestones and centiles	mini-CEX, DOPS, CbD	1,2,3,4
Applies paediatric drug ranges and dosages, particularly for asthma, rhinitis, anaphylaxis	mini-CEX, DOPS, CbD	1,2,3,4
Practises management of paediatric asthma, rhinitis, sinusitis and anaphylaxis management, including inhaler devices	mini-CEX, DOPS, CbD	1,2,3,4
Evaluates manifestations of food allergy, and manages severe food anaphylaxis in the community	mini-CEX, DOPS, CbD	1,2,3,4
Performs paediatric food challenge	mini-CEX, DOPS, CbD	1,2,3,4
Interprets paediatric bowel investigations	mini-CEX, DOPS, CbD	1,2,3,4
Interprets tests for lactose intolerance	mini-CEX, DOPS, CbD	1,2,3,4
Performs paediatric ENT examination, and manages of chronic sinusitis and nasal polyps	mini-CEX, DOPS, CbD	1,2,3,4
Manages paediatric asthma	mini-CEX, DOPS, CbD	1,2,3,4
Communicates with community paediatric teams for management of children at school	mini-CEX, DOPS, CbD	1,2,3,4
Behaviours		
Recognises limitations of expertise when dealing with children	CbD	1,2,3,4
Respects the fears and wishes of the parents	CbD	1,2,3,4
Contributes to holistic care in the community	CbD	1,2,3,4

5.13 Unconventional therapies/Diagnostic procedures

The trainee will acquire and be able to supply a comprehensive body of knowledge relating to unconventional means of alleged allergy diagnosis and management strategies of unproven or doubtful worth

Knowledge	Assessment Methods	GMP
Describes unproven procedures for allergy diagnosis (Vega testing, leucocytotoxic tests, hair analysis, applied kinesiology, auricular cardiac reflex) and treatment (homoeopathy, enzyme-potentiated desensitisation, hypnosis, acupuncture, unlicensed medicines)	CbD	1,2
Describes the principles of "clinical ecology": diagnosis (Miller technique), diseases (multiple chemical sensitivity, total allergy syndrome, Candida hypersensitivity syndrome) and treatment (neutralisation vaccines, etc)	CbD	1,2
Describes aetiological and psychological facets of chronic ("post-viral") fatigue syndrome (myalgic encephalomyelitis)	CbD	1,2
Skills		
Manages patients who have consulted "alternative allergists" and have been misdiagnosed or given unconventional diagnoses such as Candida hypersensitivity syndrome	CbD	1,2,3,4
Manages patients with ME	CbD	1,2,3,4
Evaluates clinical ecology journals	CbD	1,2,3,4
Evaluates publications from specialist societies for homoeopathy, acupuncture, etc	CbD	1,2,3,4
Discusses position statements regarding alternative allergy from professional societies	CbD	1,2,3,4
Behaviours		
Exhibits a sympathetic and open-minded approach	MSF, CbD PS	1,2,3,4
Recognises the limitations of conventional, as well as unconventional therapy	MSF, CbD PS	1,2,3,4
Contributes to holistic approach to dealing with patient's symptoms and beliefs	MSF, CbD PS	1,2,3,4
Is aware of the impact of cultural beliefs and traditions on health outcomes	MSF, CbD PS	1,2,3,4

5.14 Immunodeficiency

The trainee will acquire and be able to supply a working body of knowledge relating to identification of common immunodeficiency syndromes and their management		
Knowledge	**Assessment Methods**	**GMP**
Describes congenital and acquired immunodeficiency syndromes, including antibody and cell mediated disorders, complement deficiencies and defects in neutrophil function	CbD, *	1
Outlines the management of intravenous and subcutaneous immunoglobulin therapy, including available preparations	CbD, *	1
Has a working knowledge of the long term management of infections, including opportunistic infections	CbD, *	1
Has a working knowledge of the management of the immunosuppressed patient	CbD, *	1
Describes the principles of vaccination and immunisation	CbD, *	1
Skills		
Takes a relevant and focused history in the context of immunodeficiency to guide clinical examination and the formulation of differential diagnoses	mini-CEX, CbD	1,2
Performs a targeted and relevant clinical examination, linking findings to the history to establish the diagnosis and formulate a management plan	mini-CEX, CbD	1,2
Demonstrates knowledge of genetic basis of immunodeficiency	mini-CEX, CbD	1,2
Discusses when to measure immunoglobulins, classes and subclasses	mini-CEX, CbD	1,2
Interprets specific antibody titres and responses to vaccination	mini-CEX, CbD	1,2
Discusses functional analysis of complement components: CH50, AH50	mini-CEX, CbD	1,2
Evaluates cell surface and cytoplasmic markers for assessment of immunodeficiency	mini-CEX, CbD	1,2
Interprets lymphocyte function tests	mini-CEX, CbD	1,2
Analyses functional assessments of neutrophils and macrophages	mini-CEX, CbD	1,2
Interprets tests of cytokine production *in vitro*	mini-CEX, CbD	1,2
Behaviours		
Recognises limitations of expertise	CbD	2,3,4
Refers promptly to appropriate specialist where necessary	CbD	2,3,4

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 Allergy in each deanery is, therefore, the remit of the regional Allergy STC. Each STC has a Training Programme Director who coordinates the training programme in the specialty. Training programmes are regularly scrutinised by the STC in terms of structure, organisation and fitness for purpose using feedback from trainers and trainees. If the need arises, training programmes are inspected, informally or formally "in the field" by delegates of the STC who will usually be fellow trainers in the speciality.

Deaneries have assumed responsibility for ensuring that trainers and assessors are appropriately trained to undertake their educational responsibilities. Trainers and assessors will be expected to be fully conversant with the curriculum and assessment methods and work in conjunction with the SAC to deliver effective training. Training programmes, either centrally based at Deaneries or organised locally by the Postgraduate Deans in major teaching centres are already in operation, and satisfactory training of all trainers and assessors is mandatory.

As elaborated in section 3.1 above, the order in which the learning experiences listed in Tables 3-5.14 are provided is not critical and will depend on local circumstances, except that it is generally desirable for the trainee to begin to accrue theoretical immunological knowledge and laboratory experience (Tables 3-5.1) from the beginning of the training period. Training in paediatric allergy would normally follow training in adult allergy. In keeping with the principles of a spiral curriculum, the competencies of knowledge, skills and behaviours should be maintained and built upon throughout training in all of the fields shown in the Tables. Opportunity is provided in the ePortfolio to assess competency at various levels, which should progress to satisfactory in all aspects by the time the training period is completed.

The sequence of training and supervision provided for the trainee should be closely monitored by the educational supervisor at all times to ensure appropriate progression in experience and responsibility. The training to be provided at each stage 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.

Training in allergy is currently usually centered on one of the centres across the country providing a comprehensive allergy service, so that full training is generally possible at a single centre, rather than in a succession of posts in different regions. Nevertheless in some cases periods of secondment of trainees to other centres with particular expertise may be necessary.

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 www.jrcptb.org.uk/trainingandcert/Pages/Out-of-Programme.

4.2 Teaching and learning methods

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

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'. Trainees will pursue the learning outcomes described in the curriculum through a variety of learning methods, including:

- Approved study leave (approximately 15 days annually) which may be used for a variety of purposes including but not limited to:
  - Attendance at relevant courses run by the Royal College of Physicians and other professional bodies (such as the BSACI, BSI, EAACI, AAAAI, WAO) and other relevant courses, in particular the national allergy trainee scheme run and subsidised by the BSACI;
  - Attendance at regional, national and international speciality meetings (annual meetings of the BSACI, BSI, AAAAI, EAACI, courses run by the Royal Society of Medicine, local University and NHS run training courses and study days).
- Up to 50 days (over 5 years) for local postgraduate meetings the content of which is currently determined by the Deanery Speciality Training Committee, the Programme Director and College Tutors. These meetings may include care presentations, research and audit projects, lectures and small group teaching, clinical skills demonstrations and teaching and evidence-based medicine sessions.
- Approximately 15 days annually for self-directed study and private learning to be used in a variety of ways depending on the trainee's stage of learning:
  - Preparation for ARCP and examinations;
  - Appraisal, feedback and reflection;
  - Reading;
  - Maintenance of personal portfolio;
  - Audit and small research projects;
  - Pursuing special interests outside the essential curriculum.

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

- Allergy and other speciality 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. In order to cover the curriculum, trainees must assist at drug and food allergy clinics and challenge sessions, immunotherapy clinics, ENT, dermatology, asthma and paediatric allergy clinics in addition to "general" allergy clinics. They must also spend some supervised time in the hospital diagnostic laboratory.
- Assessment of inpatients referred for allergy opinions. This will include a range of problems including anaphylaxis, emergency investigation of drug allergy in patients

requiring antibiotics who are suspected of having antibiotic allergy, advice on diets for food allergic patients and many others. Every patient seen, on the ward or in outpatients provides a learning opportunity which will be enhanced by following the patient through the course of their illness: the experience of the evolution of patients' problems over time is a critical part both of the diagnostic process as well as management. Patients seen should provide the basis for critical reading and reflection of clinical problems.

- Speciality-specific team meetings. These should address difficult clinical problems as well as governance, safety and organisational aspects of the allergy service, including praise and complaints.
- 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.

Formal Postgraduate Teaching – The content of these sessions is 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 and Pathologists, the British Society for Immunology and the British Society for Allergy and Clinical Immunology.

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
- Joint specialty meetings
- Attendance at national Allergy and Immunology 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 and learning with peers - There are many other opportunities for trainees to learn with their peers while at work and elsewhere. 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. Other experiences may include:

- Searching the literature (manually and using electronic and web based learning resources) and reading journals.
- Small group teaching such as tutorials, journal clubs.
- Carrying out clinical and laboratory audit.
- Giving lectures and presentations.
- Keeping notes of key and interesting case studies.
- Notes/treatises on critical, emerging and controversial aspects of allergy management.
- Teaching others.
- Collection of literature reviews, care reports, clinical protocols and standard operating procedures.
- Personal study and self-directed learning.
- Achieving personal goals beyond the essential, core curriculum

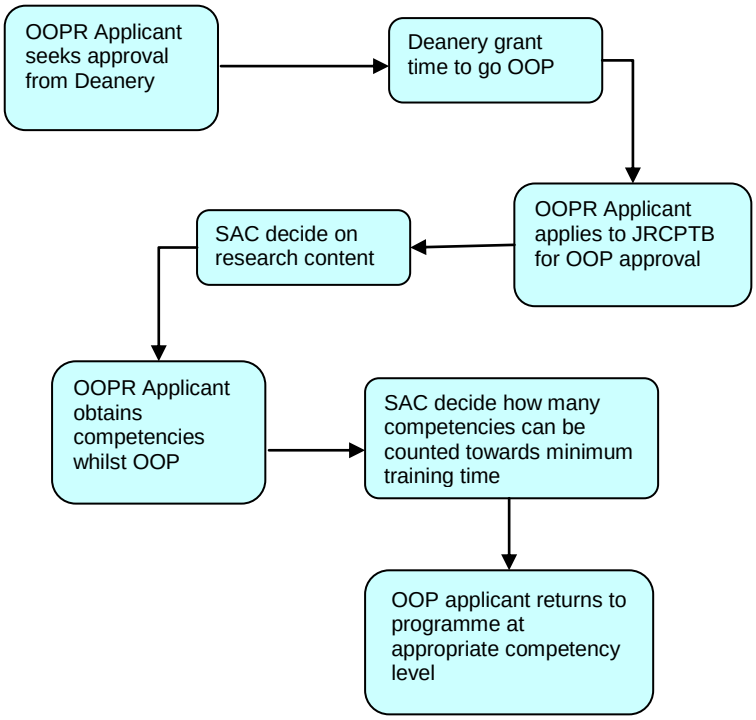
Formal Study Courses - Time to be made available for formal courses is encouraged, subject to local conditions of service. Examples include management courses and communication courses.

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 laboratory-based or strong clinical commitment), as well as duration (eg 12 month Masters, 2-year MD, 3-Year PhD). On approval by the SAC, the JRCPTB will advise the trainee and the deanery of the decision. The deanery will make an application to the GMC for approval of the out of programme research. All applications for out of programme research must be prospectively approved.

Upon completion of the research period the 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.

Many Allergy Centres have varied and vibrant research programmes and associated learning opportunities of which trainees may avail themselves even if they do not undertake a formal research project. These might include MSc and Diploma courses, local seminars and lectures, computer literacy courses etc.

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 alternative career directions.

The integrated assessment system comprises a combination of workplace-based assessments and knowledge – based assessment. Individual assessment methods are described in more detail below. These techniques are freely available to patients and the public on the JRCPTB web site.

Workplace-based assessments will take place throughout the training programme to allow trainees continually to 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. They will build progressively to a complete picture of evidence that the trainee has satisfactorily mastered all aspects of the curriculum`

5.2 Assessment Blueprint

In the syllabus (section 3.3 above) the "Assessment Methods" shown are those that are appropriate as **possible** methods that could be used to assess each competency. They are abbreviated as shown in the description of each assessment method (see section 5.3 following). It is not expected that all competencies will be assessed and that where they are assessed not every method will be used. The results of these assessments will be stored in the trainee's ePortfolio and will be available to trainers as well as trainees, as well as assessors and examiners for ARCP.

5.3 Assessment methods

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

Examinations and certificates

- Advanced Life Support Certificate (ALS)

The small size of the specialty means that it is not feasible to run a full specialty certificate examination to assess knowledge. The specialty is currently planning to pilot a formative knowledge-based assessment method and, if successful, it is intended that this method will be used in the future.

Where there is a * in the syllabus this competency will be assessed by a knowledge-based assessment method

Workplace-based assessments (WPBAs)

- mini-Clinical Evaluation Exercise (mini-CEX)
- Direct Observation of Procedural Skills (DOPS)
- Multi-Source Feedback (MSF)
- 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 www.jrcptb.org.uk. Workplace-based assessments should be recorded in the trainee's ePortfolio. The workplace-based assessment methods include feedback

opportunities as an integral part of the assessment process: this is explained in the guidance notes provided for the techniques.

Multisource feedback (MSF)
This tool is a method of assessing 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": these are seen by the Educational Supervisor who then feeds back directly to the trainee.

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)
DOPS is an assessment tool designed to assess the performance of a trainee in undertaking a practical procedure, against a structured checklist or standard operating procedure. 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 written records such as written case notes and outpatient letters. A typical encounter might be when presenting newly referred patients in the outpatient department.

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

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

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 www.mmc.nhs.uk). Deaneries are responsible for organising and conducting ARCPs. The evidence to be reviewed by ARCP assessment 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. The table serves as a guide to ARCP panels in assessing the progress of Allergy trainees. The order in which any individual trainee will acquire the necessary knowledge base in the 16 subject areas of the curriculum will inevitably vary. Thus the table is meant to be interpreted flexibly and designed to ensure that the progress of trainees is measurable, and should alert assessors to cases where full competence in all aspects of the curriculum is unlikely to be achieved in the allotted time span.

Educational and clinical supervisors should ensure that an appropriate mix of assessment tools is employed to assess competence in each aspect of the curriculum, as detailed in Tables 1-16 above, with a degree of complexity of cases appropriate to the trainee's experience.

5.5 ARCP Decision Aid

Specialist Allergy Training

Curriculum topic(s)	End ST3	End ST4	End ST5	End ST6	End ST7/CCT
Relevant immunological knowledge (Tables 3 and 4 in curriculum)	Competence in at least 2 topics (CbD, mini-CEX, DOPS)	Competence in at least 5 topics (CbD, mini-CEX, DOPS)	Competence in at least 10 topics (CbD, mini-CEX, DOPS)	Firm plans to attain full competence in outstanding topics	Full knowledge of all topics (CbD, DOPS, mini-CEX)
Relevant laboratory experience (Table 5.1 in curriculum)	Plans should be in place to complete and assess laboratory experience by end of Year ST4 (DOPS, CbD, mini-CEX)		Full knowledge of all procedures (DOPS, CbD, mini-CEX)		
Specialist topics in clinical allergy (Tables 5.2-5.14 in curriculum)	Competence in at least 2 topics (CbD, mini-CEX, DOPS)	Competence in at least 5 topics (CbD, mini-CEX, DOPS)	Competence in at least 10 topics (CbD, mini-CEX, DOPS)	Firm plans to attain full competence in outstanding topics	Fully competent in all topics (CbD, mini-CEX, DOPS)
Acquisition of common competencies (Table 1 and 2) (% by end of year) evidenced by assessments listed below	20%	50%	70%	85%	95%
ALS	Valid	Valid	Valid	Valid	Valid
MSF		At least one satisfactory survey		At least one satisfactory survey	
PS	At least one satisfactory survey		At least one satisfactory survey		
Teaching		At least one TO appropriate to level of training and experience	At least one TO appropriate to level of training and experience	At least one TO appropriate to level of training and experience	At least one TO appropriate to level of training and experience
Audit		At least one AA showing evidence of participation in	At least one AA showing participation in	At least one AA showing participation in ongoing audit or	

		ongoing audit	ongoing audit or initiation of new audit	initiation of new audit	
Minimum number of work place assessments (combination of mini-CEX, DOPS, CbD)	At least 6 and sufficient to show competence in 2 topics of basic immunological knowledge (Tables 3/4 in curriculum) and clinical allergy (Tables 5.1-5.14)	At least 6 and sufficient to show competence in 3 additional topics of basic immunological knowledge (Tables 3/4 in curriculum) and clinical allergy (Tables 5.1-5.14)	At least 6 and sufficient to show competence in 5 additional topics of basic immunological knowledge (Tables 3/4 in curriculum) and clinical allergy (Tables 5.1-5.14)	At least 6 and sufficient to show competence in all topics of basic immunological knowledge (Tables 3/4 in curriculum) and clinical allergy (Tables 5.1-5.14)	At least 6 and sufficient to show competence in any topics of basic immunological knowledge (Tables 3/4 in curriculum) and clinical allergy (Tables 5.1-5.14) in which the trainee was not judged competent by end of ST6
Supporting Evidence					
Supervisor's Report	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory

Definition of competence: Educational Supervisor sign off of all aspects of specialist topics of the allergy curriculum supported by CbD, mini-CEX, DOPS and other evidence as appropriate.
Definition of terms: CbD = Case Based Discussion; mini-CEX = mini-Clinical Evaluation Exercise; DOPS = Direct Observation of Procedural Skills; ALS = Acute Life Support Training; MSF = Multi-Source Feedback; PS = Patient Survey; TO = Teaching Observation; AA = Audit Assessment.

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. One of the purposes of the PYA is to identify gaps in training which must be filled

5.7 Complaints and Appeals

All WPBA method outcomes must be used to provide feedback to the trainee on the effectiveness of the education and training where consent from all interested parties has been given. 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.

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 may also have a Clinical Supervisor responsible for overseeing their education if they are seconded to specialist clinics or aspects of training outside allergy (such as ENT, paediatrics or laboratory testing).

The responsibilities of supervisors have been defined by GMC in the document "Operational Guide for the PMETB 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.

All trainers and educational supervisors will be consultants of at least 1 years standing who will have undergone appropriate training to fulfil these roles and undertake periodic retraining, as determined by the local Postgraduate Deanery. Trainers will be required to present evidence of completion of such training periodically to the local Postgraduate Dean.

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) has 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 and Subsequent Appraisals

The trainee and educational supervisor should have an appraisal meeting at the beginning of training and at least annually thereafter when the educational supervisor oversees training for the entire curriculum, as is usual in allergy training. The purpose is to review the trainee's progress so far, agree learning objectives for the year ahead and identify the learning opportunities for the next phase of training. Specific concerns may be highlighted from these appraisals, in which case the appraisal form should record the areas where further work is required to overcome any shortcomings. Reviewing progress through the curriculum will help trainees to compile an effective Personal Development Plan (PDP) of objectives for the coming year. This PDP should be agreed at each 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

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

7 Managing curriculum implementation

7.1 Intended use of curriculum by trainers and trainees

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

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

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

Implementation of the 2009 curriculum has been facilitated by a national educational workshop on the curriculum and assessment methods for educational supervisors and trainers held by the JRCPTB at the Royal College of Physicians on 26th June 2009. Local mechanisms for curriculum implementation will be overseen by the relevant schools of medicine under the aegis of Postgraduate Deaneries. Regular feedback from trainee representatives on the SAC in Allergy at JRCPTB and the Intercollegiate Joint Committee on Immunology and Allergy will ensure that trainees' views on curriculum implementation are adequately represented.

7.2 Recording progress

On enrolling with JRCPTB trainees will be given access to the ePortfolio for Allergy. 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 or relevant paper copies are 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 or paper based 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 curriculum will remain under regular review as a standing item on the agenda for meetings of the SAC in Allergy at JRCPTB held 3 times a year. Trainee and lay representation on the committee will enable the SAC to respond to any issues raised by these groups. In addition to these meetings, the SAC will formally review the curriculum at its joint annual meeting with Regional Specialty Advisors. These meetings will ensure that the curriculum remains relevant to current practice and that the SAC responds swiftly to advances in basic and applied immunological science which impact on the quality of care provided to patients with immune-mediated disease.

The syllabus content of the curriculum is reviewed annually by allergy specialist and trainee members of the JRCPTB in consultation with the BSACI to identify new trends in allergy diagnosis, management and patient priorities which are earmarked for incorporation into future revisions with appropriate timeliness. This is supplemented by occasional more formal

meetings of trainers and trainee representatives at educational workshops on curriculum implementation held by the Education Department of the RCP.

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 GMC.

Compliance with anti-discriminatory practice will be assured through:

- monitoring of recruitment processes;
- ensuring all College representatives and Programme Directors have attended appropriate training sessions prior to appointment or within 12 months of taking up post;
- 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.