

## Curriculum for Immunology (Allergy, Clinical and Laboratory Immunology) Training Implementation August 2021

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## 1. Introduction

*An application has been made to change the name of the specialty of Immunology to Allergy, Clinical and Laboratory Immunology. This new name will be used from this point forward.*

Allergy, Clinical and Laboratory Immunology (ACLI) is the branch of medicine concerned with the body's immune system. The clinical practice of this specialty encompasses clinical and laboratory activities dealing with the study, diagnosis, and management of patients with diseases resulting from disordered immunological mechanisms, (both deficient and exaggerated) and conditions in which immunological manipulations form an important part of treatment.

In the last three decades, there has been a significant increase in the requirement for allergy, clinical and laboratory immunology services. This is due to improved case ascertainment and treatment options for patients who have primary and secondary immune deficiencies (especially those caused by increased use of chemotherapy, immunosuppressive drugs and biological agents). There has been a significant increase in the prevalence of allergic conditions and in demand for allergy services with new and developing therapeutic intervention options in the fields of both allergy and immunology. There has been a corresponding requirement for immunology laboratories to provide support for primary care and secondary care in diagnosis and management of both allergic and immunological conditions.

Physicians in ACLI specialise in the care of patients with failure of the immune system (immunodeficiency) and heightened immune reactivity (allergy).

As patient-facing clinicians, physicians in ACLI are principally responsible for:

- Providing specialist allergy care services encompassing the assessment and management of patients with a broad spectrum of common atopic and allergic conditions (such as food, drug and insect venom allergy, anaphylaxis, asthma, eczema, rhino-conjunctivitis and urticaria and angioedema).
- Providing clinical immunology services encompassing the assessment and management of patients with immunological conditions such as primary immunodeficiency and disorders of immune dysregulation.
- Working closely with primary care, paediatricians, and other hospital specialists to manage patients with allergic and immune-mediated disease.

As laboratory physicians, they are responsible for leading the provision and development of diagnostic services for immune-mediated disease spanning multiple specialties and primary care, thus underpinning multiple patient pathways. These responsibilities include:

- Investigation of disorders affecting autoimmunity, immunochemistry, allergy and cellular immunology.
- Immunology laboratory leadership & direction, governance, supervision, quality assurance, clinical interpretation and clinical liaison as per the UKAS Standards (ISO15189).

In addition to these core working elements, physicians in ACLI also provide a range of highly specialised clinical or laboratory services, at regional and national level, which are focused on specific aspects of autoimmune, immune deficiency, allergic or inflammatory diseases.

External accreditation processes underpin quality assurance of all the components of immunology services.

## **2. Purpose**

### **2.1 Purpose Statement**

There are two training pathways in Allergy and Immunology:

- Allergy and Clinical Immunology (ACI) – currently known as Allergy
- Allergy, Clinical and Laboratory Immunology (ACLI) – currently Immunology.

The new clinical pathway, which includes an understanding of core laboratory capabilities, that are integral to clinical practice, has emerged from the existing Allergy curriculum and clinical components of the Immunology curriculum.

This combined clinical and laboratory pathway includes all the capabilities in the clinical pathway. In addition, it will provide enhanced training in laboratory capabilities leading to competencies in managing and leading immunological laboratories.

Together these curricula will deliver specialists who are equipped to develop, lead and deliver NHS allergy, clinical and laboratory immunology services, and to provide necessary support to primary and secondary care services in the diagnosis and management of the full breadth and complexity of allergic and immune mediated disease.

The ACLI curriculum has been designed to build upon the knowledge and core competencies in internal medicine that trainees will bring with them as they enter higher specialty training. Throughout specialty training, the curriculum provides a structured framework to enable incremental learning and reflection across the whole breadth of allergy, clinical immunology and laboratory immunology knowledge which underpin the clinical and laboratory service delivery.

Trainees will be given greater responsibility and acquire deeper knowledge and skills in allergy and immunological diseases as they progress through training. They will acquire the skills required to provide allergy, clinical and laboratory immunology services.

They will acquire the requisite capabilities to lead investigation and management of patients in a variety of settings (outpatients, day-case unit, inpatients, and community), integrate with other medical specialities as required and to lead multidisciplinary teams in

investigation and management of allergic and immunological diseases, and advise on and manage immunological interventions.

They will acquire laboratory capabilities in immunological assay selection, evaluating assay performance, quality assurance of laboratory processes, advanced interpretation of immunological results and liaison skills to support primary and secondary care specialities in laboratory investigation of immunological conditions.

### **Scope of practice**

Training in this clinical pathway prepares trainees for a broad scope of practice encompassing allergy and clinical Immunology. Doctors will be able to:

- Provide specialised allergy and immunology services.
- Support the acute medical take and other clinical services by providing clinical advice and advice on laboratory support.
- Support other clinical services in leading and developing the management of anaphylaxis and suspected drug allergy (including the importance of not inappropriately labelling patients with a drug allergy).
- Provide appropriate engagement with Immunoglobulin Assessment Panels to ensure evidence-based, cost-effective use of therapeutic immunoglobulin with the support of local and national networks where appropriate.
- Plan, and where appropriate, deliver the transitional care of adolescents and young adults with common allergic and immunological diseases, and to understand the tertiary referral services available across the United Kingdom.
- Provide immunotherapy and allergen desensitisation services for specific allergies.

### **Laboratory Service Provision**

- Lead, supervise and deliver immunology laboratory diagnostic services
  - Provide clinical leadership of a diagnostic immunology laboratory including provision of advanced interpretive advice and oversight of test repertoire, quality, financial and regulatory requirements, in collaboration with the laboratory management team.
  - All aspects of devising, introducing new assays and technologies, troubleshooting and quality assurance of laboratory immunology practice, required to underpin the management of immune mediated disease.
- As laboratory physicians support and underpin the relevant clinical services which need input from an immunology laboratory:
  - Gastroenterology – eg coeliac screening, autoimmune liver disease
  - Haematology – eg myeloma screening and management
  - Rheumatology – eg early arthritis pathway, vasculitis, myositis

- Neurology – eg autoimmune encephalitis, demyelinating disorders, immune-mediated neuropathies

A consultant physician in ACLI will work in multidisciplinary teams with other immunologists, allergists, rheumatologists, respiratory physicians, neurologists, other laboratory disciplines and may develop subspecialty interests within the group, for example, immune-deficiency, drug allergy, venom allergy, allergic respiratory disease, connective tissue disease, neuroimmunology and vasculitis.

The ACLI certificate of completion of training (CCT) holder will be equipped to play a key role in advising primary care physicians and secondary care specialists, about appropriate immunological investigations in various disease conditions and their interpretation. They will need the broad range of skills and knowledge specified in this curriculum for the development and delivery of relevant patient pathways for allergy and immune mediated disease.

Teaching, training, audit and research remain important components of the scope of practice for consultants with a CCT in ACLI.

This purpose statement has been endorsed by the General Medical Council’s (GMC) Curriculum Oversight Group and confirmed as meeting the needs of the health services of the countries of the UK.

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

The capabilities in practice (CiPs) describe the professional tasks or work within the scope of allergy and clinical immunology. Each CiP has a set of descriptors associated with that activity or task. Descriptors are intended to help trainees and trainers recognise the minimum level of knowledge, skills and behaviours which should be demonstrated for an entrustment decision to be made. By the completion of training and award of a CCT, the doctor must demonstrate that they are capable of unsupervised practice in all CiPs.

The CiPs have been mapped to the generic professional capabilities (GPC) domains and subsections to reflect the capabilities required to undertake the clinical and laboratory tasks. Satisfactory sign off requires demonstration that, for each of the CiPs, the doctor in training's performance meets or exceeds the minimum expected level for completion of training, as defined in the curriculum.

The ACLI CiPs comprise of eight specialty CiPs, six generic CiPs shared across all physician specialties.

<b>Learning outcomes – capabilities in practice (CiPs)</b>
Generic CiPs

1. Able to successfully function within NHS organisational and management systems
2. Able to deal with ethical and legal issues related to clinical practice
3. Communicates effectively and is able to share decision making, while maintaining appropriate situational awareness, professional behaviour and professional judgement
4. Is focused on patient safety and delivers effective quality improvement in patient care
5. Carrying out research and managing data appropriately
6. Acting as a clinical teacher and clinical supervisor

#### Specialty CiPs

1. Managing, developing, and delivering allergy services in all appropriate service settings
2. Managing, developing, and delivering clinical immunology services in all appropriate service settings
3. Providing advice to colleagues on selection, interpretation and limitations of laboratory and other investigations for common immunological and allergic conditions
4. Supporting the management of patients with allergy, immunodeficiency, auto-immune disease, and auto-inflammatory disease, in liaison with other specialties including primary care
5. Delivering and supporting both immune-mediated and other therapeutic interventions in allergic and immunological conditions
6. Understanding the needs of adolescents and young adults with allergic and immunological diseases transitioning to adulthood.
7. Able to deliver a clinical laboratory liaison service to support investigation and management of allergic and immunological disorders across primary and secondary care
8. Able to lead, supervise and deliver immunology laboratory diagnostic services.

#### Output

- To be able to provide a clinical allergy service in a variety of settings to include the range of common atopic conditions including but not limited to allergic rhinitis, asthma, eczema, food allergy, drug allergy, insect allergies, anaphylaxis, urticaria and angioedema.
- To be able to provide a Clinical Immunology service in a variety of settings to include primary and secondary immunodeficiency and to contribute to the management of patients with autoimmune disease and auto-inflammatory disease.
- To provide clinical leadership in the development and delivery of home therapy and other outreach services.
- To participate actively in the multidisciplinary team, not only clinically, but also providing leadership and contributing to team education and quality improvement.
- To be able to develop and deliver a comprehensive food and drug allergy service including challenge testing and desensitisation.

- To be able to develop, manage and deliver an immunotherapy service for all common and relevant allergens.
- To provide clinical leadership in the delivery of emergency anaphylaxis services and provide follow up services for patients with suspected anaphylaxis.
- To be able to develop, manage and deliver immunoglobulin, C1-inh and other similar services, with support through local and national specialty network consultation where appropriate.
- To be able to provide immunological and allergic expertise to support and where appropriate manage patients with asthma, rhinitis/rhinosinusitis and bronchiectasis.
- To be able to provide immunological and allergic expertise to support and where appropriate manage patients with common allergic and immunological skin diseases such as eczema, urticaria and angioedema, hereditary/acquired angioedema, mastocytosis and autoimmune skin disease.
- To provide immunological and allergy support to paediatric services, in particular, providing advice on allergic and immunological aspects, for example, asthma, urticaria, food and drug allergy and immunodeficiencies.
- To be able to develop, manage and deliver the transitional care of adolescents and young adults with common allergic and immunological diseases, and to understand the tertiary referral services available across the United Kingdom.
- To recognise and provide basic management of occupational allergy and understand where there may be a need to refer to tertiary services.
- To understand and support specialists in the use of biological therapeutic agents, for example advising on possible interactions and complications.
- To be able to provide advice on therapeutic interventions for common allergic and immunological conditions and understand the tertiary referral services available for the management of more complex conditions.
- To be able to provide advice to organ based specialists on selection, interpretation and limitations of relevant and locally available or common specialist investigations; where appropriate to advise on management for allergic and immunological conditions; and to understand the tertiary referral services available for the investigation of more complex immunological conditions.
- To be able to provide clinical leadership of a diagnostic laboratory including provision of advanced interpretive advice and oversight of test repertoire, quality, financial and regulatory requirements, in collaboration with laboratory scientific and management team.
- To be able to provide laboratory leadership in supporting immunology diagnostic and screening pathways across primary and secondary care.
- To be able to support and oversee all aspects of devising, introducing new assays and technologies, troubleshooting and quality assurance of laboratory immunology practice.

### **Interdependencies**

Physicians in ACLI interact with colleagues in any speciality where a patient with allergy and immunological disease might present. This spans primary and secondary care and includes



both paediatric and adult medicine. There may also be interaction with non-physician specialties such as anaesthesia, ENT, ophthalmology and occupational medicine.

Trainees will be given the opportunity to gain experience of the other specialties, for example: rheumatology, infectious diseases, paediatric immunology and allergy, respiratory medicine, dermatology, haematology and transplant services.

Trainees will attend multidisciplinary clinical meetings, participate in joint specialty clinics, adolescent and young adult clinics in allergy and immunology. They will provide advice to colleagues regarding test selection and clinical interpretation of laboratory results used in the investigation and management of allergic and immunological disorders and support the management of patients with allergy, immunodeficiency, auto-immune disease, and auto-inflammatory disease, in liaison with other medical specialties including primary care.

This curriculum prepares trainees to provide evidence based, high quality clinical and laboratory advice in these settings

### **2.3 Training pathway**

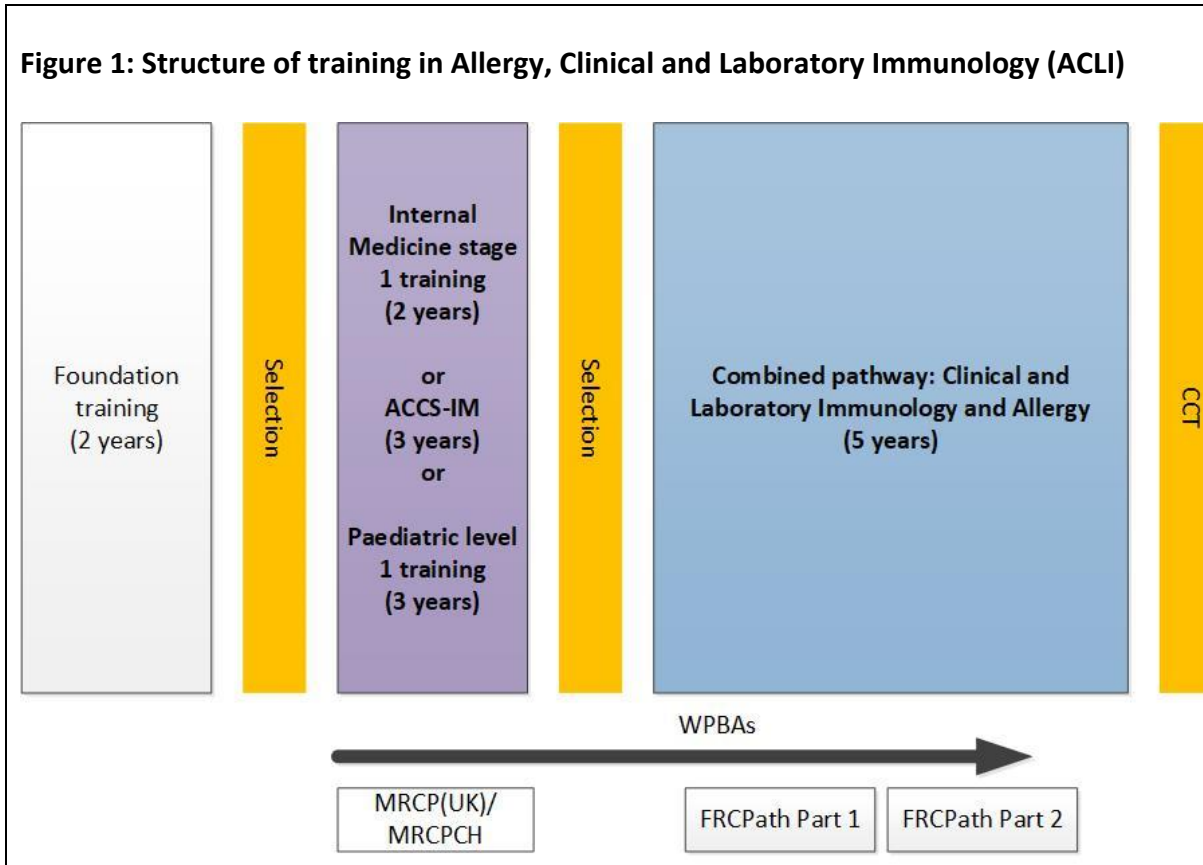
Recruitment into the ACLI training pathway will be after completion of two years of Internal Medicine Training (indicative two years of IM stage 1 training), Acute Care Common Stem Medicine – Internal Medicine (ACCS-IM) or Paediatric Level 1 training (indicative three years). Completion of core training will be evidenced by satisfactory:

- Foundation competences
- IMT (2 years) or ACCS-IM (3 years) or Paediatric level 1 training (3 years)
- Full MRCP(UK) or MRCPC

ACLI (combined pathway) is a Group 2 specialty. The content of training will remain broadly the same as defined currently in the 2010 Allergy curriculum, clinical and laboratory immunology competencies in Immunology (2015) curriculum with harmonisation of overlapping competencies.

The FRCPATH Part 1 and FRCPATH Part 2 will be the knowledge based assessments for the combined pathway.

**Figure 1: Structure of training in Allergy, Clinical and Laboratory Immunology (ACLI)**



## 2.4 Duration of training

All specialist trainees will undertake an indicative five years of training. This will include experience in allergy, clinical immunology and all aspects laboratory immunology, providing well rounded knowledge and skills in clinical liaison and the ability to investigate and manage patients with suspected or confirmed allergy and immunodeficiency, and ability lead delivery of immunology laboratory service provision.

They will develop skills in multidisciplinary management and advanced team working skills. They will be required to gain the requisite knowledge of laboratory test selection, limitations and clinical interpretation.

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

## **2.5 Flexibility and accreditation of transferable capabilities**

The two pathways largely share common generic and specialty CiPs. This combined pathway includes the capabilities of the clinical pathway and an additional, integrated indicative year of training, leading to acquisition of higher level comprehensive capabilities in laboratory immunology and its management. The curriculum supports flexibility and transferability of outcomes across related specialties and disciplines, reflecting key interdependencies between this curriculum and other training programmes, outlined below.

The curriculum incorporates and emphasises the importance of the generic professional capabilities (GPCs). GPCs will promote flexibility in postgraduate training as these common capabilities can be transferred from specialty to specialty. In addition, the IM generic CiPs will be shared across all physicianly curricula, supporting flexibility for trainees to move between these specialties without needing to repeat aspects of training.

The curriculum will allow trainees to train in academic medicine alongside their acquisition of clinical and generic capabilities, and these skills will be transferable across other specialties.

The combined pathway curriculum is competency based and descriptors outline the overlapping capabilities in rheumatology, respiratory medicine, dermatology and other laboratory specialities, to enable transferable competencies across respective specialties.

Trainees will have the opportunity to spend a period of time training in other relevant specialties for example, respiratory medicine, renal medicine, rheumatology, infectious disease, dermatology, haematology and supra-regional BMT units.

## **2.6 Less than full time training**

Trainees are entitled to opt for less than full time training programmes. Less than full time trainees should undertake a pro rata share of the out-of-hours duties (including on-call and other out-of-hours commitments) required of their full-time colleagues in the same programme and at the equivalent stage.

Less than full time trainees should assume that their clinical training will be of a duration pro-rata with the time indicated/recommended, but this should be reviewed in accordance with the Gold Guide.

## 2.7 Generic Professional Capabilities and Good Medical Practice

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

The nine domains of the GMC's Generic Professional Capabilities



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

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

The nine domains and subsections of the GPC framework are directly identifiable in the curriculum. They are mapped to each of the generic and specialty CiPs, which are in turn mapped to the assessment blueprints. This is to emphasise those core professional

<sup>1</sup> [Generic professional capabilities framework](#)

<sup>2</sup> [Good Medical Practice](#)

capabilities that are essential to safe clinical practice and that they must be demonstrated at every stage of training as part of the holistic development of responsible professionals.

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

### **3 Content of Learning**

The curriculum is spiral, and topics and themes will be revisited to expand understanding and expertise. The level of entrustment for capabilities in practice (CiPs) will increase as an individual progresses from needing direct supervision to being entrusted to act unsupervised. The curriculum has been designed to build upon the knowledge and core competencies in internal medicine that trainees will bring with them as they enter higher specialty training. Throughout specialty training, the curriculum provides a structured framework to enable incremental learning and reflection across the whole breadth of allergy, clinical immunology and laboratory immunology knowledge which underpin the clinical and laboratory service delivery.

Trainees will be given greater responsibility and acquire deeper knowledge and skills in allergy and immunological diseases as they progress through training. They will acquire the skills required to provide allergy, clinical and laboratory immunology services. They will acquire the requisite competencies to lead investigation and management of patients in a variety of settings (outpatients, day-case unit, inpatients and community), integrate with and refer to other medical specialities as required and to lead multidisciplinary teams in management of allergic and immunological diseases, and advise on and manage the appropriate interventions. They will acquire laboratory competencies in immunological assay selection, evaluating assay performance, quality assurance of laboratory processes, advanced interpretation of immunological results and liaison skills to support primary and secondary care specialities in laboratory investigation of immunological conditions.

#### **3.1 Capabilities in practice**

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

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

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<sup>3</sup> [Nuts and bolts of entrustable professional activities](#)

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

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

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

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

### **3.2 Generic capabilities in practice**

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

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

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

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

#### **KEY**

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

<b>Generic capabilities in practice (CiPs)</b>	
<b>Category 1: Professional behaviour and trust</b>	
<b>1. Able to function successfully within NHS organisational and management systems</b>	
<b>Descriptors</b>	<ul style="list-style-type: none"> <li>• Aware of and adheres to the GMC professional requirements</li> <li>• Aware of public health issues including population health, social detriments of health and global health perspectives</li> <li>• Demonstrates effective clinical leadership</li> <li>• Demonstrates promotion of an open and transparent culture</li> <li>• Keeps practice up to date through learning and teaching</li> <li>• Demonstrates engagement in career planning</li> <li>• Demonstrates capabilities in dealing with complexity and uncertainty</li> <li>• Aware of the role of and processes for commissioning</li> <li>• Aware of the need to use resources wisely</li> </ul>
<b>GPCs</b>	Domain 1: Professional values and behaviours Domain 3: Professional knowledge <ul style="list-style-type: none"> <li>• professional requirements</li> <li>• national legislative requirements</li> <li>• the health service and healthcare systems in the four countries</li> </ul> Domain 9: Capabilities in research and scholarship
<b>Evidence to inform decision</b>	MCR MSF Active role in governance structures Management course End of placement reports
<b>2. Able to deal with ethical and legal issues related to clinical practice</b>	
<b>Descriptors</b>	<ul style="list-style-type: none"> <li>• Aware of national legislation and legal responsibilities, including safeguarding vulnerable groups</li> <li>• Behaves in accordance with ethical and legal requirements</li> <li>• Demonstrates ability to offer apology or explanation when appropriate</li> <li>• Demonstrates ability to lead the clinical team in ensuring that medical legal factors are considered openly and consistently</li> </ul>
<b>GPCs</b>	Domain 3: Professional knowledge <ul style="list-style-type: none"> <li>• professional requirements</li> <li>• national legislative requirements</li> </ul>

	<ul style="list-style-type: none"> <li>the health service and healthcare systems in the four countries</li> </ul> Domain 4: Capabilities in health promotion and illness prevention Domain 7: Capabilities in safeguarding vulnerable groups Domain 8: Capabilities in education and training Domain 9: Capabilities in research and scholarship
<b>Evidence to inform decision</b>	MCR MSF CbD DOPS Mini-CEX ALS certificate End of life care and capacity assessment End of placement reports
<b>Category 2: Communication, teamworking and leadership</b>	
<b>3. Communicates effectively and is able to share decision making, while maintaining appropriate situational awareness, professional behaviour and professional judgement</b>	
<b>Descriptors</b>	<ul style="list-style-type: none"> <li>Communicates clearly with patients and carers in a variety of settings</li> <li>Communicates effectively with clinical and other professional colleagues</li> <li>Identifies and manages barriers to communication (eg cognitive impairment, speech and hearing problems, capacity issues)</li> <li>Demonstrates effective consultation skills including effective verbal and nonverbal interpersonal skills</li> <li>Shares decision making by informing the patient, prioritising the patient's wishes, and respecting the patient's beliefs, concerns and expectations</li> <li>Shares decision making with children and young people</li> <li>Applies management and team working skills appropriately, including influencing, negotiating, re-assessing priorities and effectively managing complex, dynamic situations</li> </ul>
<b>GPCs</b>	Domain 2: Professional skills <ul style="list-style-type: none"> <li>practical skills</li> <li>communication and interpersonal skills</li> <li>dealing with complexity and uncertainty</li> <li>clinical skills (<i>history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease</i>)</li> </ul> Domain 5: Capabilities in leadership and teamworking
<b>Evidence to inform decision</b>	MCR MSF PS End of placement reports ES report
<b>Category 3: Safety and quality</b>	



<b>4. Is focused on patient safety and delivers effective quality improvement in patient care</b>	
<b>Descriptors</b>	<ul style="list-style-type: none"> <li>• Makes patient safety a priority in clinical practice</li> <li>• Raises and escalates concerns where there is an issue with patient safety or quality of care</li> <li>• Demonstrates commitment to learning from patient safety investigations and complaints</li> <li>• Shares good practice appropriately</li> <li>• Contributes to and delivers quality improvement</li> <li>• Understands basic Human Factors principles and practice at individual, team, organisational and system levels</li> <li>• Understands the importance of non-technical skills and crisis resource management</li> <li>• Recognises and works within limit of personal competence</li> <li>• Avoids organising unnecessary investigations or prescribing poorly evidenced treatments</li> </ul>
<b>GPCs</b>	<p>Domain 1: Professional values and behaviours</p> <p>Domain 2: Professional skills</p> <ul style="list-style-type: none"> <li>• practical skills</li> <li>• communication and interpersonal skills</li> <li>• dealing with complexity and uncertainty</li> <li>• clinical skills (<i>history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease</i>)</li> </ul> <p>Domain 3: Professional knowledge</p> <ul style="list-style-type: none"> <li>• professional requirements</li> <li>• national legislative requirements</li> <li>• the health service and healthcare systems in the four countries</li> </ul> <p>Domain 4: Capabilities in health promotion and illness prevention</p> <p>Domain 5: Capabilities in leadership and teamworking</p> <p>Domain 6: Capabilities in patient safety and quality improvement</p> <ul style="list-style-type: none"> <li>• patient safety</li> <li>• quality improvement</li> </ul>
<b>Evidence to inform decision</b>	<p>MCR</p> <p>MSF</p> <p>QIPAT</p> <p>End of placement reports</p>
<b>Category 4: Wider professional practice</b>	
<b>5. Carrying out research and managing data appropriately</b>	
<b>Descriptors</b>	<ul style="list-style-type: none"> <li>• Manages clinical information/data appropriately</li> <li>• Understands principles of research and academic writing</li> <li>• Demonstrates ability to carry out critical appraisal of the literature</li> <li>• Understands the role of evidence in clinical practice and demonstrates shared decision making with patients</li> </ul>

	<ul style="list-style-type: none"> <li>• Demonstrates appropriate knowledge of research methods, including qualitative and quantitative approaches in scientific enquiry</li> <li>• Demonstrates appropriate knowledge of research principles and concepts and the translation of research into practice</li> <li>• Follows guidelines on ethical conduct in research and consent for research</li> <li>• Understands public health epidemiology and global health patterns</li> <li>• Recognises potential of applied informatics, genomics, stratified risk and personalised medicine and seeks advice for patient benefit when appropriate</li> </ul>
<b>GPCs</b>	Domain 3: Professional knowledge <ul style="list-style-type: none"> <li>• professional requirements</li> <li>• national legislative requirements</li> <li>• the health service and healthcare systems in the four countries</li> </ul> Domain 7: Capabilities in safeguarding vulnerable groups Domain 9: Capabilities in research and scholarship
<b>Evidence to inform decision</b>	MCR MSF GCP certificate (if involved in clinical research) Evidence of literature search and critical appraisal of research Use of clinical guidelines Quality improvement and audit Evidence of research activity End of placement reports
<b>6. Acting as a clinical teacher and clinical supervisor</b>	
<b>Descriptors</b>	<ul style="list-style-type: none"> <li>• Delivers effective teaching and training to medical students, junior doctors and other health care professionals</li> <li>• Delivers effective feedback with action plan</li> <li>• Able to supervise less experienced trainees in their clinical assessment and management of patients</li> <li>• Able to supervise less experienced trainees in carrying out appropriate practical procedures</li> <li>• Able to provide clinical supervision to doctors in earlier stages of training</li> </ul>
<b>GPCs</b>	Domain 1: Professional values and behaviours Domain 8: Capabilities in education and training
<b>Evidence to inform decision</b>	MCR MSF TO Relevant training course End of placement reports

### 3.3 Specialty capabilities in practice

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

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

#### KEY

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

Specialty CiPs	
1. Managing, developing, and delivering allergy services in all appropriate service settings	
<b>Descriptors</b>	<ul style="list-style-type: none"> <li>• Demonstrates effective clinical management of allergic diseases and other conditions that can present with features of allergic disease</li> <li>• Demonstrates professional behaviour with regard to patients, carers, colleagues and others</li> <li>• Delivers patient centred care including shared decision making</li> <li>• Demonstrates effective consultation skills</li> <li>• Formulates an appropriate diagnostic and management plan, taking into account patient preferences</li> <li>• Explains clinical reasoning behind diagnostic and clinical management decisions to patients/carers/guardians and other colleagues and clearly communicates risk/benefit analysis of proposed interventions.</li> <li>• Takes a relevant patient history including patient symptoms, concerns, priorities and preferences</li> <li>• Shows appropriate clinical reasoning by analysing physical and psychological findings</li> <li>• Formulates an appropriate differential diagnosis</li> <li>• Formulates an appropriate diagnostic and management plan, taking into account patient preferences, available resources, the urgency of intervention and the risk/benefit ratio of potential interventions</li> </ul>
<b>GPCs</b>	Domain 1: Professional values and behaviours Domain 2: Professional skills <ul style="list-style-type: none"> <li>• practical skills</li> <li>• communication and interpersonal skills</li> <li>• dealing with complexity and uncertainty</li> <li>• clinical skills (<i>history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using</i></li> </ul>

	<p><i>medical devices safely; infection control and communicable disease)</i></p> <p>Domain 3: Professional knowledge</p> <ul style="list-style-type: none"> <li>• professional requirements</li> <li>• national legislative requirements</li> <li>• the health service and healthcare systems in the four countries</li> </ul> <p>Domain 4: Capabilities in health promotion and illness prevention</p> <p>Domain 5: Capabilities in leadership and teamworking</p> <p>Domain 6: Capabilities in patient safety and quality improvement</p> <ul style="list-style-type: none"> <li>• patient safety</li> <li>• quality improvement</li> </ul>
<b>Evidence to inform decision</b>	<p>MCR</p> <p>MSF</p> <p>Mini-CEX</p> <p>DOPS</p> <p>Specialty exam</p> <p>QIPAT</p> <p>ALS</p> <p>CbD</p> <p>Evidence of reflection</p> <p>PS</p> <p>End of placement reports</p> <p>Presentation at Grand rounds</p> <p>Presentations at regional and national meetings</p> <p>Publications</p> <p>Clinic letters</p> <p>Evidence of participation in accreditation processes</p>
<b>2. Managing, developing, and delivering clinical immunology services in all appropriate service settings</b>	
<b>Descriptors</b>	<ul style="list-style-type: none"> <li>• Demonstrates effective clinical management of primarily immunological conditions and other conditions that can mimic immunological disease</li> <li>• Delivers patient centred care including shared decision making</li> <li>• Demonstrates effective consultation skills</li> <li>• Formulates an appropriate diagnostic and management plan, taking into account patient preferences</li> <li>• Explains clinical reasoning behind diagnostic and clinical management decisions to patients/carers/guardians and other colleagues and clearly communicates risk/benefit analysis of proposed interventions.</li> <li>• Takes a relevant patient history including patient symptoms, concerns, priorities and preferences</li> <li>• Shows appropriate clinical reasoning by analysing physical, immunological and psychological information</li> <li>• Formulates an appropriate differential diagnosis</li> <li>• Formulates an appropriate diagnostic and management plan, taking into account patient preferences, available resources, the urgency of intervention and the risk/benefit ratio of potential interventions</li> </ul>

<b>GPCs</b>	<p>Domain 1: Professional values and behaviours</p> <p>Domain 2: Professional skills</p> <ul style="list-style-type: none"> <li>• practical skills</li> <li>• communication and interpersonal skills</li> <li>• dealing with complexity and uncertainty</li> <li>• clinical skills (<i>history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease</i>)</li> </ul> <p>Domain 3: Professional knowledge</p> <ul style="list-style-type: none"> <li>• professional requirements</li> <li>• national legislative requirements</li> <li>• the health service and healthcare systems in the four countries</li> </ul> <p>Domain 4: Capabilities in health promotion and illness prevention</p> <p>Domain 5: Capabilities in leadership and teamworking</p> <p>Domain 6: Capabilities in patient safety and quality improvement</p> <ul style="list-style-type: none"> <li>• patient safety</li> <li>• quality improvement</li> </ul>
<b>Evidence to inform decision</b>	<p>MCR</p> <p>MSF</p> <p>Mini-CEX</p> <p>DOPS</p> <p>Specialty exam</p> <p>QIPAT</p> <p>ALS</p> <p>CbD</p> <p>Evidence of reflection</p> <p>PS</p> <p>End of placement reports</p> <p>Presentation at Grand rounds</p> <p>Presentations at regional and national meetings</p> <p>Publications</p> <p>Clinic letters</p> <p>Evidence of participation in accreditation processes</p>
<b>3. Providing advice to colleagues on selection, interpretation and limitations of laboratory and other investigations for common immunological and allergic conditions</b>	
<b>Descriptors</b>	<ul style="list-style-type: none"> <li>• Demonstrates understanding of the principles and utility of commonly used investigations for diagnosis and monitoring for immunological and allergic conditions and their limitations</li> <li>• Understands and can manage uncertainty in the interpretation of immunological tests and its effect on diagnostic utility</li> <li>• Demonstrates ability to select appropriate tests and to interpret test results appropriately in patients with suspected allergic and immunological conditions</li> </ul>

	<ul style="list-style-type: none"> <li>• Demonstrates ability to explain the clinical reasoning behind diagnostic decisions to patients/carers/guardians and other colleagues.</li> <li>• Demonstrates ability to advise patients, colleagues, and an MDT on interpretation of test results and choice of test</li> <li>• Demonstrates understanding of genomics and impact of investigations on the diagnosis and treatment of allergic and immunological disease</li> </ul>
<b>GPCs</b>	<p>Domain 1: Professional values and behaviours</p> <p>Domain 2: Professional skills</p> <ul style="list-style-type: none"> <li>• practical skills</li> <li>• communication and interpersonal skills</li> <li>• dealing with complexity and uncertainty</li> <li>• clinical skills (<i>history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease</i>)</li> </ul> <p>Domain 3: Professional knowledge</p> <ul style="list-style-type: none"> <li>• professional requirements</li> <li>• national legislative requirements</li> <li>• the health service and healthcare systems in the four countries</li> </ul> <p>Domain 4: Capabilities in health promotion and illness prevention</p> <p>Domain 5: Capabilities in leadership and teamworking</p> <p>Domain 6: Capabilities in patient safety and quality improvement</p> <ul style="list-style-type: none"> <li>• patient safety</li> <li>• quality improvement</li> </ul>
<b>Evidence to inform decision</b>	<p>MCR</p> <p>MSF</p> <p>Specialty exam</p> <p>QIPAT</p> <p>CbD</p> <p>Evidence of reflection</p> <p>End of placement reports</p> <p>Presentation at Grand rounds</p> <p>Presentations at regional and national meetings</p> <p>Publications</p> <p>Clinical letters</p>
<b>4. Supporting the management of patients with allergy, immunodeficiency, auto-immune disease, and auto-inflammatory disease, in liaison with other specialties including primary care</b>	
<b>Descriptors</b>	<ul style="list-style-type: none"> <li>• Demonstrates ability to develop effective management plans for patients with allergic and immunological conditions in a variety of care settings</li> <li>• Demonstrates effective liaison with other specialties including primary care in the management of patients with suspected allergic and immunological disease</li> </ul>

	<ul style="list-style-type: none"> <li>• Participates in the development of pathways and/or protocols for patients with allergic and immunological diseases</li> <li>• Participates actively in the multidisciplinary team</li> <li>• Recognises the importance of prompt and accurate information sharing with primary care team</li> <li>• Accurate and appropriate confirmation or exclusion of allergic conditions</li> <li>• Supporting identification of allergic and non-allergic diseases</li> </ul>
<b>GPCs</b>	<p>Domain 1: Professional values and behaviours</p> <p>Domain 2: Professional skills</p> <ul style="list-style-type: none"> <li>• practical skills</li> <li>• communication and interpersonal skills</li> <li>• dealing with complexity and uncertainty</li> <li>• clinical skills (<i>history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease</i>)</li> </ul> <p>Domain 3: Professional knowledge</p> <ul style="list-style-type: none"> <li>• professional requirements</li> <li>• national legislative requirements</li> <li>• the health service and healthcare systems in the four countries</li> </ul> <p>Domain 4: Capabilities in health promotion and illness prevention</p> <p>Domain 5: Capabilities in leadership and teamworking</p> <p>Domain 6: Capabilities in patient safety and quality improvement</p> <ul style="list-style-type: none"> <li>• patient safety</li> <li>• quality improvement</li> </ul>
<b>Evidence to inform decision</b>	<p>MCR</p> <p>MSF</p> <p>DOPS</p> <p>Specialty exam</p> <p>QIPAT</p> <p>CbD</p> <p>Evidence of reflection</p> <p>End of placement reports</p> <p>Presentation at grand rounds</p> <p>Presentations at regional and national meetings</p> <p>Publications</p> <p>Clinical letters</p> <p>Mini-CEX</p>
<b>5. Delivering and supporting both immune-mediated and other therapeutic interventions in allergic and immunological conditions</b>	
<b>Descriptors</b>	<ul style="list-style-type: none"> <li>• Demonstrate ability to deliver effective: <ul style="list-style-type: none"> <li>○ Therapeutic interventions for allergic and immunological conditions including: <ul style="list-style-type: none"> <li>▪ Immunoglobulin</li> <li>▪ C1 Inhibitor and other treatments for angioedema</li> <li>▪ Immunotherapy</li> </ul> </li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>▪ Desensitisation therapies</li> <li>▪ Biologics</li> <li>▪ Rescue medications</li> <li>○ Sequencing of therapies</li> <li>• Treatment and follow up of patients with anaphylaxis</li> <li>• Support for patients and their carers, on self-care and home therapies</li> </ul>
<b>GPCs</b>	<p>Domain 1: Professional values and behaviours</p> <p>Domain 2: Professional skills</p> <ul style="list-style-type: none"> <li>• practical skills</li> <li>• communication and interpersonal skills</li> <li>• dealing with complexity and uncertainty</li> <li>• clinical skills (<i>history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease</i>)</li> </ul> <p>Domain 3: Professional knowledge</p> <ul style="list-style-type: none"> <li>• professional requirements</li> <li>• national legislative requirements</li> <li>• the health service and healthcare systems in the four countries</li> </ul> <p>Domain 4: Capabilities in health promotion and illness prevention</p> <p>Domain 5: Capabilities in leadership and teamworking</p> <p>Domain 6: Capabilities in patient safety and quality improvement</p> <ul style="list-style-type: none"> <li>• patient safety</li> <li>• quality improvement</li> </ul>
<b>Evidence to inform decision</b>	<p>MCR</p> <p>MSF</p> <p>Mini-CEX</p> <p>DOPS</p> <p>Specialty exam</p> <p>QIPAT</p> <p>ALS</p> <p>CbD</p> <p>Evidence of reflection</p> <p>PS</p> <p>End of placement reports</p> <p>Presentation at Grand rounds</p> <p>Presentations at regional and national meetings</p> <p>Publications</p> <p>Clinical letters</p> <p>Evidence of participation in accreditation processes</p>
<b>6. Understanding the needs of adolescents and young adults with allergic and immunological diseases transitioning to adulthood</b>	
<b>Descriptors</b>	<ul style="list-style-type: none"> <li>• Demonstrate ability to deliver transition services in accordance with national guidelines by: <ul style="list-style-type: none"> <li>○ Understanding behavioural and psychosocial issues in transition</li> </ul> </li> </ul>



	<ul style="list-style-type: none"> <li>○ Developing effective plans for transition between paediatric and adult services</li> <li>○ Effective communication with the patients and when appropriate their carers</li> </ul>
<b>GPCs</b>	<p>Domain 1: Professional values and behaviours</p> <p>Domain 2: Professional skills</p> <ul style="list-style-type: none"> <li>● practical skills</li> <li>● communication and interpersonal skills</li> <li>● dealing with complexity and uncertainty</li> <li>● clinical skills (<i>history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease</i>)</li> </ul> <p>Domain 3: Professional knowledge</p> <ul style="list-style-type: none"> <li>● professional requirements</li> <li>● national legislative requirements</li> <li>● the health service and healthcare systems in the four countries</li> </ul> <p>Domain 4: Capabilities in health promotion and illness prevention</p> <p>Domain 5: Capabilities in leadership and teamworking</p> <p>Domain 6: Capabilities in patient safety and quality improvement</p> <ul style="list-style-type: none"> <li>● patient safety</li> <li>● quality improvement</li> </ul>
<b>Evidence to inform decision</b>	<p>MCR</p> <p>MSF</p> <p>Mini-CEX</p> <p>Specialty exam</p> <p>QIPAT</p> <p>CbD</p> <p>Evidence of reflection</p> <p>PS</p> <p>End of placement reports</p> <p>Presentation at Grand rounds</p> <p>Presentations at regional and national meetings</p> <p>Publications</p> <p>Clinical letters</p> <p>Evidence of participation in accreditation processes</p>
<b>7. Able to deliver a clinical laboratory liaison service to support investigation and management of allergic and immunological disorders across primary and secondary care</b>	
<b>Descriptors</b>	<ul style="list-style-type: none"> <li>● Demonstrates ability to liaise with laboratory and clinical users to develop optimised, evidence-based pathways for use of immunological laboratory testing</li> <li>● Demonstrates expertise in the selection, interpretation, and limitations of immunological tests</li> <li>● Demonstrates ability to deliver effective demand management</li> </ul>

	<ul style="list-style-type: none"> <li>• Promotes the use of evidence-based tests, critical evaluation of data and awareness of tests of unproven value and is able to advise patients and colleagues appropriately</li> <li>• Demonstrates ability to analyse and critically interpret laboratory statistical data and to make informed decisions regarding assay selection, performance, and demand management</li> <li>• Demonstrates ability to provide advanced interpretative advice</li> </ul>
<b>GPCs</b>	<p>Domain 1: Professional values and behaviours</p> <p>Domain 2: Professional skills</p> <ul style="list-style-type: none"> <li>• practical skills</li> <li>• communication and interpersonal skills</li> <li>• dealing with complexity and uncertainty</li> <li>• clinical skills (<i>history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease</i>)</li> </ul> <p>Domain 3: Professional knowledge</p> <ul style="list-style-type: none"> <li>• professional requirements</li> <li>• national legislative requirements</li> <li>• the health service and healthcare systems in the four countries</li> </ul> <p>Domain 4: Capabilities in health promotion and illness prevention</p> <p>Domain 5: Capabilities in leadership and teamworking</p> <p>Domain 6: Capabilities in patient safety and quality improvement</p> <ul style="list-style-type: none"> <li>• patient safety</li> <li>• quality improvement</li> </ul>
<b>Evidence to inform decision</b>	<p>MCR</p> <p>MSF</p> <p>Specialty exam</p> <p>QIPAT</p> <p>CbD</p> <p>Evidence of reflection</p> <p>End of placement reports</p> <p>Presentation at Grand rounds</p> <p>Presentations at regional and national meetings</p> <p>Publications</p> <p>Clinical letters</p> <p>Evidence of participation in accreditation processes</p>
<b>8. Able to lead, supervise and deliver immunology laboratory diagnostic services.</b>	
<b>Descriptors</b>	<ul style="list-style-type: none"> <li>• Demonstrates comprehensive knowledge of laboratory management, organisation, quality assurance and laboratory accreditation sufficient to lead a diagnostic laboratory</li> <li>• Demonstrates ability to provide clinical leadership of a diagnostic laboratory including quality, financial and regulatory requirements</li> <li>• Demonstrates ability to review and provide oversight of test repertoire and new test introduction</li> </ul>

	<ul style="list-style-type: none"> <li>• Understands effective resource management in the use of laboratory investigations</li> <li>• Demonstrates the ability to critically appraise the literature and effective introduction and validation of new laboratory investigations.</li> </ul>
<b>GPCs</b>	<p>Domain 1: Professional values and behaviours</p> <p>Domain 2: Professional skills</p> <ul style="list-style-type: none"> <li>• practical skills</li> <li>• communication and interpersonal skills</li> <li>• dealing with complexity and uncertainty</li> <li>• clinical skills (<i>history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease</i>)</li> </ul> <p>Domain 3: Professional knowledge</p> <ul style="list-style-type: none"> <li>• professional requirements</li> <li>• national legislative requirements</li> <li>• the health service and healthcare systems in the four countries</li> </ul> <p>Domain 4: Capabilities in health promotion and illness prevention</p> <p>Domain 5: Capabilities in leadership and teamworking</p> <p>Domain 6: Capabilities in patient safety and quality improvement</p> <ul style="list-style-type: none"> <li>• patient safety</li> <li>• quality improvement</li> </ul>
<b>Evidence to inform decision</b>	<p>MCR</p> <p>MSF</p> <p>Specialty exam</p> <p>QIPAT</p> <p>CbD</p> <p>Evidence of reflection</p> <p>End of placement reports</p> <p>Presentation at Grand rounds</p> <p>Presentations at regional and national meetings</p> <p>Publications</p> <p>Clinical letters</p> <p>Evidence of participation in accreditation processes</p> <p>Participation in verification and validation</p> <p>Participation in root cause analysis</p> <p>Participation in Horizontal, Vertical and Examination audits</p>

### 3.4 Presentations and conditions

The table below details the key presentations and conditions of Allergy, clinical and laboratory immunology. Each of these should be regarded as a clinical context in which trainees should be able to demonstrate CiPs and GPCs. In this spiral curriculum, trainees will expand and develop the knowledge, skills and attitudes around managing patients with

these conditions and presentations. The patient should always be at the centre of knowledge, learning and care.

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

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

Particular presentations, conditions and issues are listed either because they are common or serious (having high morbidity, mortality and/or serious implications for treatment or public health).

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

For all the laboratory immunology methods, the trainees will develop in-depth knowledge and understanding of assay principles to enable them to trouble-shoot, quality assure and provide safe and useful clinical interpretation for immunological assays across manual and automated platforms. Trainees are not expected to be competent in performing all the assay techniques independently in the laboratory, although performing assays under supervision is essential to learning assay principles.

Curriculum area	Presentations	Conditions/Issues
<b>Allergy and Immunological emergencies</b>	<ul style="list-style-type: none"> <li>• Anaphylaxis and mimics of anaphylaxis</li> <li>• Severe sting reactions</li> <li>• Adverse reaction during Immunotherapy / Desensitisation and provocation (Challenge) testing</li> <li>• Adverse reactions during Immunoglobulin replacement and use of biologics</li> <li>• Severe Infections in immunocompromised host</li> <li>• Acute severe angioedema</li> <li>• Acute severe asthma</li> </ul>	<ul style="list-style-type: none"> <li>• IgE and non IgE mediated</li> <li>• Allergen desensitisation</li> <li>• Provocation (challenge) Testing</li> <li>• Immunoglobulin replacement</li> <li>• Use of Biologics</li> <li>• Diagnosis and emergency management of Severe Combined Immunodeficiency</li> <li>• Diagnosis and emergency management of Severe/opportunistic infections in Adult CID</li> <li>• C1 Inhibitor deficiency (HAE and AAE)</li> <li>• Bradykinin mediated Angioedema with normal C1 Inhibitor</li> </ul>
<b>Allergic diseases and their mimics</b>	<ul style="list-style-type: none"> <li>• Asthma</li> <li>• Localised and systemic Eosinophilic diseases</li> <li>• Urticaria</li> <li>• Angioedema</li> <li>• Rhinitis</li> <li>• Conjunctivitis</li> <li>• Itching</li> <li>• Dermatitis</li> <li>• Blisters</li> <li>• Purpura</li> <li>• Cough</li> <li>• Airways obstruction</li> <li>• Gastrointestinal Symptoms</li> </ul>	<ul style="list-style-type: none"> <li>• Allergic and non-allergic Asthma</li> <li>• Allergic and non-allergic rhinitis</li> <li>• Allergic and non-allergic dermatitis</li> <li>• Contact Dermatitis</li> <li>• Eosinophilic lung and gut disorders</li> <li>• Anaphylaxis</li> <li>• Food allergy causing immediate or delayed systemic or localised symptoms</li> <li>• Co-factor induced allergic conditions</li> <li>• Allergy to drugs, vaccines and their excipients</li> <li>• Venom allergy</li> <li>• Perioperative Allergy &amp; Anaphylaxis</li> <li>• Mast cell disease</li> </ul>

Curriculum area	Presentations	Conditions/Issues
	<ul style="list-style-type: none"> <li>• Cardiorespiratory symptoms</li> <li>• Anaphylaxis</li> <li>• Nasal polyposis</li> </ul>	<ul style="list-style-type: none"> <li>• Allergic and non-allergic urticaria and angioedema</li> <li>• Aspirin / NSAID Exacerbated Respiratory Disease (AERD / NERD)</li> <li>• Severe Cutaneous Adverse Reactions to Drugs</li> <li>• Non IgE mediated hypersensitivity</li> <li>• Food protein-induced enterocolitis syndrome</li> <li>• Transitional care from Paediatric to adult care</li> </ul>
<b>Immunodeficiency</b>	<ul style="list-style-type: none"> <li>• Recurrent or atypical or opportunistic infections</li> <li>• Unexplained Bronchiectasis</li> <li>• Recurrent or unusual abscesses</li> <li>• Severe atypical Eczema / dermatitis / erythroderma</li> <li>• Lymphoproliferation (malignant and non-malignant)</li> <li>• Granulomatous disease</li> <li>• Poor wound healing</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrates understanding of diagnosis and management of PID and their management (Refer to latest ESID or IUIS definitions for a non-exhaustive list)</li> <li>• Primary and secondary disorders of antibody production</li> <li>• Primary and acquired disorders of cellular immunity.</li> <li>• Primary and acquired disorders of complement production and function</li> <li>• Common or serious disorders of innate immune system, cytokines and immunological signalling and regulation</li> <li>• Malignancies associated with immunodeficiency and immunosuppression</li> <li>• Non-malignant complications of immunodeficiency and immunosuppression/immunomodulatory treatments</li> <li>• Periodic fever syndromes</li> </ul>

Curriculum area	Presentations	Conditions/Issues
		<ul style="list-style-type: none"> <li>• Disorders of immune regulation</li> <li>• Transitional care from Paediatric to adult care</li> </ul>
<b>Allergy and Immunology Therapeutics</b>	<ul style="list-style-type: none"> <li>• Conditions requiring allergen/drug desensitisation</li> <li>• Conditions requiring investigation by provocation Challenges</li> <li>• Conditions requiring Immunoglobulin replacement</li> <li>• Conditions requiring treatment with biological therapies</li> <li>• Conditions requiring treatment with Immunomodulatory and Immunosuppressive agents</li> <li>• Conditions requiring prophylactic antimicrobial prophylaxis</li> </ul>	<ul style="list-style-type: none"> <li>• Primary and Secondary Immune deficiencies</li> <li>• Hereditary and non-hereditary Angioedema</li> <li>• Asthma</li> <li>• Rhinitis</li> <li>• Dermatitis</li> <li>• Urticaria and angiodema</li> <li>• Drug Allergy</li> <li>• Food Allergy</li> <li>• Venom Allergy</li> </ul>
<b>Liaison Allergy</b>	<ul style="list-style-type: none"> <li>• Suspected allergic reactions to foods, drugs, aeroallergen and insect stings in Primary and secondary care</li> <li>• Conditions requiring shared care with primary care and other specialties</li> <li>• Nasal obstruction</li> <li>• Oesophagitis</li> <li>• Severe Dermatitis</li> <li>• Conditions mimicking allergic disease</li> </ul>	<ul style="list-style-type: none"> <li>• Mild to moderate allergic conditions presenting to primary care</li> <li>• Eosinophilic Oesophagitis</li> <li>• Severe Atopic Dermatitis</li> <li>• Nasal Polyposis</li> <li>• Suspected allergic conditions</li> <li>• Food intolerance</li> <li>• Biological therapy</li> <li>• Contact dermatitis</li> <li>• Sulphite/salicylate Intolerance</li> <li>• Irritable Bowel Disease</li> <li>• Non evidence based and complementary medicine in allergy e.g. Patients who have</li> </ul>

Curriculum area	Presentations	Conditions/Issues
		<p>had “alternative” allergy tests but do not have allergic symptoms.</p> <ul style="list-style-type: none"> <li>• Non allergic causes of raised IgE</li> <li>• Hypereosinophilic syndromes</li> </ul>
<b>Liaison Clinical and Laboratory Immunology</b>	<p>Primary care and other speciality colleagues seeking advice on appropriate initial testing and interpretation, and patient specialist referral of:</p> <ul style="list-style-type: none"> <li>• Suspected Immunodeficiency</li> <li>• Suspected Autoimmune disease, both systemic and organ-specific</li> <li>• Haematological malignancy in the context of immune deficiency</li> <li>• Congenital Cardiac anomalies</li> <li>• Developmental delay, Failure to thrive (child) or wasting (adult)</li> <li>• GVHD of blood transfusion</li> <li>• Mother-to-child (infant) engraftment</li> <li>• Haemolysis</li> <li>• Atypical Inflammatory bowel disease</li> <li>• Poor wound healing</li> <li>• Delayed separation of umbilical cord</li> <li>• Recurrent Fever</li> <li>• Unexplained Bronchiectasis, Pneumatoceles, Interstitial lung disease</li> <li>• Familial occurrence of similar symptoms</li> <li>• Absence of Thymus on imaging</li> <li>• Thymoma</li> <li>• Nephrotic and nephritic syndromes</li> </ul>	<p>Advise on recognition and investigation of suspected immunodeficiency</p> <p>Able to advise on referral, investigation and management of tests/conditions for primary care and secondary care referrers</p> <ul style="list-style-type: none"> <li>• Coeliac Disease</li> <li>• Paraproteins</li> <li>• Cryoproteins</li> <li>• Complement deficiency</li> <li>• Total IgE, Specific IgE</li> <li>• IgG4 disease</li> <li>• Hyper IgE Syndromes</li> <li>• Component resolved diagnostics for Allergy</li> <li>• Basophil Activation testing</li> <li>• Rheumatic diseases/Autoimmunity including <ul style="list-style-type: none"> <li>○ SLE (ANA, ENA, dsDNA)</li> <li>○ myositis</li> <li>○ Scleroderma</li> <li>○ Sjogren’s syndrome</li> <li>○ Rheumatoid arthritis (RF, anti-CCP)</li> </ul> </li> <li>• Paraneoplastic Antibodies</li> </ul>



Curriculum area	Presentations	Conditions/Issues
	<ul style="list-style-type: none"> <li>• Abnormal LFTs and jaundice</li> <li>• Recurrent fevers</li> <li>• Cytopaenias</li> <li>• Chronic diarrhoea</li> </ul>	<ul style="list-style-type: none"> <li>• Autoimmune liver diseases – Primary Biliary cirrhosis, Autoimmune Hepatitis, Primary sclerosing cholangitis</li> <li>• Autoimmune neurological disease including – Myasthenia Gravis, GBS/CIDP, encephalitis</li> <li>• Vasculitis including               <ul style="list-style-type: none"> <li>○ ANCA associated vasculitides</li> <li>○ Hypocomplementemic urticarial vasculitis</li> <li>○ Cryoglobulinaemia vasculitis</li> <li>○ Giant cell arteritis</li> <li>○ Henoch Schonlein purpura</li> <li>○ Haemolytic uraemic syndrome/TTP</li> <li>○ Behcet’s disease</li> </ul> </li> <li>• Immunological Renal disease including               <ul style="list-style-type: none"> <li>○ Glomerulonephritis (membranous, post infectious, GBM and membranoproliferative)</li> </ul> </li> </ul>
Laboratory Immunology	<ul style="list-style-type: none"> <li>• Understand the diagnostic utility and limitations of laboratory tests, e.g. sensitivity, specificity, predictive values</li> <li>• Understand of the methods of standardisation and calibration:</li> <li>• Understand the statistics of IQC, EQA, Screening, reference range assignments,</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding of Preanalytical, Analytical and Post analytical issues</li> <li>• Trouble-shooting and risk assessment of laboratory errors</li> <li>• Automated instrumentation Random access, immunoassay analysers robotics and modular systems. Understand the technology and design of immunology/biochemistry analysers and appreciate their limitations and benefits.</li> </ul>

Curriculum area	Presentations	Conditions/Issues
	<p>imprecision, bias, sensitivity, specificity, common interferences,</p> <ul style="list-style-type: none"> <li>• Understand the preparation and storage of assay reagents</li> <li>• Understand the principles of operation of automated, semi-automated and manual analysis across all fluid phase, solid phase, flow cytometric and gel phase techniques</li> <li>• Understand the principles of quality control, calibration and quality assurance of automated, semi-automated and manual analysis across all fluid phase, solid phase, flow cytometric and gel phase techniques</li> <li>• Understand the principles of verification and validation of automated, semi-automated and manual analysis across all fluid phase, solid phase flow cytometric and gel phase techniques</li> <li>• Understand the principles of verification and validation of automated, semi-automated and manual Light and immunofluorescence microscopy</li> </ul>	<ul style="list-style-type: none"> <li>• Spectrometric methods Spectrometry, Turbidimetry, nephelometry and Mass spectrometry where relevant</li> <li>• Immunochemical techniques. Bead- and chip-based serological techniques.</li> <li>• Gel phase and Capillary Zone electrophoresis, Immunofixation, Immunosubtraction and Iso-electric focussing</li> <li>• Flow cytometry for Immunophenotyping and functional studies for diagnosis and monitoring of immunodeficiency and allergic diseases and immunohaematology of lymphoid malignancies</li> <li>• Molecular techniques, DNA/ RNA preparations and extraction and PCR for use in diagnosis and immunophenotyping of Immunological, relevant haematooncology of immunodeficiency and allergic disorders.</li> <li>• MHC, HLA, tissue typing, genetics and genomics Understanding of the techniques and their application to diagnosis and in transplantation relevant to immunological practice.</li> </ul>

Curriculum area	Presentations	Conditions/Issues
	<ul style="list-style-type: none"> <li>• Identification of invalid and suspicious results - be aware of the limitations of automated, semi-automated and manual analysis across all fluid phase, solid phase and gel phase techniques</li> <li>• Interpretation and reporting of immunology laboratory results</li> <li>• Knowledge of safe laboratory practice - Biological specimen handling; COSHH; RIDDOR; radioactivity</li> <li>• Understanding of principles and application of Laboratory Audit, Root Cause analysis, Verification and Validation, IQC and EQA across all immunoassay</li> <li>• Laboratory management proficiencies</li> </ul>	<p>Interpretation of genetic results in liaison with genetics laboratories and Genomic Hubs</p> <ul style="list-style-type: none"> <li>• Proteins <ul style="list-style-type: none"> <li>Principles of measurement relevant to immunological practice</li> <li>Properties and functions of the principal plasma proteins relevant to Acute Phase responses, mast cell mediators, complement and immunoglobulins in diseases states, A1-AT, cryoproteins, cytokines</li> </ul> </li> <li>• Light and immunofluorescence microscopy <ul style="list-style-type: none"> <li>Principles of technique and interpretation in Immunological diseases</li> </ul> </li> <li>• Accreditation, business planning, relevant legislation and legal frameworks, use of guidelines</li> </ul>

### 3.5 Practical procedures

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

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

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

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

Procedure	ST3	ST4	ST5	ST6	ST7
Minimum level required					
Skin Prick Testing	Competent to perform unsupervised	Maintain	Maintain	Maintain	Maintain
Intradermal Testing	Perform under supervision	Competent to perform unsupervised	Maintain	Maintain	Maintain
Drug Provocation Test	Perform under supervision	Perform under supervision	Perform under supervision	Competent to perform unsupervised	Maintain
Food Provocation Test	Perform under supervision	Perform under supervision	Perform under supervision	Competent to perform unsupervised	Maintain
Drug Desensitization	Perform under supervision	Perform under supervision	Perform under supervision	Perform under supervision	Competent to perform unsupervised
Aeroallergen Immunotherapy	Perform under supervision	Perform under supervision	Competent to perform unsupervised	Maintain	Maintain
Venom Immunotherapy	Perform under supervision	Perform under supervision	Competent to perform unsupervised	Maintain	Maintain

Procedure	ST3	ST4	ST5	ST6	ST7
Perioperative anaphylaxis assessment	Perform under supervision	Perform under supervision	Perform under supervision	Competent to perform unsupervised	Maintain
Spirometry	Competent to perform unsupervised	Maintain	Maintain	Maintain	Maintain
Fractional Exhaled nitric oxide (FeNO)	Competent to perform unsupervised	Maintain	Maintain	Maintain	Maintain
Anterior Rhinoscopy	Competent to perform unsupervised	Maintain	Maintain	Maintain	Maintain

## 4 Learning and Teaching

### 4.1 The training programme

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

Progression through the programme will be determined by the Annual Review of Competency Progression (ARCP) process and the training requirements for each indicative year of training are summarised in the ARCP decision aid (available on the [JRCPTB website](#)). Trainees will have appropriate clinical supervisors and a named educational supervisor. The clinical supervisor and educational supervisor may be the same person.

The sequence of training should ensure appropriate progression in experience and responsibility. The training to be provided at each training site is defined to ensure that, during the programme, the curriculum requirements are met and also that unnecessary duplication and educationally unrewarding experiences are avoided.

#### Experience of other specialty clinics

In order for trainees to access the experience to meet the learning outcomes and see the breadth of presentations, attachments to other specialties’ clinics may be required. These may include ENT, Dermatology, Respiratory and Paediatric Allergy and Immunology. Time may also be spent in tertiary referral centres.

#### Laboratory immunology

Trainees should have regular and ongoing exposure to laboratory immunology throughout the training programme. This should include an indicative 2-4 week placement early in the training programme. Placements for specialised laboratory experience may also be required.

## **4.2 Teaching and learning methods**

The curriculum will be delivered through a variety of learning experiences and will achieve the capabilities described in the syllabus through a variety of learning methods. There will be a balance of different modes of learning from formal teaching programmes to experiential learning 'on the job'. The proportion of time allocated to different learning methods may vary depending on the nature of the attachment within a rotation.

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

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

### **Medical clinics including specialty clinics**

The educational objectives of attending clinics are:

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

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

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

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

### **Reviewing patients with consultants**

It is important that trainees have an opportunity to present at least a proportion of patients seen for senior review in order to obtain immediate feedback into their performance (that

may be supplemented by an appropriate WBA such as an ACAT, mini-CEX or CBD). This may be accomplished when patients are referred as day cases or for consultation.

### **Personal ward rounds and provision of ongoing clinical care on specialist medical ward attachments**

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 on clinical problems.

### **Learning in the Laboratory**

There are many opportunities for trainees to learn in the laboratory. Trainees will spend appropriate time in the laboratory, reviewing results and reporting laboratory tests alongside consultants, more senior trainees and experienced clinical scientists.

### **Laboratory work**

This would take the form of introduction to laboratory techniques, immunoassay platforms and performing some assays under supervision.

### **Laboratory authorisation, interpretation and reporting**

The educational objective of participating in laboratory authorisation are:

- To be able interpret and issue clinically helpful reports on immunology laboratory results
- Be able to inform clinical users in a defined time-frame
- To be able to provide safe, appropriate and helpful comments to the clinical user
- To propose relevant further investigations and management plan where needed
- To review available clinical information and available results across laboratory disciplines
- To recognise trends and laboratory quality issues
- To liaise closely with laboratory teams
- To be able communicate urgent laboratory results

These objectives can be achieved by participating in the laboratory rota for immunology results authorisation or advice rota. The authorisation queue may be supervised by clinical scientists, Consultant Physicians or other qualified health care professionals. After initial induction, trainees will review and interpret results, under direct supervision. The degree of responsibility taken by the trainee will increase as competency increases. Trainees should see a range of immunology results on the authorisation queue and present their interpretation and proposed actions to their clinical supervisor. Laboratory reports issued by the trainee should also be reviewed and feedback given.

The number of results that a trainee should authorise in each session is not defined, but as a guide this should be a minimum of four hours per week

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

## **Reviewing of laboratory incidents, quality reports with consultants**

It is important that trainees have an opportunity to present and discuss laboratory incidents and quality reports. Trainees should discuss root cause analysis with senior clinical scientists and consultants and seek senior review in order to obtain immediate feedback into their performance (that may be supplemented by an appropriate WBA such as an DOPs, mini-CEX or CbD).

They should have exposure to laboratory quality systems and quality control (QC) meetings.

Every Internal Quality Control (IQC) and External Quality Assessment (EQA) issue provides a learning opportunity, which will be enhanced by doing a root-cause analysis and corrective actions. The experience of reflecting on pre-analytical, analytical and post-analytical issues is a critical part both of the diagnostic process as well as management. Trainees should discuss their learning with consultants, quality meetings and Multidisciplinary meetings.

## **Multidisciplinary team meetings**

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

The degree of responsibility taken by the trainee will increase as competency increases. There should be appropriate levels of clinical supervision throughout training, with increasing clinical independence and responsibility.

## **Formal postgraduate teaching**

The content of these sessions 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.

Suggested activities include:

- a programme of formal bleep-free regular teaching sessions to cohorts of trainees (eg a weekly training hour for IM teaching within a training site)
- case presentations
- research, audit and quality improvement projects
- lectures and small group teaching
- Grand Rounds
- clinical skills demonstrations and teaching
- critical appraisal and evidence based medicine and journal clubs
- joint specialty meetings
- training programmes organised on a deanery, regional or national basis, which are designed to cover aspects of the training programme outlined in this curriculum.

**Learning with peers** - There are many opportunities for trainees to learn with their peers. Local postgraduate teaching opportunities allow trainees of varied levels of experience to come together for small group sessions.



### **Independent self-directed learning**

Trainees will use this time in a variety of ways depending upon their stage of learning.

Suggested activities include:

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

### **Formal study courses**

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

## **4.3 Academic training**

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

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

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

## **4.4 Taking time out of programme**

There are a number of circumstances when a trainee may seek to spend some time out of specialty training, such as undertaking a period of research or taking up a fellowship post. All such requests must be agreed by the postgraduate dean in advance and trainees are advised to discuss their proposals as early as possible. Full guidance on taking time out of programme can be found in the Gold Guide.

## **4.5 Acting up as a consultant**

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

## **5 Programme of Assessment**

### **5.1 Purpose of assessment**

The purpose of the programme of assessment is to:

- assess trainees' actual performance in the workplace
- enhance learning by providing formative assessment, enabling trainees to receive immediate feedback, understand their own performance and identify areas for development
- drive learning and enhance the training process by making it clear what is required of trainees and motivating them to ensure they receive suitable training and experience
- demonstrate trainees have acquired the GPCs and meet the requirements of GMP
- ensure that trainees possess the essential underlying knowledge required for their specialty
- provide robust, summative evidence that trainees are meeting the curriculum standards during the training programme;
- inform the ARCP, identifying any requirements for targeted or additional training where necessary and facilitating decisions regarding progression through the training programme;
- identify trainees who should be advised to consider changes of career direction.

### **5.2 Programme of Assessment**

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

The programme of assessment is comprised of several different individual types of assessment. A range of assessments is needed to generate the necessary evidence required for global judgements to be made about satisfactory performance, progression in, and completion of, training. All assessments, including those conducted in the workplace, are linked to the relevant curricular learning outcomes (eg through the blueprinting of assessment system to the stated curricular outcomes).

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

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

Assessment will take place throughout the training programme to allow trainees continually to gather evidence of learning and to provide formative feedback. Those assessment tools which are not identified individually as summative will contribute to summative judgements about a trainee's progress as part of the programme of assessment. The number and range of these will ensure a reliable assessment of the training relevant to their stage of training and achieve coverage of the curriculum.

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

### **5.3 Assessment of CiPs**

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

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

#### **Global assessment anchor statements**

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

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

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

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

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

### Level descriptors for specialty CiPs

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

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

### 5.4 Critical progression points

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

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

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

**Table 1: Outline grid of levels expected for Allergy, Clinical and Laboratory Immunology (ACLI) CiPs**

**Level descriptors**

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

Level 4: Entrusted to act unsupervised

Specialty CiP	Specialty training					CCT
	ST3	ST4	ST5	ST6	ST7	
1. Managing, developing, and delivering allergy services in all appropriate service settings	2	2	3	3	4	CRITICAL PROGRESSION POINT
2. Managing, developing, and delivering clinical immunology services in all appropriate service settings	2	2	3	3	4	
3. Providing advice to colleagues on selection, interpretation and limitations of laboratory and other investigations for common immunological and allergic conditions	2	2	3	4	4	
4. Supporting the management of patients with allergy, immunodeficiency and autoimmune disease, and auto-inflammatory disease, in liaison with other specialties including primary care	2	2	3	3	4	
5. Delivering and supporting both immune-mediated and other therapeutic interventions in allergic and immunological conditions	2	2	3	3	4	
6. Understanding the needs of adolescents and young adults with immunological and allergic diseases transitioning to adulthood	2	2	3	3	4	
7. Able to deliver a clinical laboratory liaison service to support investigation and management of allergic and immunological disorders across primary and secondary care	2	2	3	3	4	
8. Able to lead, supervise and deliver immunology laboratory diagnostic services	2	2	2	3	4	

## 5.5 Evidence of progress

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

### ***Summative assessment***

#### **Examinations and certificates**

- Advanced Life Support Certificate (ALS)
- FRCPATH Part 1
- FRCPATH Part 2

The summative assessments for ACLI are the FRCPATH Part 1 and Part 2. The Part 1 is also the Allergy and Clinical Immunology Certificate Examination (ACICE) taken by ACI pathway trainees. The examinations are managed by the Royal College of Pathologists and further information is available on the website [www.rcpath.org/trainees/examinations](http://www.rcpath.org/trainees/examinations).

It is recommended that trainees pass Part 1 by the end of ST5 in order to progress and allow time to obtain Part 2. Both parts of the FRCPATH must be completed by the end of training.

#### **Workplace based assessment (WPBA)**

- Direct Observation of Procedural Skills (DOPS) – summative

### ***Formative assessment***

#### **Supervised Learning Events (SLEs)**

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

#### **WPBA**

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

#### ***Supervisor reports***

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

These methods are described briefly below. More information and guidance for trainees and assessors are available in the ePortfolio and on the JRCPTB website ([www.jrcptb.org.uk](http://www.jrcptb.org.uk)).

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

### **Case-based Discussion (CbD)**

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

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

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

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

A DOPS is an assessment tool designed to evaluate the performance of a trainee in undertaking a practical procedure, against a structured checklist. The trainee receives immediate feedback to identify strengths and areas for development. DOPS can be undertaken as many times as the trainee and their supervisor feel is necessary (formative). A trainee can be regarded as competent to perform a procedure independently after they are signed off as such by an appropriate assessor (summative).

### **Multi-source feedback (MSF)**

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

### **Patient Survey (PS)**

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

### **Quality Improvement Project Assessment Tool (QIPAT)**

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



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

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

### **Multiple Consultant Report (MCR)**

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

### **Educational supervisors report (ESR)**

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

## **5.6 Decisions on progress (ARCP)**

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

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

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

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

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

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

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

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

## 5.7 Assessment blueprint

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

### KEY

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

### Blueprint for assessments mapped to CiPs

Learning outcomes	CbD	DOPS	MCR	Mini-CEX	MSF	PS	QIPAT	TO	FRCPATH Part 1	FRCPATH Part 2
Generic CiPs										
Able to function successfully within NHS organisational and management systems			√		√					
Able to deal with ethical and legal issues related to clinical practice	√	√	√	√	√					

Learning outcomes	Cbd	DOPS	MCR	Mini-CEX	MSF	PS	QIPAT	TO	FRCPATH Part 1	FRCPATH Part 2
Communicates effectively and is able to share decision making, while maintaining appropriate situational awareness, professional behaviour and professional judgement			√		√	√				
Is focused on patient safety and delivers effective quality improvement in patient care			√		√		√			
Carrying out research and managing data appropriately			√		√					
Acting as a clinical teacher and clinical supervisor			√		√			√		
<b>Specialty CiPs</b>										
Managing, developing, and delivering allergy services in all appropriate service settings	√	√	√	√	√	√	√		√	
Managing, developing, and delivering clinical immunology services in all appropriate service settings	√	√	√	√	√	√	√		√	
Providing advice to colleagues on selection, interpretation and limitations of laboratory and other investigations for common immunological and allergic conditions	√	√	√		√		√		√	
Supporting the management of patients with allergy, immunodeficiency, auto-immune disease, and auto-inflammatory disease, in liaison with other specialties including primary care	√	√	√	√	√		√		√	
Delivering and supporting both immune-mediated and other therapeutic interventions in allergic and immunological conditions	√	√	√	√	√	√	√		√	
Understanding the needs of adolescents and young adults with allergic and immunological diseases transitioning to adulthood.	√	√	√	√	√	√	√		√	
Able to deliver a clinical laboratory liaison service to support investigation and management of allergic and immunological disorders across primary and secondary care	√	√	√	√	√	√	√		√	√
Able to lead, supervise and deliver immunology laboratory diagnostic services	√		√	√	√	√	√		√	√

## 6 Supervision and feedback

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

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

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

### 6.1 Supervision

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

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

The role and responsibilities of supervisors have been defined by the GMC in their standards for medical education and training<sup>5</sup>.

#### Educational supervisor

The educational supervisor is responsible for the overall supervision and management of a doctor's educational progress during a placement or a series of placements. The educational supervisor regularly meets with the doctor in training to help plan their training, review progress and achieve agreed learning outcomes. The educational supervisor is responsible for the educational agreement, and for bringing together all relevant evidence to form a summative judgement about progression at the end of the placement or a series of placements.

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<sup>4</sup> [Improving feedback and reflection to improve learning. A practical guide for trainees and trainers](#)

<sup>5</sup> [Promoting excellence: standards for medical education and training](#)

### **Clinical supervisor**

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

The educational and (if relevant) clinical supervisors, when meeting with the trainee, should discuss issues of clinical governance, risk management and any report of any untoward clinical incidents involving the trainee. If the service lead (clinical director) has any concerns about the performance of the trainee, or there are issues of doctor or patient safety, these would be discussed with the clinical and educational supervisors (as well as the trainee). These processes, which are integral to trainee development, must not detract from the statutory duty of the trust to deliver effective clinical governance through its management systems.

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

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

### **Trainees**

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

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<sup>6</sup> [Recognition and approval of trainers](#)

## 6.2 Appraisal

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

### Induction Appraisal

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

### Mid-point Review

This meeting between trainee and educational supervisor is not mandatory (particularly when an attachment is shorter than 6 months) but is encouraged particularly if either the trainee or educational or clinical supervisor has training concerns or the trainee has been set specific targeted training objectives at their ARCP). At this meeting trainees should review their PDP with their supervisor using evidence from the eportfolio. Workplace based assessments and progress through the curriculum can be reviewed to ensure trainees are progressing satisfactorily, and attendance at educational events should also be reviewed. The PDP can be amended at this review.

### End of Attachment Appraisal

Trainees should review the PDP and curriculum progress with their educational supervisor using evidence from the eportfolio. Specific concerns may be highlighted from this appraisal. The end of attachment appraisal form should record the areas where further work is required to overcome any shortcomings. Further evidence of competence in certain areas may be needed, such as planned workplace based assessments, and this should be recorded. If there are significant concerns following the end of attachment appraisal then the programme director should be informed. Supervisors should also identify areas where a trainee has performed about the level expected and highlight successes.

## 7 Quality Management

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

- oversee recruitment and induction of trainees into the specialty
- allocate trainees into particular rotations appropriate to their training needs
- oversee the quality of training posts provided locally
- ensure adequate provision of appropriate educational events

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

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

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

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

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

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

## **8 Intended use of curriculum by trainers and trainees**

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

Clinical and educational supervisors should use the curriculum and decision aid as the basis of their discussion with trainees, particularly during the appraisal process. Both trainers and trainees are expected to have a good knowledge of the curriculum and should use it as a guide for their training programme.

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

### **Recording progress in the ePortfolio**

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

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

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

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

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

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

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

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

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

## **9 Equality and diversity**



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

The Federation of the Royal Colleges of Physicians believes that equality of opportunity is fundamental to the many and varied ways in which individuals become involved with the Colleges, either as members of staff and Officers; as advisers from the medical profession; as members of the Colleges' professional bodies or as doctors in training and examination candidates.

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

Compliance with anti-discriminatory practice will be assured through:

- monitoring of recruitment processes
- ensuring all College representatives and Programme Directors have attended appropriate training sessions prior to appointment or within 12 months of taking up post
- Deaneries ensuring that educational supervisors have had equality and diversity training (for example, an e-learning module) every three years
- Deaneries ensuring that any specialist participating in trainee interview/appointments committees or processes has had equality and diversity training (at least as an e-module) every three years
- ensuring trainees have an appropriate, confidential and supportive route to report examples of inappropriate behaviour of a discriminatory nature. Deaneries and Programme Directors must ensure that on appointment trainees are made aware of the route in which inappropriate or discriminatory behaviour can be reported and supplied with contact names and numbers. Deaneries must also ensure contingency mechanisms are in place if trainees feel unhappy with the response or uncomfortable with the contact individual
- providing resources to trainees needing support (for example, through the provision of a professional support unit or equivalent)
- monitoring of College Examinations
- ensuring all assessments discriminate on objective and appropriate criteria and do not unfairly advantage or disadvantage a trainee with any of the Equality Act 2010 protected characteristics. All efforts shall be made to ensure the participation of people with a disability in training through reasonable adjustments.

# JRCPTB

Joint Royal Colleges of Physicians Training Board

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