

## Review of training in Allergy and Immunology

### Introduction

National small specialty reviews allow us greater insight into the quality of training in small specialties. We are aware that in these specialties there are specific challenges for doctors in training, their trainers, and educational and clinical supervisors. These challenges also extend to local education and training boards (LETBs) and deaneries in quality managing the trainee experience and its outcomes. Our reviews highlight national issues across the specialty, consider areas where training is working well and being delivered to a high standard, and identify challenging areas that stakeholder organisations can improve together.

We define small specialties as those with fewer than 250 doctors currently in training. We tend to have limited evidence on the quality of these training posts because of the size of the programmes; where there are less than three doctors in training within a setting we are unable to publish national training survey results. Therefore, one aim of these reviews is to enhance the information available about the quality of training in these small specialties.

Our quality assurance reviews aim to assure us (the regulator), the public and delivery partners about the quality of training by ensuring compliance with our standards for training (in [Promoting excellence: standards for medical education and training](#)). These standards set out requirements for the management and delivery of undergraduate and postgraduate medical education and training. The standards came into effect on 1 January 2016 and replace the previous standards in *Tomorrow's Doctors* and *The Trainee Doctor*.

Although much of the visit activity for this review took place in 2015, we have mapped our findings to the new standards document.

This review focuses on the delivery of postgraduate education programmes in the medical specialties of Allergy and Immunology and considers the policies, processes and systems in place to support them. We aim to encourage improvement of the training experience and outcomes, share good practice and show the importance and benefits of effective training pathways.

## Background

In common with other small specialties, our evidence base for Allergy and Immunology is limited, but includes data from the following sources:

- the national training survey (NTS)
- annual review of competence progression (ARCP) outcomes
- quality assurance (QA) visits to deaneries and local education and training boards (LETBs)
- scheduled reports from deaneries/LETBs
- annual reports from the Joint Royal Colleges of Physicians Training Board (JRCPTB)

Our review took place between July 2015 and April 2016. We met with the Postgraduate Lead Dean for the specialty, both the Specialty Advisory Committees (SACs) and then separately with the SAC chairs. We attended a National Training day in Birmingham where we met with Immunology doctors in training. We also met with the Heads of School for both specialties, trainers and doctors in training at the London and South East LETB.

## Allergy

Allergy embraces a variety of medical specialties, including paediatrics and dietetics, and the training is unique and varied. Allergic diseases affect millions, and there is ample opportunity to provide tangible and effective help to sufferers, both through active intervention (drugs, immunotherapy) and allergen avoidance.

The training programme is based around a central core of general allergy clinics which should provide experience of a wide range of problems, including; food allergy, drug allergy and the management of anaphylaxis. Trainees are taught how to manage an allergen immunotherapy clinic. Alongside this, there are attachments to dermatology (for training in eczema, urticaria and contact dermatitis), ENT (evaluation and management of the upper respiratory tract), respiratory medicine (asthma, extrinsic allergic alveolitis and occupational lung disease), paediatrics (milestones, infant food allergy and substitute formulas, infant rhinitis, eczema and asthma) and immunology (vasculitis, immunoglobulin deficiency). In addition, the trainee will spend time in laboratory medicine, becoming acquainted with the indications, methods and limitations of relevant diagnostic tests such as a radioallergosorbent test (RAST).

Entry into Allergy training is possible following successful completion of both a foundation programme and a core training programme. There are two core training pathways for Allergy training:

- Core Medical Training (CMT)
- Acute Care Common Stem - Acute Medicine (ACCS-AM)

## Immunology

Immunology encompasses clinical and laboratory activity dealing with the study, diagnosis and management of patients with diseases resulting from disordered immunological mechanisms, and conditions in which immunological manipulations form an important part

of therapy. In the UK Immunologists provide combined clinical and laboratory services for patients with immunodeficiency, autoimmune disease, systemic vasculitis and allergy.

The clinical work of Immunologists is largely out-patient based and involves primary immunodeficiency, allergy, autoimmune rheumatic disease and systemic vasculitis (jointly with Rheumatologists), joint paediatric clinics for children with immunodeficiency and allergy and immunoglobulin infusion clinics for patients with antibody deficiency. On the laboratory front, Immunologists are responsible for directing diagnostic immunology services and perform a wide range of duties including clinical liaison, interpretation and validation of results, quality assurance and assay development. Immunologists encounter a variety of clinical problems and have the opportunity to solve difficult diagnostic problems in patients with undefined immunodeficiencies or complex multi-system disease.

Entry into Immunology training is possible following successful completion of both a foundation programme and a core training programme. There are three core training pathways for Immunology training:

- Core Medical Training (CMT)
- Acute Care Common Stem - Acute Medicine (ACCS-AM)
- Paediatric level 1

## **Joint Royal Colleges of Physicians Training Board**

The Joint Royal Colleges of Physicians Training Board (JRCPTB) is a Federation of the Royal Colleges of Physicians within the UK and is the body responsible for setting and maintaining standards for physician specialist training in the UK.

Allergy and Immunology are 2 of 33 specialties or sub-specialties that sit under the JRCPTB. Allergy and Immunology each have a Specialty Advisory Committee (SAC) which sets curricula and assessment systems, and assists and supports local programmes to manage and improve the quality of education across each specialty.

Each SAC draws together expert specialty educators from across the UK and comprises leading consultants, doctors in training and lay representatives.

Membership of SACs, with the exception of the chairman and a lay representative, is through nomination and represents the following:

- Heads of Specialty Training from each area where training is delivered (normally the TPD)
- The Royal Colleges
- Specialist Societies
- Postgraduate deaneries
- Doctors in training

The JRCPTB and the SAC are tasked with the following activities:

- annual review of the curriculum and assessment systems

- production of an annual specialty report (ASR) submitted to the GMC
- provision of advice during LETB and deanery visits to local education providers; of external advice on ARCP panels; and advice and support for new training posts and programmes, and recommendation of doctors in training eligible for CCT or CESR.

## Deaneries/LETBs

Deaneries/LETBs are responsible for the design and delivery of Allergy and Immunology training programmes including workplace-based experience, based on the approved [curriculum and assessment system](#). This includes funding and managing the quality of training, supervision and support for doctors in training. The programme must enable doctors in training to meet the curriculum and assessment requirements, but can be tailored to the services of LEPs, providing a balance is maintained between service and education.

Specialty schools (or equivalents) manage the postgraduate medical training in their respective specialty within a deanery/LETB. The schools are managed by the deanery/LETB in conjunction with the royal colleges and faculties. A key interface role between the college and deaneries/LETBs is the head of the specialty school.

## The Lead Dean

The Lead Dean for Allergy and Immunology is also the lead for two other medical specialties and sub specialties. He is a member of the Conference of Postgraduate Medical Deans of the United Kingdom (COPMeD) and therefore has a four nation view for all the specialties he leads on. He is involved in the overview of the specialty and is a source of reference, guidance and advice to the SAC on all training and curriculum issues.

## Summary of findings

1. The team found that programmes visited (London and Birmingham) were fit for purpose and met our standards. Throughout the review we met very engaged trainers and doctors in training who were committed to education and training. The Lead Dean and members of the SACs including the Chairs were enthusiastic and committed to developing training and delivering improvements to the specialties.
2. One of the main challenges for the Immunology doctors in training was obtaining the laboratory skills as detailed in the curriculum. Doctors in training listed factors such as difficulties with protecting dedicated laboratory time, lack of supervision and understanding the laboratory setting when first commencing training, as barriers to attaining the laboratory skills.
3. There was strong support from those interviewed for having joint Allergy and Immunology training for the first 2 years of speciality training. We heard that this could provide all doctors in training with basic but comprehensive training combining the key components of both specialty curricula resulting in sound knowledge of both clinical and laboratory practice. Doctors in training would still be able to gain a certificate completion of training (CCT) in either Allergy or Immunology.
4. Both specialties have experienced challenges with recruitment. They mainly consider these challenges to be a result of having a low profile during foundation and core training, mainly doctors in training have not heard of either specialty until they reach specialty training. Immunology had a 64% fill rate and Allergy a 57% fill rate in 2015.
5. We found good networking between the heads of school in the sites that we visited as part of this review.
6. Clinical and educational supervisors appeared to be well supported in their roles, and all trainers had time identified for education and training in their job plans. The specialty provides robust training for trainers through online and local training courses. The trainers we met reported there were no formal processes for doctors in training to feedback on trainers and they would like to see some introduced.
7. The majority of the doctors in training we met with for both specialties said they were well supported in their training by their educational supervisors, Allergy doctors in training particularly commented that they worked very closely with their supervisors and their 'door was always open for questions'. There were good mechanisms in place for all doctors in training to feedback about their training i.e through the SAC trainee representative and a 'well established' Google group for immunology doctors in training.
8. As is common with small specialties many of the doctors in training felt that it would be difficult to report issues of bullying or undermining as they were concerned they would be easily identifiable. The doctors in training commented that a mentor scheme may help with this, whereby a mentor outside of the specialty was assigned to a doctor in training.
9. Immunology doctors in training, in particular, commented that the training programmes across the UK vary significantly as the centres providing the training have different service requirements. They also mentioned that their training can be heavily influenced by their supervisors 'special interest'. The team heard that training

programme directors are very understanding about gaps in the training programmes and will arrange for doctors in training to attend placements in order to gain missing competences and skills. The team welcomed the introduction of a rotation within the London programme.

10. The FRCPATH exams (taken by Immunology doctors in training only) were considered to be fair and fit for purpose by those we spoke to. The doctors in training said the exam had recently improved in terms of relevance to clinical practice.
11. As part of the review we identified examples of effective practice that we encourage (see good practice section) and challenges and opportunities for improvement (see recommendations section).

## Areas of good practice

We note good practice where we have found exceptional or innovative examples of work or problem-solving related to our standards that should be shared with others and/or developed further.

Number	Paragraph in <i>Promoting Excellence</i>	Areas of good practice
1	S3.1	The National training days for both specialties were well organised and of significant value to the doctors in training. (paragraphs 46 and 47)

## Requirements

We set requirements where we have found that our standards are not being met. Our requirements explain what an organisation has to address to make sure that it meets those standards.

Number	Paragraph in <i>Promoting Excellence</i>	Requirements
1		The Deaneries/LETBs with input from the SAC must ensure that Immunology doctors in training have opportunities to meet their curricular requirements. This includes:
	S5.2, R5.9	<ul style="list-style-type: none"> <li>undertaking a set period of training in the laboratory at the beginning of their programme, with appropriate supervision. (paragraph 19)</li> </ul>
	S5.2, R5.9	<ul style="list-style-type: none"> <li>having a set time allocated every week or set blocks within their training programme for laboratory experience, with appropriate supervision. (paragraph 19)</li> </ul>
2	S4.1, R4.2	All Deaneries/LETBs must work closely with LEPs to ensure that all staff (medical and non medical) with responsibility for educational and clinical supervision have allocated time for education in their job plans (paragraph 19)
3	S5.2	The SACs must explore the possibility of introducing a joint common period of training for two years at the beginning of joint specialty training. (paragraph 3)
4	S2.2, R2.1, R2.4	The London and SE LETB must introduce a regular programme of QM and formal feedback mechanism for the Immunology programme. (paragraph 27)
5	S5.2, R5.10	The SAC for Immunology must clarify their view on the Masters in Immunology (paragraph 42)

## Recommendations

We set recommendations where we have found areas for improvement related to our standards. Our recommendations explain what an organisation should address to improve in these areas, in line with best practice.

Number	Paragraph in <i>Promoting Excellence</i>	Recommendations
1	S3.1, R3.2	The SACs with the LETBs/Deaneries should explore the possibility of a mentor system for doctors in training. (paragraph 8)
2	S3.1	The LETBS/Deaneries should explore the possibility of specialist nurses undertaking some duties/inappropriate tasks on behalf of the Immunology doctor in training. (paragraph 20)
3	S3.1, S2.2, R2.7	The LETBs/Deaneries should ensure that all doctors in training are aware of the process to report concerns with their supervisor (paragraph 25)
4	S5.2, R5.10	The SAC in Allergy should continue to develop the knowledge based assessment. (paragraph 38)

## Findings

12. Overall from the evidence we reviewed and the people we spoke to, we consider that doctors in training are satisfied with the quality of their training and their ability to demonstrate the required competences prior to completing their specialty training. This report focuses on highlighting a number of key themes across the UK where we heard concerns, where there is room for improvement and where issues are being effectively identified and addressed.

### Training structure and content

13. Specialty training in Allergy consists of core and higher speciality training. There are three possible ways of entering higher specialist training programme in Allergy:

- Core Medical Training (CMT)
- Acute Care Common Stem - Acute Medicine (ACCS-AM)

To ensure completion of CMT or ACCS, doctors in training are required to complete the MRCP(UK).

14. The SAC has advised that allergy training from ST3 will usually require 5 (five) years in full time training.

15. Training is provided at Allergy centres, which limits the number of training posts. Allergy centres are currently located at;

- Cambridge
- Leicester
- Manchester
- Southampton
- London
- Liverpool

The specialty is currently in discussions with HEE to increase the number of posts. At the time of the review there were no rotations between the posts and gaps in training are organised through informal attachments.

16. Specialty training in Immunology consists of core and higher speciality training. There are three possible ways of entering higher specialist training programme in immunology:

- Core Medical Training (CMT)
- Acute Care Common Stem - Acute Medicine (ACCS-AM)
- Paediatric level 1

To ensure completion of CMT or ACCS, doctors in training are required to complete the MRCP(UK). To ensure completion of level 1 Paediatrics, doctors in training are required to complete the MRCPCH.

17. The SAC has advised that training in Immunology from ST3 will usually be completed in 5 (five) years of full time training.
18. Many of the Immunology doctors in training commented that a lot of the curriculum is self-directed learning which has its benefits as they can tailor their training, however trainees also commented that they have to spend many hours reading after their day of clinical work which can be difficult to manage.
19. One of the main issues reported by Immunology doctors in training was the difficulty to obtain training in the laboratory, which makes these aspects of their curriculum challenging. This issue had two main aspects to it;
  - Getting protected laboratory time – Many trainees told us that they find it difficult to protect their lab time as they are often too busy with clinical work, this was especially apparent if there was only a single trainee at one site. The amount of laboratory time provided to doctors in training did vary depending on which site they were based at.
  - Supervision – Many of the doctors in training commented that even though they are assigned a laboratory supervisor that person is often over worked and too busy to supervise the doctor in training. They reported that many of the non-medical laboratory supervisors did not have training time in their job plans nor was education part of their performance appraisal. This can mean that the doctor in training struggles with this section of their training, particularly when they first start in the laboratory. This issue is also very dependent on which site the doctor in training is based at.
20. The Immunology doctors in training we met with reported a significantly high workload which at times can be 'overwhelming'. This is mainly because the doctors in training undertake all the procedures necessary for their patients' i.e taking bloods, clerking etc. The review team considered that a few of these duties could be done by a specialist nurse.
21. Allergy doctors in training were very positive about their training programmes and commented that they were well supported by their supervisors. Some doctors in training commented that they received a 'VIP service'.
22. Allergy doctors in training based outside of London commented that they are exposed to a wide range of conditions and therefore didn't consider it a disadvantage that they didn't rotate. However in London the doctors in training told the review team that it would be beneficial if they could rotate. The review team would like see more rotation happening across the specialty to increase experience but also to prevent training in isolation. There are currently two sites providing training in London, which the review team would recommend to increase.

## **Patient safety and raising concerns**

23. A few concerns were raised with regard to clinical and educational supervision in Immunology which appear to have been resolved locally; a majority of trainers for both specialties were perceived to be dedicated, supportive and interactive with doctors in training. Trainers were supportive of time off for courses and training. Many of the doctors in training commented that their supervisors were available 24/7 and they would never hesitate to ring them if they felt they were working beyond their competence.
24. Many of the doctors in training in both specialties commented that if they did have an issue regarding their supervisor they might be wary of reporting it through local processes for fear of it impacting on their training and career progress. They highlighted this as one of the problems of working in a small specialty.
25. The Allergy SAC mentioned that if doctors in training wanted to raise concerns about their supervision there is a procedure in place by which they can contact the Head of Services, who is a respiratory physician. It was clear to the review team that this process is not known to Allergy doctors in training and therefore needs to be clearly communicated during induction.
26. We did not hear of any immediate patient safety concerns in Allergy or Immunology in the areas we visited, nor did we hear doctors in training were working beyond their competence.
27. No current concerns around bullying and undermining were raised through the review. The team did hear of two previous episodes (both in Immunology) which have been addressed.

## **Equality, diversity and opportunity**

28. There was consensus among doctors in training and trainers about the important role equality and diversity plays in the specialty, and no concerns were raised in this area.

## **Recruitment and selection**

29. National recruitment for ST3 Allergy posts and ST3 Immunology posts is managed by London Recruitment (working on behalf of Health Education North Central & East London, Health Education North West London, and Health Education South London) using the Oriel recruitment system. Guidance on the process for both specialties is provided through a helpful section on the [JRCPTB website](#). All posts advertised have been approved by the GMC. The doctors in training in both specialties commented that the process had worked very well.
30. The SAC in allergy commented that the committee has a very strong interest in recruitment. Unfortunately a post in Liverpool remains unfilled following 3 years of attempted recruitment. The SAC commented that the specialty has tried to boost recruitment by advertising the specialty better through the JRCPTB and the British Society for Allergy and Clinical Immunology (BSACI). They mentioned that undergraduate interaction days have also been organised locally.

31. The SAC in Allergy said that there was a lack of spread geographically of posts and this meant that many of the trainees were based in the South East.

32. The SAC in Immunology commented that the recruitment figures for 2015 were 64% fill rate. Like Allergy, the SAC said that the specialty needed to have more publicity in foundation and CMT posts to boost the profile of the specialty early in training.

### **Support for trainers**

33. The trainers at both sites we visited said that there was no formal process for them to receive specific feedback on their supervisory roles. All supervisors commented that they had a close working relationship with their doctors in training but they agreed that a formal process would be beneficial as some doctors in training do find it difficult to give honest feedback in a small specialty. All trainers acknowledged that obtaining genuine honest feedback from their doctors in training in a small specialty was a challenge. The trainers reported that they felt well supported.

34. All the trainers that we met with had their supervisory role acknowledged in their job plans and they reported that they felt supported in their roles.

35. Both sites commented that they have access to good online training and training courses.

36. Preparation for the GMC scheme on the [recognition and approval of trainers](#) was reported to be on track for the specialty.

### **The assessment system**

37. The assessment system for Allergy is described in the [Allergy curriculum 2010](#). It is made up of workplace-based assessments (WPBAs).

38. The small size of Allergy means that it is not feasible to run a full specialty certificate examination to assess knowledge. The specialty is currently piloting a formative knowledge based assessment (KBA) which takes place at the end of the national training days. The SAC confirmed that they had undertaken 3 pilots at the time of the review and have settled on a format that works. The SAC were uncertain how the KBA was going to be funded in the future.

39. The assessment system for Immunology is described in the [Immunology curriculum 2015](#). It is made up of WPBAs and examinations.

40. Immunology doctors in training undertake examinations at two key stages of their training: the MRCP or MRCPCH during core training and the FRCPATH Part 1 and Part 2 during specialty training.

41. The FRCPATH Examination in Immunology comprises two parts:

- Part 1: comprises 2 written papers covering fundamental immunology and clinical problem-solving. The part 1 examination is designed to test a candidate's grasp of fundamental immunology and ability to integrate knowledge and experience to critically evaluate clinical cases and laboratory results.
- Part 2: is composed of a written component, an objective structured practical examination (OSPE), followed by an extended objective structured oral examination (OSOE). Successful completion of the FRCPATH part II examination denotes that a candidate has reached the standard required for independent practice as a consultant immunologist.
- Further information on the FRCPATH examination can be obtained [here](#).

42. There appeared to be some confusion among the immunology doctors in training and trainers with regards to the Masters in Immunology (MSc). The MSc is not a requirement of the [Immunology curriculum 2015](#) however is seen as a good preparation for FRCPATH part 1. Some doctors in training commented that it was an 'unwritten rule' that they should undertake the MSc and they felt pressured to do so by their trainers. Some doctors in training said they were funded to take the MSc but others were not, also they said that attending the MSc used up all their study leave allowance which they considered to be unfair. The trainers we spoke with said that the MSc was not mandatory and some didn't think it was a good use of time as some doctors in training who didn't take it still passed the FRCPATH part 1.

43. The primary purpose of WPBAs is for learning through constructive short loop feedback between trainers and their doctor in training that identifies areas for development. Collectively they are used as part of the ARCP which is a summative process. However, individually the tools are designed to develop doctors in training and are formative assessment tools which can:

- trigger conversations between doctors in training and their trainer
- enable observation and discussion of clinical practice
- record good practice and outline areas for development of knowledge, skills, judgement and professional behaviour
- formulate action plans for development
- enable doctors in training to analyse pattern recognition.

44. The WPBAs required during training for Allergy and Immunology are:

- multi-source feedback (MSF)
- mini-clinical evaluation exercise (mini-CEX)
- case-based discussion (CBD)
- direct observation of procedural skills (DOPS)
- audit assessment (AA)
- teaching observation (TO)
- patient survey (PS)
- Quality Improvement Project Assessment Tool (QIPAT) – Immunology only

The doctors in training we spoke with commented that their trainers were engaged with WPBAs and provided useful feedback. Some highlighted that WPBAs tend to be done in a hurry towards the end of a training year to prepare for the ARCP.

## **Quality and availability of teaching**

45. Doctors in training for both specialties were satisfied with the quality of regional teaching and National training days. They said that they were released for them and expected to attend, and that study leave was also supported.
46. The training days in particular for both specialties were described as a 'source of strength for the specialties' by the postgraduate dean. The SACs obtain feedback from the trainings days which contributes to quality improvement.

**Note: At the time of writing, the review team understood that the Chair for the Allergy SAC had unfortunately stepped down and an interim chair was in place.**

**The review report strongly recommends that a permanent chair is appointed in order to take forward the requirements and recommendations of this report.**

## **Acknowledgement**

We would like to thank the Specialty Advisory Committees, the JRCPTB, the Lead Dean, and all the people we met during the visits for their cooperation and willingness to share their learning and experiences, particularly the London and SE LETB and all those at the national ACP Immunology training day in Birmingham.

## Appendix 1: Visit details

### Visit team

<b>Team leader</b>	Professor Liz Hughes
<b>Visitor</b>	Dr Paul O'Neil
<b>Visitor</b>	Ms Jane Nicholson
<b>Visitor</b>	Dr Tom Foley
<b>GMC staff</b>	Hannah Watts, Emily Saldanha, Jessica Lichtenstein and Lauren Bryne
<b>Visit Dates</b>	Meeting with Allergy SAC chair and incoming SAC chair – 10 July 2015  Meeting with Immunology SAC chair – 19 August 2015  Meeting with Postgraduate Lead Dean – 20 August 2015  Meeting with the Allergy SAC and Immunology SAC – 20 October 2015  Visit to Immunology national training day in Birmingham – 28 January 2016  Visit to London and SE LETB – 21 April 2016