



Shaping Allergy Training in the UK Foundation Programme: a national survey

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Introduction

Allergic disorders are common, affect all age groups and patients with allergic conditions frequently present to non-allergists. Allergy can affect single organs, such as the nose in allergic rhinitis or skin in atopic dermatitis, or conversely may present with systemic symptoms, for example, in anaphylaxis or drug allergy. Mimics of allergy are common. Table 1 summarises clinical conditions that fall under the remit of allergy medicine.

It is vital that all doctors have a sound understanding of allergic diseases (1,2), with timely access for patients to specialist services where necessary. Yet the evidence would suggest that neither is the case. There is a shortage of allergists within the UK, as highlighted in the report “Meeting the Challenges of the National Allergy Crisis” (1). This shortage in expertise not only affects quality of patient care but is also likely to impact adversely upon the provision of undergraduate/postgraduate allergy education to non-specialists. Whilst tragic deaths from anaphylaxis have led to changes in law (3), education has not kept up with patient needs. A Preventing Future Deaths Report highlighted insufficient clinician training in allergy as a causative factor in the death of a young person from food-induced anaphylaxis (4).

Table 1: Conditions under the remit of allergy medicine

<p>Anaphylaxis and its mimics Immediate (IgE mediated) and delayed food allergy Allergic and non-allergic rhinitis Allergic and non-allergic asthma Insect venom allergy All forms of drug allergy Childhood eczema Non-allergic conditions- chronic spontaneous urticaria; physical urticarias; angioedema; mast cell disorders</p>
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The UK Foundation Programme (UKFP) is a two-year vocational training programme for newly qualified doctors trained in the UK and for international medical graduates. It hosts approximately nine thousand doctors per year across the UK (7500 in England) and is the gateway to future career pathways in the UK. Typically, foundation doctors rotate through six four-month posts, with everyone doing at least one medical and one surgical specialty. The focus of the UKFP curriculum is on acquisition of generic capabilities. In addition, the curriculum specifies twelve “core foundation learning topics” – but allergy is not one of these. From 2024, all UK final year medical undergraduates will have to pass the medical regulator’s (General Medical Council’s (GMC)) Medical Licensing Assessment (MLA) examination. Allergy is not included in the “areas of clinical practice” within the MLA content map and food allergy is not explicitly stated (5) despite 2.4 million people in the UK being affected (6).

This study aimed to examine the educational needs of newly graduated doctors by considering five objectives:

1. To gauge current and prior education and training opportunities in relation to allergy medicine.
2. To determine how frequently foundation doctors are encountering patients with allergic diseases.
3. To gauge confidence of foundation doctors in managing patients with allergic diseases.
4. To determine where the perceived knowledge gaps are.
5. To determine agreement levels with content and delivery methods of a proposed allergy training package.

Methods

This study was informed by preliminary work to scope the extent to which allergy is included within the UKFP curriculum and the GMC MLA content map. Its relative lack of inclusion in these national policy documents drove development of this survey, which was designed by Dr Jennie Gane, with contributions from Professor Gillian Vance, Professor Judith Holloway and Dr Emma Brown. The focus was on those allergic conditions which are either commonly encountered by foundation doctors or are potentially life threatening.

This process resulted in a 20-question survey. Multiple-choice questions asked about demographic characteristics and career intentions. Current and past training opportunities in allergy (formal teaching or participation in clinical activity, such as an allergy clinic), satisfaction with training, frequency of exposure to and confidence in managing patients with allergic conditions, were assessed using questions with 5-point Likert scales, including neutral responses, where appropriate. Respondents were asked about their knowledge of the immediate medical management of anaphylaxis using a 4-part "best answer" format question. Questions assessing suggested content for an educational package in allergy and importance placed by foundation doctors on improving their knowledge of anaphylaxis and drug allergy, were assessed using a 5-point Likert scale (including a neutral response). Respondents were asked to rank teaching modality by preference: on-line self-directed learning, real-time teaching with an expert or a combination of the two. Respondents were invited to provide free-text responses regarding other allergy related content they wished to see included in a future training package and any other suggestions for how education in allergy could be delivered to foundation doctors. The survey was reviewed by a consultant immunologist for content validity and piloted for face and content validity by ten foundation doctors.

NHS England Research and Governance panel approved the study. Ethical approval was not required as the study was an evaluation of current training provision. The UKFP Office permitted dissemination to foundation doctors in England but not those working in the devolved nations. An invitation email, with a link to a web-based survey platform (SurveyMonkey Inc., San Mateo, California, USA), was cascaded to foundation doctors in each of the foundation schools in England in mid-November 2023. As response rates after the first week were low (n=67), two further reminder emails were sent at weeks two and five, along with measures to encourage responses. These included provision of a certificate of completion to use as portfolio evidence of participation in a national quality improvement project, as well as cascade via allergy colleagues and postgraduate doctors-in-training nationally, using posters, email, and professional social media accounts. The survey was closed in mid-January 2024. Anonymised survey data were downloaded into a Microsoft Excel document (Microsoft Office 365, Redmond, Washington, USA).

Results

In total 1159 foundation doctors in England completed the survey. Whilst we cannot be certain of the number of foundation doctors the invitation to participate reached, this represents at least 8% of potential responders. Not all questions were answered by each respondent and completion numbers are shown for each question. Table 2 shows demographic data. Eighty-seven percent (n=983) were UK medical graduates and 37 of 44 UK medical schools were represented. Seven UK medical schools were not included as their first cohort of medical students had not yet graduated. Respondents who trained outside of the UK provided details via free-text and had trained at medical schools in Europe, Asia, North America, and Africa. Figure 1 shows the specialty within which each respondent was working at the time of survey completion.

Table 2: Demographic data (n=1159)

Age (years)		Gender		Stage of foundation training and year of graduation	
22-30	1040 (89.7%)	Woman	748 (64.5%)	Year 1	588 (50.7%)
31-40	97 (8.4%)	Man	391 (33.7%)	Year 2	571 (49.3%)
41-50	20 (1.7%)	Trans woman	0 (0%)	Graduated:	
51-60	2 (0.2%)	Trans man	1 (0.1%)	2023	530 (45.7%)
		Non-binary/gender fluid	3 (0.3%)	2022	482 (41.6%)
		Prefer not to say	16 (1.4%)	2021	74 (6.4%)
				2015-2020	58 (5%)
				2006-2014	9 (0.8%)
				Unknown	6 (0.5%)

Figure 1: Speciality within which foundation doctors were working at time of survey completion (n=1108)

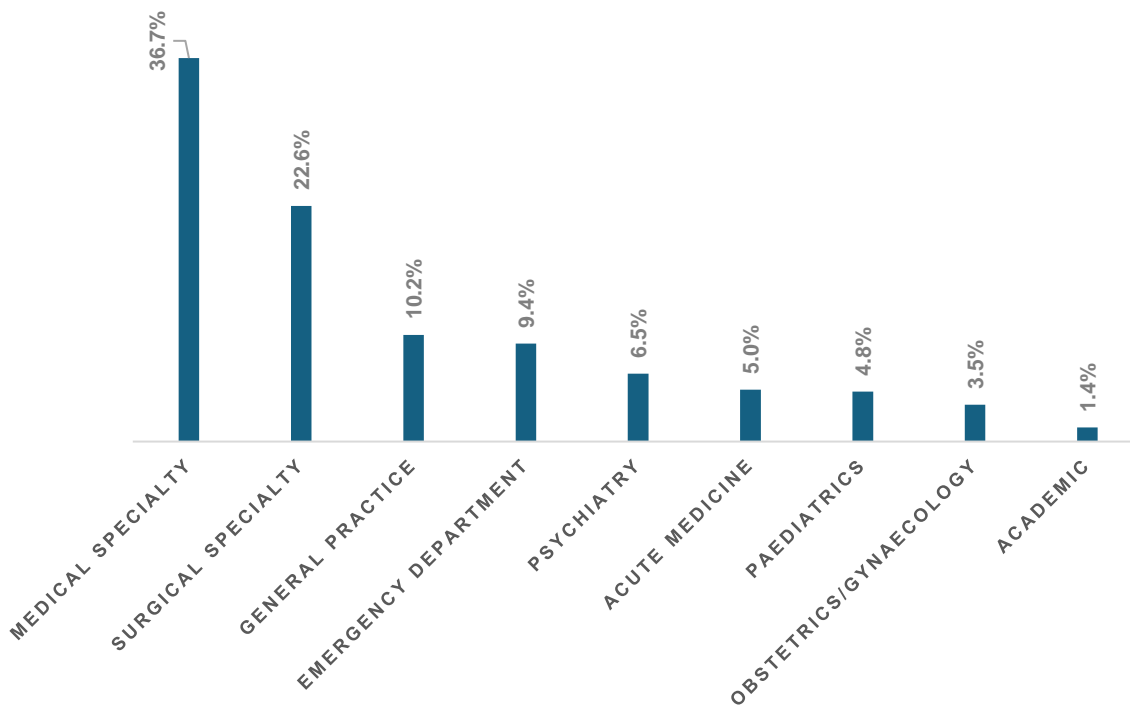


Figure 2 shows foundation doctors' intended next career step. Non training posts include locum work or the increasingly popular non-training "foundation year 3" posts.

Figure 2: Intended next career step of respondents (n=1159)

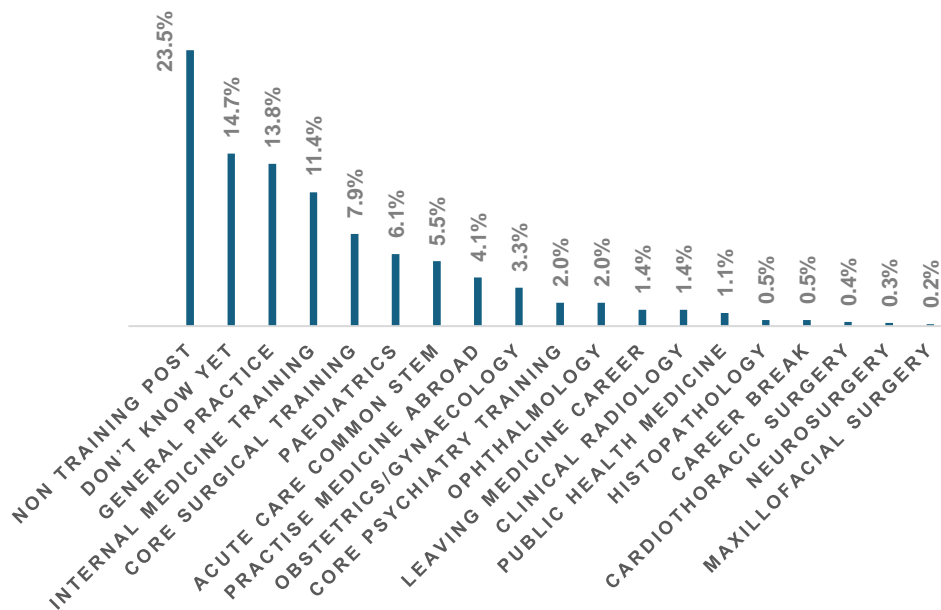
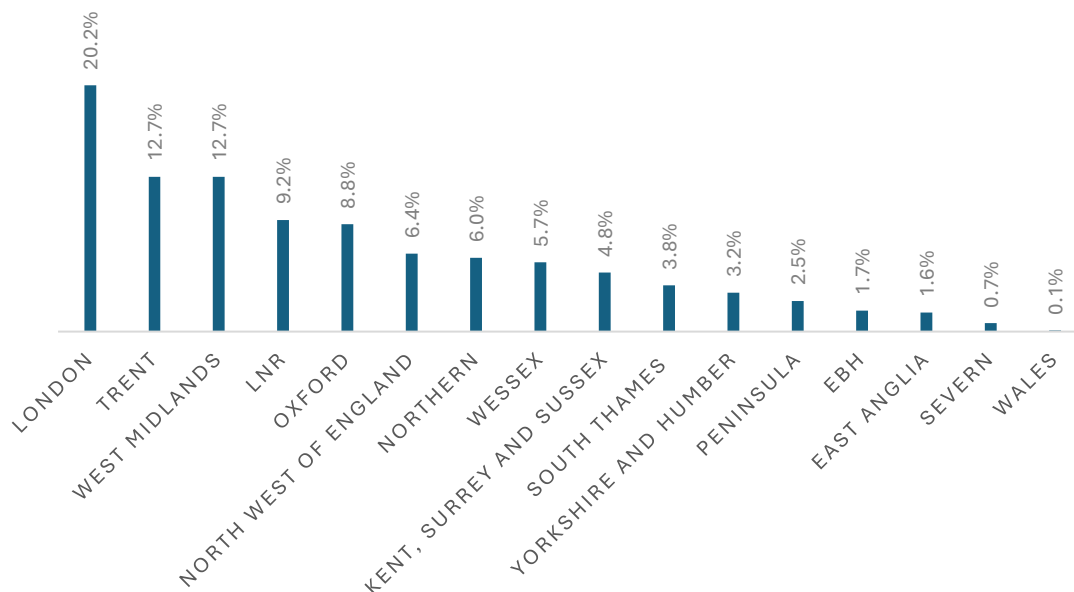


Figure 3 shows the breakdown of foundation schools (geographical regions) within which respondents were employed. There are fifteen foundation schools in England. The survey was not sent to foundation doctors working within the devolved nations, however as one doctor working in Wales completed the survey their data was included.

Figure 3: Percentage of foundation doctors employed within each foundation school (n=1159)



(LNR- Leicestershire, Northamptonshire, Rutland; EBH- Essex, Bedfordshire and Hertfordshire.)

We were unable to obtain a workforce dataset from the UKFP Office for each foundation school to determine how representative responses were of the complete 15000 cohort of current foundation doctors in England.

Education in Allergy

In this section of the survey, we briefly described allergy medicine and asked respondents to answer how much education in allergy they had received.

Asthma as a clinical topic was considered separately from allergy. Although it is part of the curriculum for postgraduate specialist trainees in allergy and immunology, it is predominantly respiratory physicians and paediatricians who manage patients with asthma in a secondary care setting. Consequently, undergraduate teaching on asthma is typically taught as part of clinical placements in respiratory medicine and child health. By separating asthma from allergy, we were able to determine how much education in allergy, other than asthma, respondents recalled receiving.

Figure 4: Respondent recollection of formal allergy and asthma teaching during medical school (n=1116)

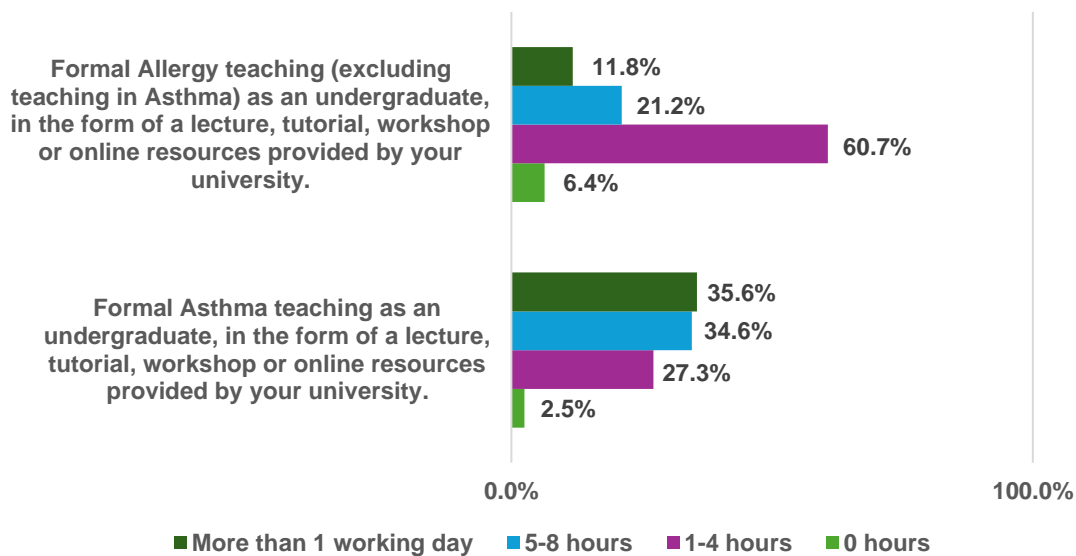


Figure 4 demonstrates that foundation doctors recall receiving more formal teaching in asthma than allergy as an undergraduate, with the majority (61%) receiving only 1-4 hours of teaching in allergy.

Figure 5: Formal allergy and asthma teaching received during the UK Foundation Programme (n=1116)

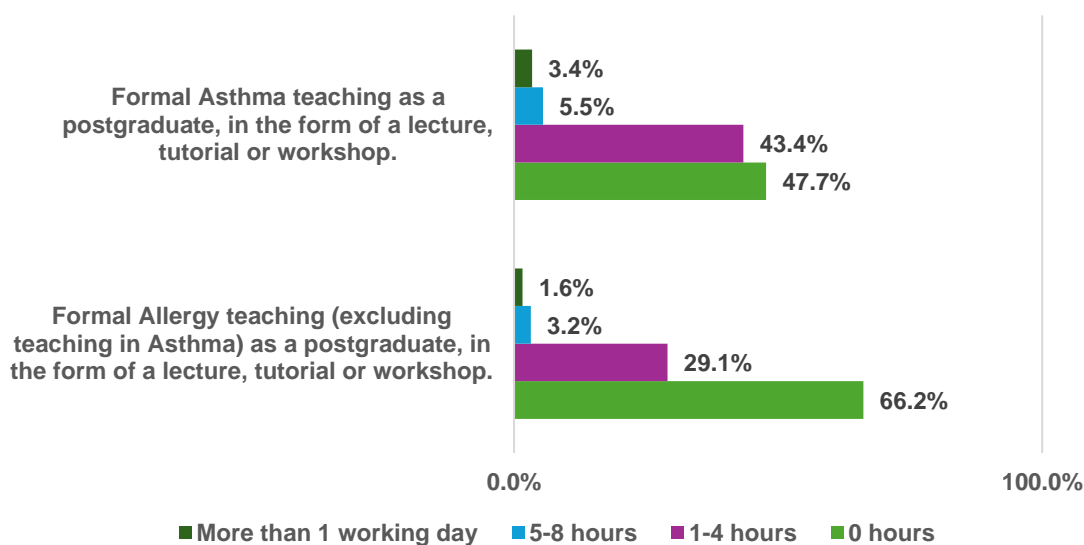


Figure 5 shows teaching respondents had received to date during the UKFP. In most foundation schools doctors are required to attend once weekly formal teaching for 1-2 hours, typically delivered in their place of work by local clinicians. Just over half of foundation doctors had received some teaching on asthma (although 48% have not), whereas the majority (66%) had received no teaching on allergy.

Figure 6: Respondent recollection of experiential learning in allergy (n=1116)

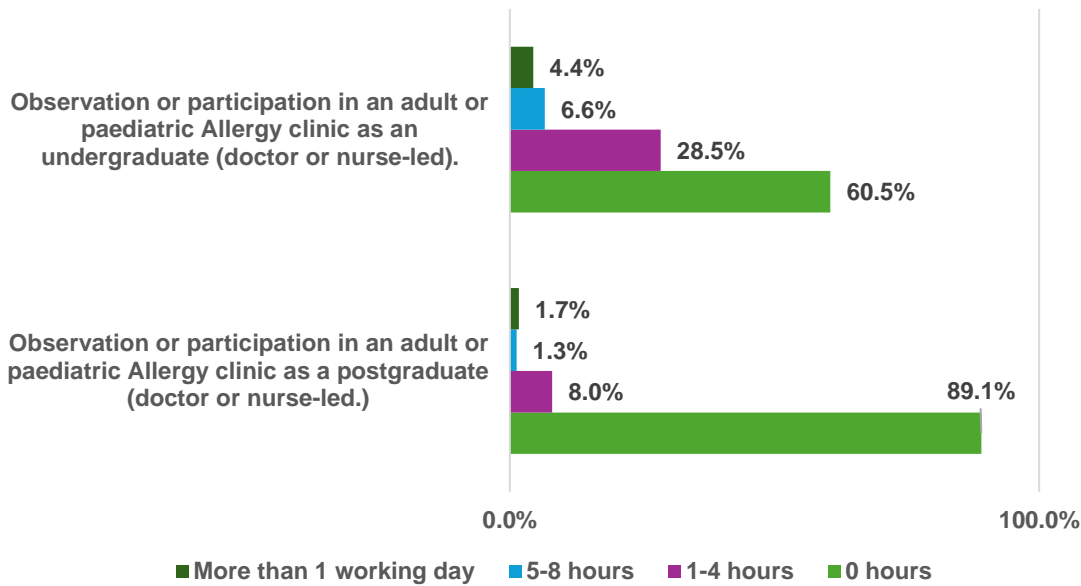


Figure 6 shows respondent recollection of participation in allergy related clinical activity, referred to here as experiential learning in allergy. Eighty nine percent had not attended a clinic during the UKFP. This is not unexpected as the focus of the UKFP is on vocational training, most commonly managing in-patients. However, this figure highlights that many trainees complete undergraduate studies and the UKFP without any opportunity to experience allergy medicine in practice.

Table 3: Satisfaction with training received in allergy (n=1116)

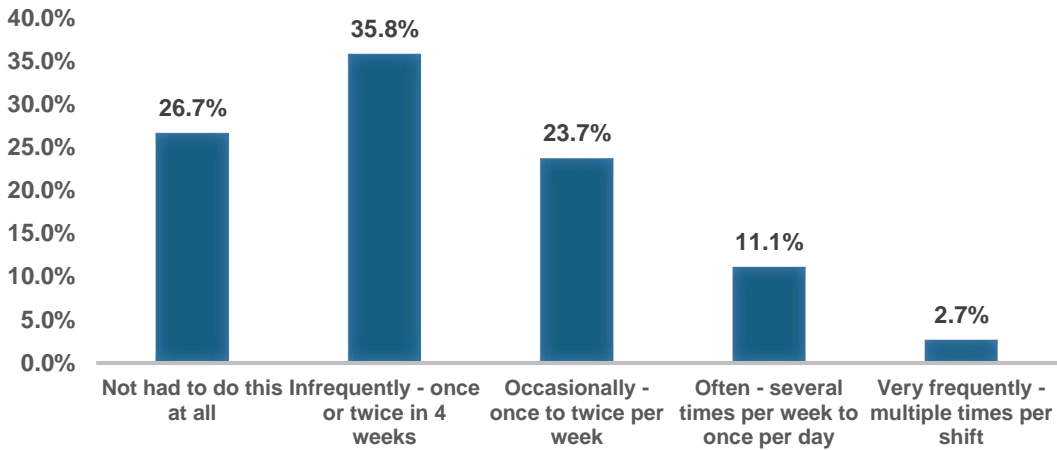
	Dissatisfied or very dissatisfied	Neither satisfied nor dissatisfied	Satisfied or very satisfied
Undergraduate training	33.1%	39.2%	27.7%
Postgraduate training	55.5%	36.0%	8.5%

Table 3 shows respondents' satisfaction with the training received in allergy at medical school and during the UKFP. One third were satisfied with their undergraduate training. Intriguingly there was a shift to a more dissatisfied view during the FP, with less than one in ten doctors satisfied and over half dissatisfied or very dissatisfied. This suggests that respondents are encountering patients with allergy-related conditions for which they feel under-prepared and may require targeted training.

How often do foundation doctors encounter patients with allergic disorders?

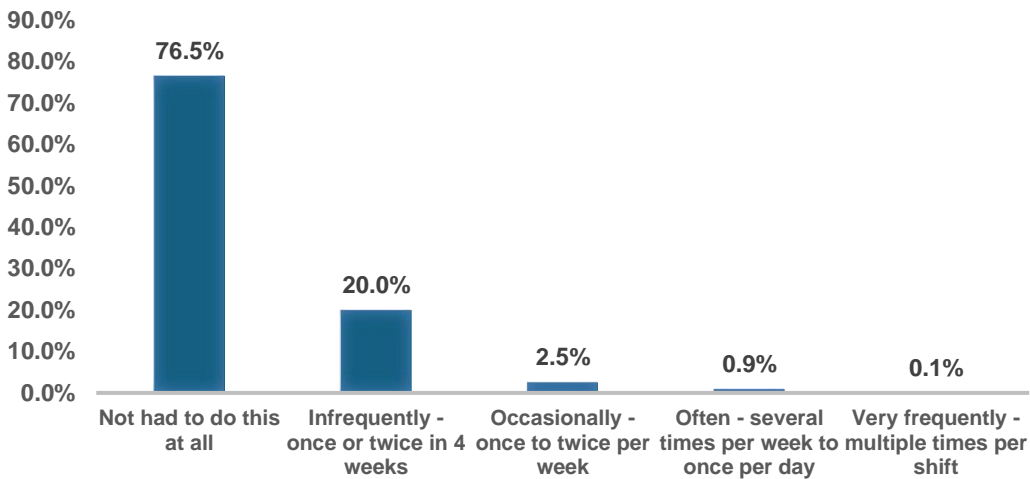
Figures 7 to 13 show how frequently foundation doctors recall seeing patients with common or serious allergic disorders in the preceding four weeks (survey conducted during winter).

Figure 7: "In the last 4 weeks how often have you had to look after a patient with poorly controlled asthma?" (n=1116)



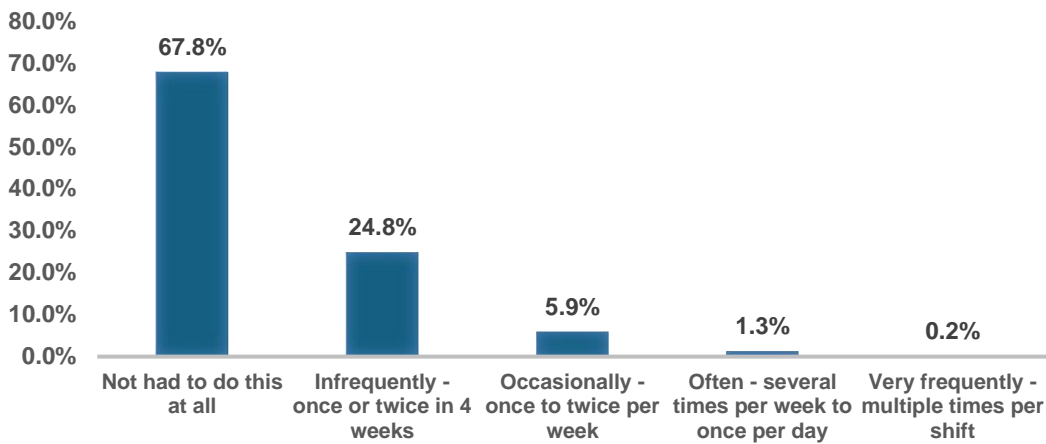
Seventy three percent of foundation doctors estimated seeing patients with uncontrolled asthma at least once to twice per month with 38% seeing them at least once to twice weekly.

Figure 8: "In the last 4 weeks how often have you had to look after a patient presenting with suspected anaphylaxis?" (n=1116)



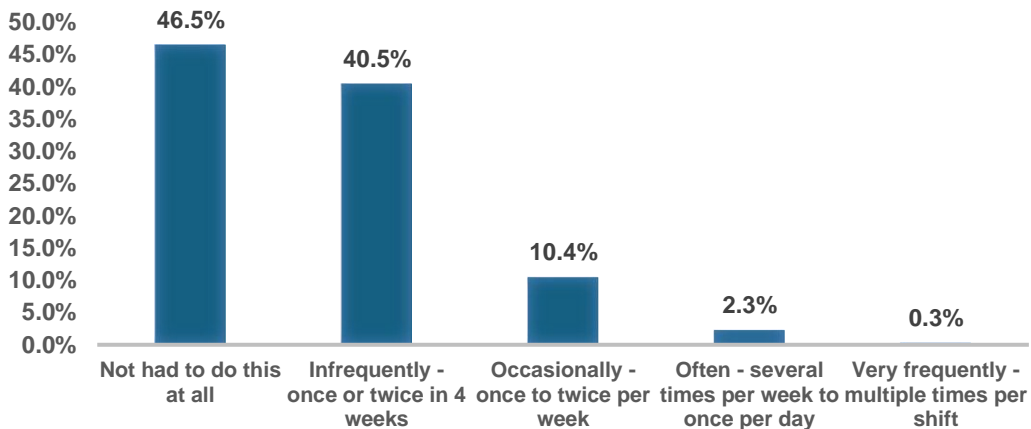
Twenty three percent of foundation doctors estimated seeing patients with suspected anaphylaxis at least once to twice per month.

Figure 9: "In the last 4 weeks how often have you had to look after a patient presenting with a suspected immediate-type food allergy reaction?" (n=1116)



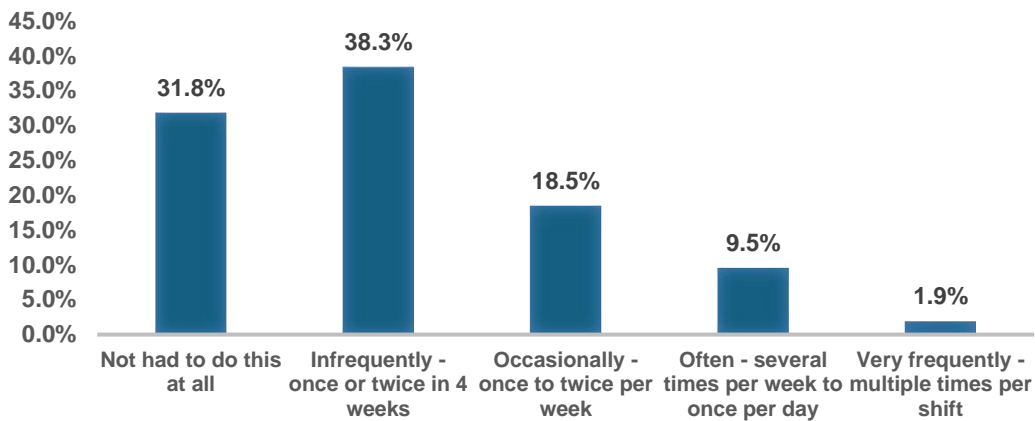
Thirty two percent of foundation doctors estimated seeing patients with suspected immediate food allergy at least once to twice per month.

Figure 10: "In the last 4 weeks how often have you had to look after a patient presenting with urticaria (hives) and/or angioedema?" (n=1116)



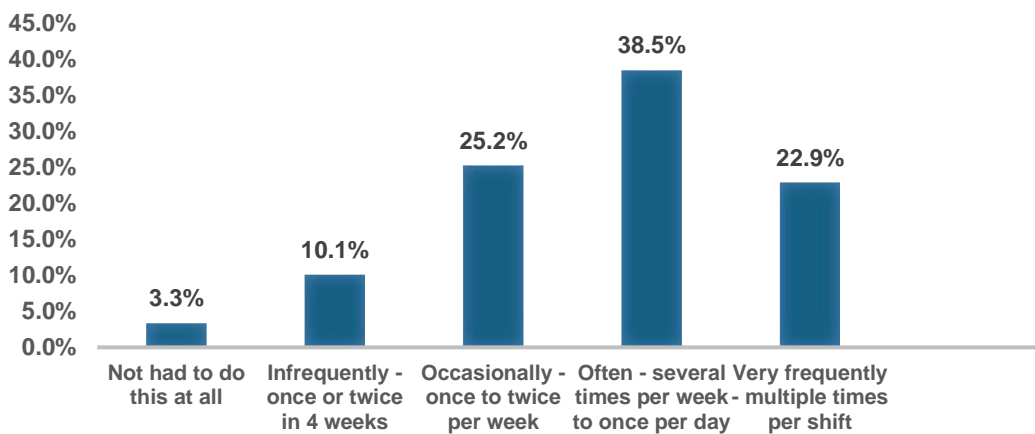
Fifty three percent of foundation doctors estimated seeing patients with hives/angioedema at least once to twice per month.

Figure 11: "In the last 4 weeks how often have you had to look after a patient presenting with eczema?" (n=1116)



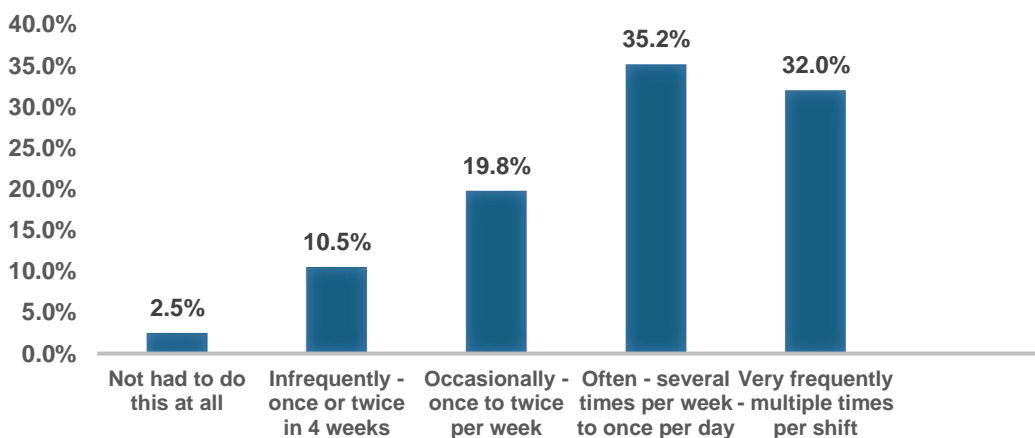
Sixty eight percent of foundation doctors estimated seeing patients with eczema at least once to twice per month.

Figure 12: "In the last 4 weeks how often have you had to look after a patient with a penicillin allergy label?" (n=1116)



Sixty one percent of foundation doctors estimated encountering patients with a label of penicillin allergy at least several times per week to once per day, with 23% multiple times per shift.

Figure 13: "In the last 4 weeks how often have you had to look after a patient with one or more drug allergies?" (n=1116)



Eighty seven percent of foundation doctors estimated encountering patients with a label of one or more drug allergies at least once to twice per week with 32% multiple times per shift.

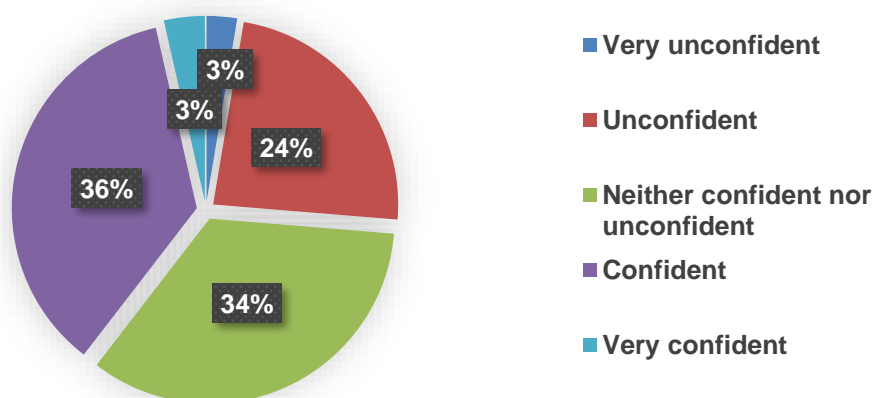
These findings demonstrate that foundation doctors were encountering patients with drug allergy labels very regularly in their day-to-day clinical work. Although less common, they managed patients with potentially life-threatening diagnoses of uncontrolled asthma, suspected anaphylaxis and possible IgE mediated food allergy (a common cause of anaphylaxis) with reasonable frequency. In any given 2-year cohort, foundation doctors are likely to encounter all these disorders as they rotate through a variety of specialties.

How confident are foundation doctors at managing allergy?

Figures 14 to 24 show responses to questions related to the confidence of foundation doctors to manage patients with allergic presentations. Whilst confidence does not automatically equate to clinical competence or understanding, expressing confidence at least assumes some prior training has been received. Percentages are shown rounded to the nearest one percent.

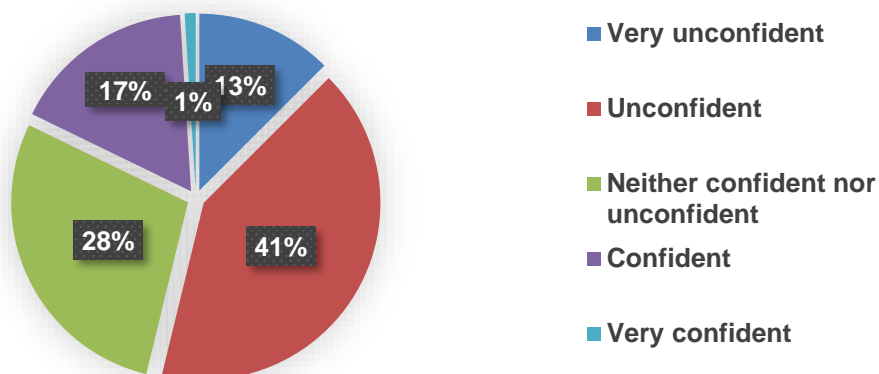
History taking and referral

Figure 14: Confidence to take an allergy focused history from patients or parents/carers (n=1095)



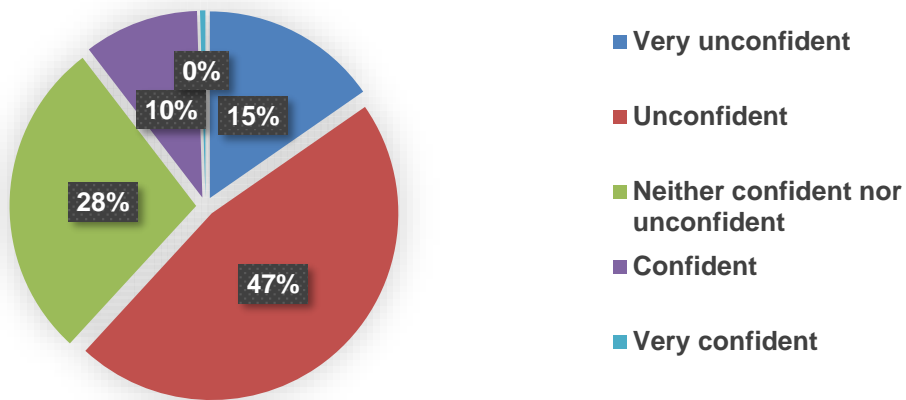
Thirty nine percent of foundation doctors felt confident or very confident to take an allergy focused history.

Figure 15: Confidence to write a referral to the allergy clinic for a patient with suspected anaphylaxis (n=1095)



Only 18% of foundation doctors felt confident or very confident to write a referral to an allergy clinic for a patient with suspected anaphylaxis.

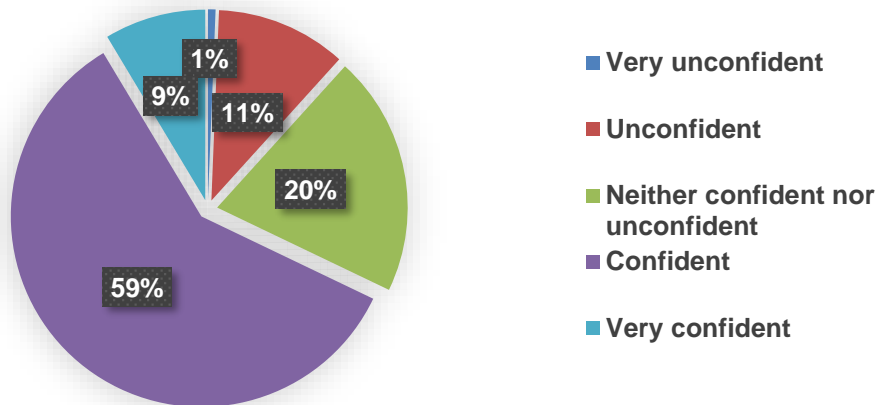
Figure 16: Confidence to identify patients who require referral to an allergist/immunologist (n=1095)



Only 10% of foundation doctors felt confident or very confident to identify which patients need to be referred to an allergy clinic.

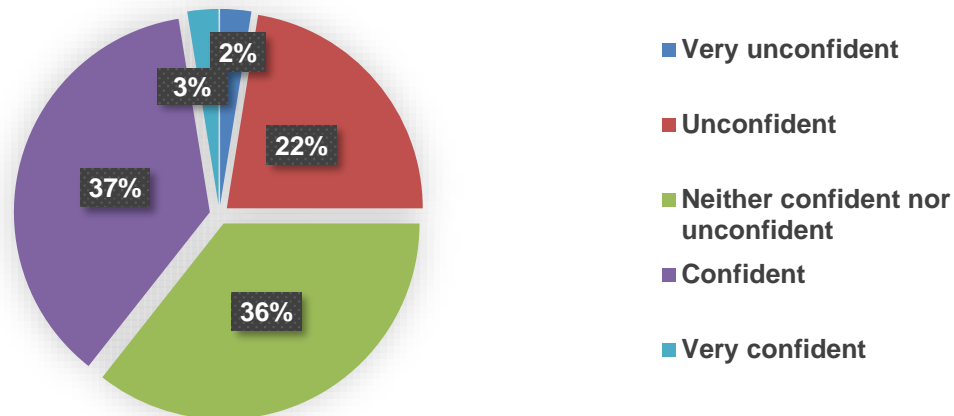
Anaphylaxis

Figure 17: Confidence in the immediate clinical management of a patient with suspected anaphylaxis (investigations and treatment) (n=1095)



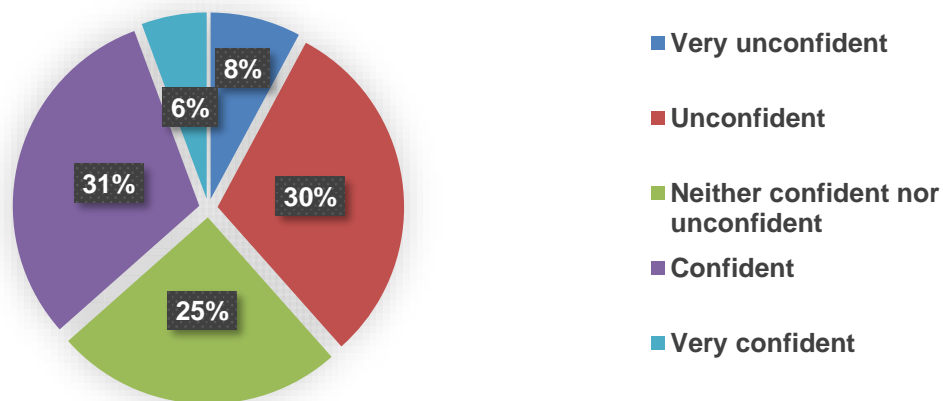
Sixty eight percent of foundation doctors felt confident or very confident to carry out the immediate clinical management of a patient with suspected anaphylaxis.

Figure 18: Confidence to take a history to identify potential causes and/or co-factors in a patient with suspected anaphylaxis (n=1095)



Only 40% of foundation doctors felt confident or very confident to identify causes or cofactors involved in a patient with anaphylaxis.

Figure 19: Confidence to train a patient in how and when to use an adrenaline auto-injector device (n=1095)

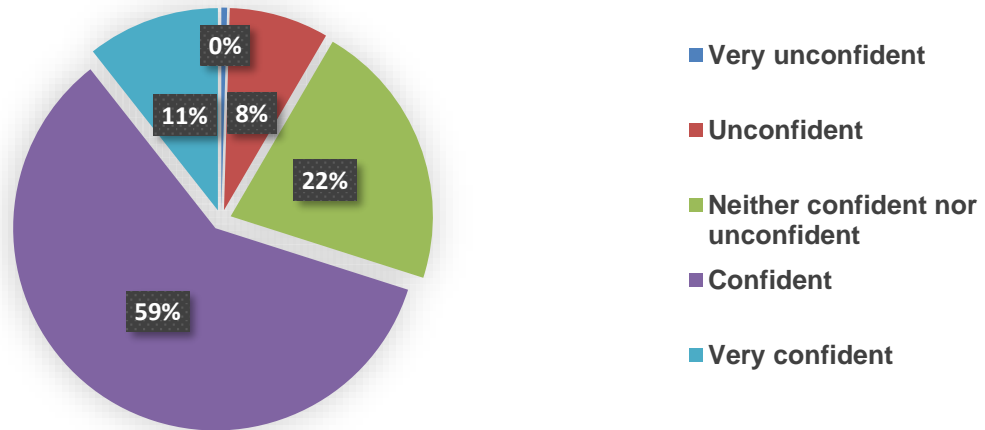


Only 37% of foundation doctors felt confident or very confident to train a patient in how to use an adrenaline auto-injector device.

The higher percentage of respondents confident in knowing the immediate medical management of anaphylaxis, compared to other aspects of its management, may be due to participation in the Resuscitation Council UK Advanced Life Support (ALS) course (7). Whilst this is no longer a mandatory component of completing the UKFP, many foundation doctors complete the course, which includes training on national anaphylaxis treatment algorithms. The results demonstrate that many foundation doctors were not confident to manage anaphylaxis beyond this, for example training patients to use an adrenaline auto-injector device, identifying cofactors and knowing how and who to refer to clinic.

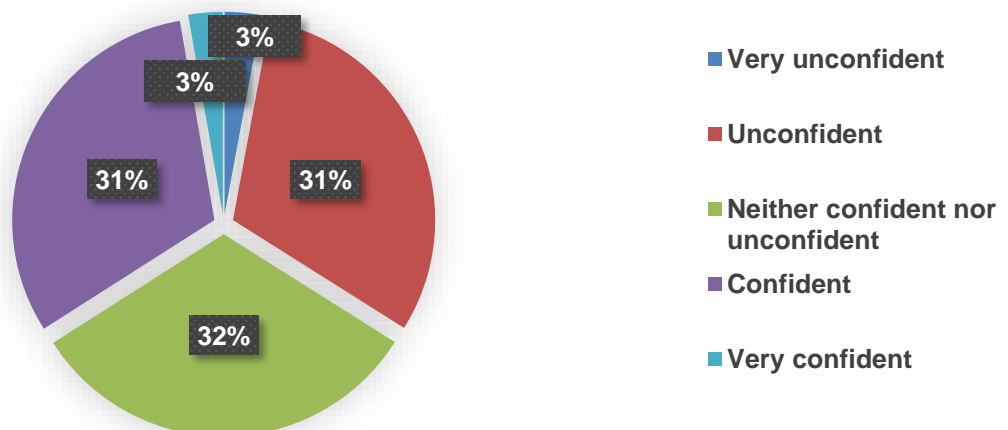
Asthma

Figure 20: Confidence to manage a patient with an acute asthma exacerbation in the first 24 hours (n=1095)



Seventy percent of foundation doctors felt confident or very confident to manage a patient with acute asthma in the first 24 hours.

Figure 21: Confidence to optimise the long-term management of a patient presenting with an acute asthma exacerbation (n=1095)

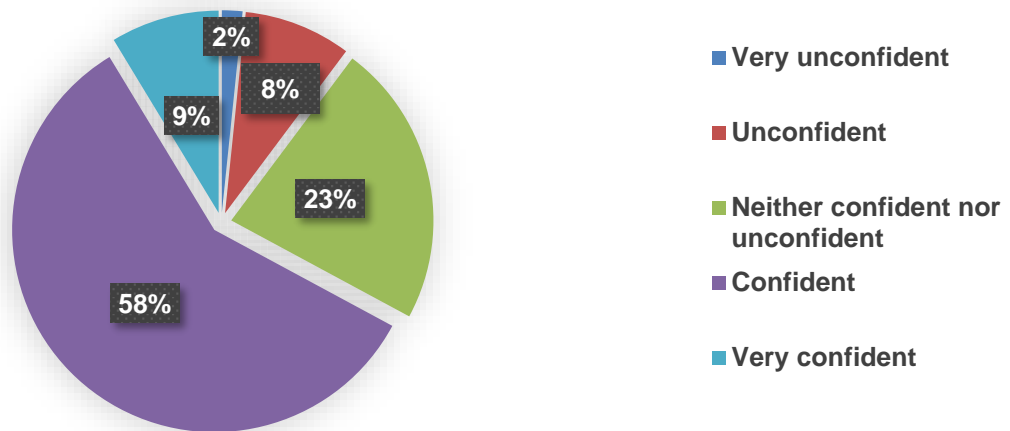


Only 34% of foundation doctors felt confident or very confident to optimise long term management for a patient with an acute exacerbation.

High levels of confidence in managing acute asthma may be due to awareness of the British Thoracic Society treatment algorithm for acute asthma (8) or attendance on the ALS course.

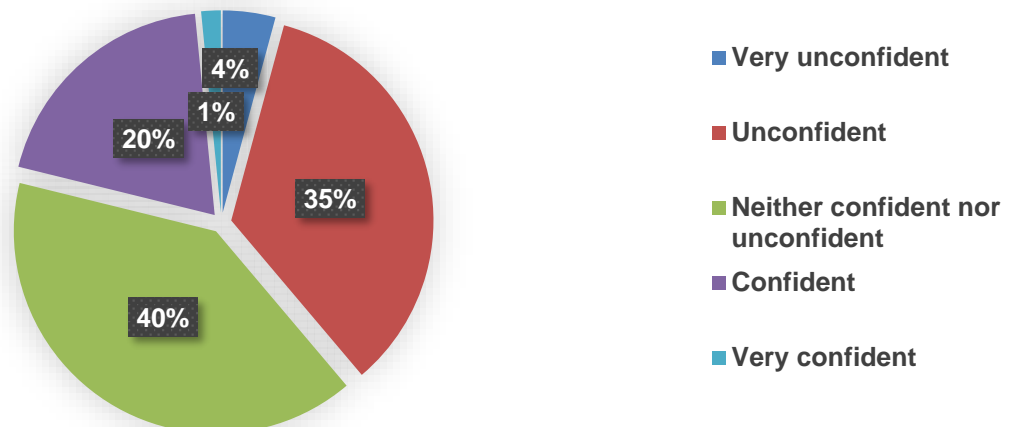
Drug allergy

Figure 22: Confidence to choose the right antibiotic for a patient with a label of penicillin allergy (n=1095)



Sixty seven percent of foundation doctors felt confident or very confident to choose the correct antibiotic for a patient with a label of penicillin allergy.

Figure 23: Confidence to manage a patient with a new suspected drug allergy (n=1095)

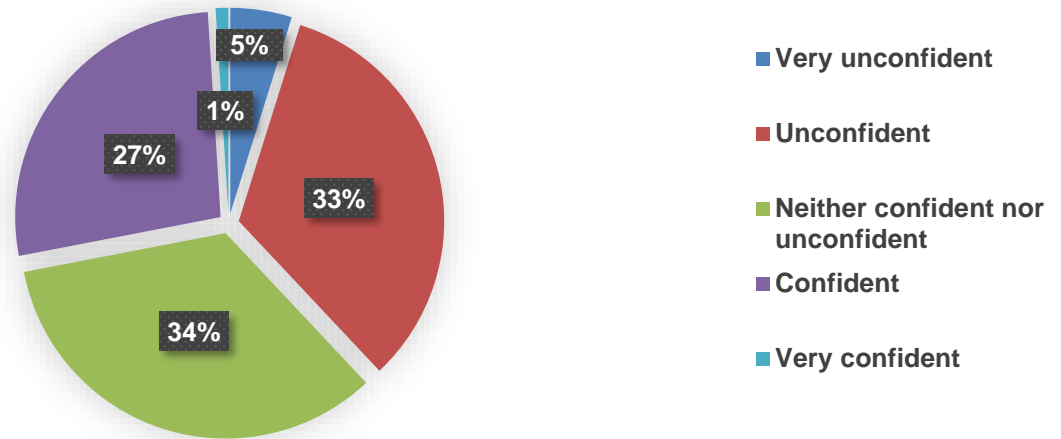


Only 21% of foundation doctors felt confident or very confident to manage a patient with a new suspected drug allergy. Thirty nine percent felt unconfident or very unconfident.

Most hospital trusts have locally published guidelines for antibiotic prescribing in patients with a label of penicillin allergy. This may partially explain the relatively high level of confidence for this question, although it should be noted that 1 in 10 foundation doctors did not feel confident to choose a safe alternative to a penicillin. Note that this question did not address if they felt confident to determine if a penicillin allergy label is correct. The low percentage of foundation doctors confident to know how to manage a patient with a new drug allergy is of concern, especially considering the existence of published NICE guidelines on this topic (9).

Urticaria and angioedema

Figure 24: Confidence to manage a patient presenting with acute urticaria (hives) and/or angioedema (n=1095)



Only 28% of foundation doctors felt confident or very confident to manage a patient with acute hives or angioedema. This is a concern because urticaria and angioedema may be of allergic or non-allergic origin. Poor understanding of this clinical presentation may lead to over diagnosis of allergy in some cases and under diagnosis in others.

Using a "best answer" style format, we asked foundation doctors to choose from one of four responses to the question "when considering the immediate management of suspected anaphylaxis, what is the most appropriate treatment combination?". The correct answer was based upon the Resuscitation Council UK 2021 anaphylaxis guideline (10). Other answers were similar, but incorrect, including the first-line use of corticosteroids and/or antihistamines. One thousand and ninety-five responded. Eighty percent of respondents chose the correct answer. Twenty percent of foundation doctors did not know the correct medical management of suspected anaphylaxis.

Content of a proposed allergy education training package for the UKFP

Table 4: Agreement with suggested content of an allergy training package for UK foundation doctors (n=1079)

Proposed content	Percentage choosing "important" or "very important" with respect to its inclusion in a training package
Anaphylaxis management in the Emergency Department or Medical Admissions Unit	95%
Commonly requested allergy investigations: interpretation and when to request	94%
How to take an allergy focused allergy history	92%
Urticaria and angioedema	92%
Asthma: exacerbations	91%
Asthma: long term management	88%
Instructing a patient in how to use an adrenaline auto-injector device	88%
The basics of drug allergy	82%
The basics of penicillin allergy	82%
Anaphylaxis: what happens in the allergy clinic	73%
Recap of what "allergy" is	72%

Respondents were asked "Regarding content, are there any other allergy topics you would like to see included?". Two hundred and eighteen doctors responded, and free-text comments were sorted into themes, shown in table 5.

Table 5: Responses to the question "Regarding content, are there any other allergy topics you would like to see included?" (n=218 respondents)

Theme	Frequency with which theme was mentioned
Food allergy	27
History taking, requesting investigations, referral to allergy clinic	25
Allergy versus intolerance (i.e. recap of what "allergy" is)	23
Skin allergy and rashes in general	21
Penicillin allergy, including penicillin allergy de-labelling	14
Drug allergies and their differentials	13
Paediatric versus adult allergy	9
Clinical management of allergic disease	17
Other (mast cell disorders; psychological aspects of allergic disease; environment and allergic disease)	5

Respondents were asked to rank teaching modalities that could be employed as part of a bespoke educational package in allergy for doctors on the UKFP, in order of preference. One thousand and seventy nine foundation doctors responded. Lecture/small group teaching delivered by an educator was most favoured, with 45% ranking this as the preferred method. Thirty-seven percent preferred a mixed modality method, with on-line self-directed learning complemented by face-to-face teaching with an educator. On-line self-directed learning alone was preferred by 18% of respondents. This indicates that foundation doctors appreciate education delivered by an expert, presumably due to the greater opportunity for engagement and two-way dialogue.

One hundred and fifty-four doctors responded to the statement "Please use the box to make any other suggestions about how we might deliver education in Allergy." Themes and frequencies are shown in table 6.

Table 6: Responses to the statement " Please use the box to make any other suggestions about how we might deliver education in allergy" (n=154 respondents)

Theme	Frequency with which theme was mentioned
Face-to-face teaching during weekly "core" UKFP teaching	35
Simulation	20
Expert led teaching	17
Self-directed on-line learning package	17
Case-based learning	13
Written resources	11
Live/recorded webinar (Zoom/Microsoft Teams)	10
Experiential learning (taster days, clinics)	5
Other (podcast; role-play; expert patients)	3

Finally, respondents were asked to rate their agreement with two statements, with 1079 responding. Ninety seven percent agreed or strongly agreed with the statement, " Improving my knowledge of how to manage patients with a new suspected drug allergy, to a basic level, will be useful to me irrespective of my intended career specialty." Ninety eight percent agreed or strongly agreed with the statement, " Improving my knowledge of how to manage patients with suspected anaphylaxis, to a basic level, will be useful to me irrespective of my intended career specialty."

Discussion

This study is the first to capture the views of a large cohort of recently qualified doctors on this subject. Foundation doctors reported they receive little training in allergy, as undergraduates and new graduates. The finding that most doctors recalled only between one and four *hours* of teaching on allergy (excluding asthma) needs to be understood in the context of undergraduate curricula content. To our knowledge most medical schools cover other subjects in far greater depth. For example, medical students will typically complete four-to-eight-week placements in obstetrics and gynaecology, comprising theory teaching and experiential learning. Whilst most doctors will not practise obstetrics in their careers, the recognised importance of having a sound understanding of the effects of pregnancy on illness and vice versa is reflected in its inclusion in all undergraduate medical courses. The same principle should hold true for allergy medicine, which presents across all specialties and age groups. It is no surprise that with so few hours dedicated to allergy education, striking levels of dissatisfaction with training in allergy were expressed here.

Foundation doctors were encountering patients with allergy-related presentations regularly. In the case of patients with labels of drug allergies this was on a weekly or daily basis. In some specific

tasks, for example the immediate medical management of anaphylaxis, a moderate percentage (68%) felt confident. Beyond this, confidence to manage other aspects of allergic diseases was low. Respondents agreed with the proposed content of an allergy education package for UKFP doctors. Almost all agreed that improving their knowledge of anaphylaxis and drug allergy would be useful to them irrespective of their career intentions.

The strength of this study lies in the cohort studied. All participants were practising foundation doctors, representing all foundation schools in England, and having trained at medical schools across the UK and from abroad. Whilst the survey was unfortunately not distributed to foundation doctors practising in the UK devolved nations, there is no reason to believe that the situation should be any different outside of England. The shortage of healthcare professionals with expertise in allergy is a UK wide issue (1).

The response rate of 8% is one potential limitation of our study. Foundation doctors receive multiple requests to participate in surveys. After a slow start, the response rate improved immediately after we offered the incentive of a certificate of completion. This is likely to have been the motivating factor for many respondents, rather than any inherent interest in allergy which might have biased the findings. The survey was conducted with six months of the two-year programme remaining and it is possible that some planned teaching on allergy may have yet to be delivered. We think this unlikely as there is no nationally coordinated education timetable to our knowledge. We acknowledge that respondent recollection may fade over time and hence not accurately reflect prior education received as an undergraduate. Finally, this study has not assessed the competence of foundation doctors in managing patients with allergic disease, nor specifically considered patients' viewpoints.

Our findings have implications for policy makers, specifically the GMC, UK Medical Schools Council and UKFP Office. Our results highlight the need for greater representation of allergy as a clinical topic within the MLA and undergraduate curricula. Calls for better inclusion of allergy within undergraduate curricula are not new, with several studies suggesting that undergraduate education in allergy is suboptimal in the UK (11-13). A 2019 study surveyed consultant members of the British Society of Allergy and Clinical Immunology and some students (11). The cohort was much smaller, with forty-four consultant responses, representing 64.7% of UK medical schools. Twelve students responded and reported minimal opportunity to learn skills, such as practising using an adrenaline auto-injector. Consultant respondents reported that of the medical schools represented only seven provided some form of compulsory clinical experience in allergy.

The World Allergy Organisation has published position papers on undergraduate allergy curriculum content in 2013 (14) and allergy education for all physicians in 2021 (2). Embedding these within existing medical school curricula may not be feasible and a different approach may be required. We propose the development of an efficient, focused, and practical training package, delivered during the foundation programme. Further work is needed to determine content and modality, but is likely to incorporate self-directed learning modules, supplemented by training by experts (in person or online). We propose this should be focused on topics relevant to foundation doctors and include a) basic understanding of allergic diseases and investigations b) management of anaphylaxis and asthma c) basics of drug allergy and penicillin allergy d) mimics of allergy including common rashes. Underpinning this package should be the aim of improving patient care and access to services. There is unlikely to be any immediate expansion of the secondary care allergy workforce and therefore it is imperative that clinicians seeing patients acutely have a sound understanding of allergy and referral pathways. Targeting the training package during the foundation programme should address the dissatisfaction expressed by foundation doctors and would capture international medical graduates, who form a substantial proportion of the workforce. The package could also be adaptable for other healthcare professionals.

Improving allergy knowledge at the start of a doctor's career may have wider benefits, irrespective of their final career destination. For example, these data suggested that understanding of drug allergy is poor. Almost 6% of the UK population are labelled with an allergy to penicillin (15) and yet 95% of those labels are incorrect when tested (16). An incorrect label of penicillin allergy is a dangerous one, leading to longer hospital stays and adverse consequences from alternative antibiotics. Improving allergy education so that there is better understanding of the nature of adverse reactions may reduce drug allergy labels and could save the NHS significant financial spend (17).

Summary

This study is the first to represent the views of recently qualified doctors working in the UK with respect to training in allergy. It highlights the urgent need for action to equip doctors to manage allergy throughout their careers. Further research is needed to design and evaluate educational interventions.

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