

Academic postgraduate medical education — an Oxford view

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ABSTRACT

Postgraduate medical education in the UK has gone through a maelstrom of change in the last 20 years; many components have disadvantaged clinical academic training in particular. In this article we summarise some of the changes and describe the advantages of the creation of a dedicated clinical academic graduate school as a response to these changes.

KEYWORDS: Clinical academic, postgraduate medical education, integrated academic training

A short history of British postgraduate medical education (mainly England)

It may surprise today's doctors, who are only too aware of the complex, highly structured and constraining nature of current postgraduate medical education (PGME), that in the UK PGME was essentially unstructured until about 40 years ago.¹ Individuals set up their own 'training programmes', by applying for posts with whomever they felt would best help their career and who could provide teaching and training in their chosen specialty. The General Medical Council (GMC)'s remit was undergraduate education and acquired nominal responsibility for PGME only in 1978. There were no college curricula, regular monitoring (such as annual reviews in competence progression [ARCP]) did not exist and appointments were made by individual hospitals or universities. The sole outcome of significance for hospital doctors was passing the college exams in one's discipline. There was no constraint in moving anywhere in the country or between disciplines.

This relatively unstructured system rather suited academic training because research is, by nature, unpredictable in both time and direction. So, if a trainee unexpectedly found an opportunity or need to move elsewhere/abroad, or to spend more time on a project, there were no external constraints to do

so. Another factor of significance was that the vast majority of people were not appointed to consultant posts until 15 or more years after graduation. So spending several additional years in research was not a major disadvantage. Indeed, given the competition for posts, having a significant research portfolio was a major plus.

In the 1970s to the 1980s this relaxed and advantageous situation for academic medicine started to change. The increasing complexity and demands of medicine and society led to changes in PGME, with more structure, specification and oversight of the training programmes and trainees. Postgraduate deans – university employees with pastoral responsibilities (the first of which were created in the 1960s) – were established across the whole country by the late 1970s. In the 1980s, colleges started to produce curricula. In the 1990s, postgraduate deans and their administrative organisations (deaneries) were given budgets and responsibility for appointments and approval of posts together with royal colleges, and the number of posts started to be regulated. In the early 2000s, training posts were restructured with the abolition of the house officer, senior house officer, and junior and senior registrar grades, and the creation of foundation and speciality training posts. Competencies were defined and regular monitoring of trainee progress was instigated, under the control of the deaneries. The duration of training programmes was restricted to 9 years or less, leading to the award of a certificate registering completion of training.

In parallel, as virtually all the funding for this activity came from the NHS, most postgraduate deans became employed by the Department of Health (DH) instead of the universities. The Post Graduate Medical Education Training Board (PMETB) was set up by the DH in the early 2000s to replace the roles of the GMC and the royal colleges, but this was later abolished and overall responsibility for PGME was transferred back to the GMC. Most recently, a national body, Health Education England (HEE), with its 13 local education training boards (LETBs), has been created. LETBs incorporating deaneries are now responsible for overseeing education and training of both medical and non-medical clinical members of the NHS workforce.

As can be seen from the above very brief and incomplete outline, PGME has been totally transformed, particularly in the last 20 years. An undoubted accompaniment has been the much increased bureaucracy and rigidity. This, combined with the

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shortened training period, and the abolition of many clinical academic posts in response to the pressures of the research assessment exercise, resulted in a crisis in clinical academic trainee numbers in the early 2000s. The Walport Report² and the creation of the Integrated Academic Training (IAT) programme was the result (see below).

The Oxford medical school

The first recorded mention of medicine at the University of Oxford was at the start of the fourteenth century. Since then, the school has had many peaks and troughs of relative success and prominence, but, since the re-emphasis on the scientific basis of medicine in the 1890s, the school's reputation for both teaching and research has grown steadily and strongly.

Currently pre-clinical students read for a BA(Hons), including a significant research project in the third year. This is followed by competitive separate entry into the clinical course. At this point, a number of students leave Oxford and are replaced by students from other institutions, often Cambridge. In 2001 the standard course was complemented by a graduate entry course, with a strong emphasis on an academic approach to medicine; many entrants had doctoral or post-doctoral research experience.

Another defining characteristic of the school is that it is relatively small. This, combined with the Oxford collegiate system of tutorials, means that students have a highly personalised educational experience, including daily interaction with research-active tutors. Inevitably, this approach has meant that most applicants to Oxford are inclined towards an academic approach to medicine, reinforcing the overall academic culture.

The school has recently been judged among the best in the world in several 'league tables'. Whatever the validity of such league tables, it is undoubtedly true that the emphasis on an academic approach to medicine has been, and remains, a strong and defining characteristic of the school.

The creation of the national IAT pathways provided an opportunity to develop a focused postgraduate clinical academic training programme in Oxford to complement and synergise with the rest of its academic strengths.

Introduction of Integrated Academic Training

The first tranche of IAT, or Walport, posts was awarded in 2006 via a competitive process to medical school/deanery/ NHS trust partnerships across England. IAT academic clinical fellowships (ACFs) are usually pre-doctoral, and have the aim of developing pilot data to enable the submission of a fellowship application to fund a doctorate. They are 3 years in length (4 years in primary care), of which 25% is protected for research. IAT clinical lectureships (CLs) are 4 years long, with time for clinical training and research, split 50:50, enabling subsequent intermediate fellowship or clinician scientist applications and the development of research independence. Some posts in the early allocations were attached to broad specialty groupings, allowing the academically strongest applicants to be appointed independent of specialty. More recently all posts are required by the National Institute for Health Research (NIHR) to be allocated to specific specialties, leading to an associated loss of flexibility.

An academic postgraduate medical school

Within Oxford, in common with other centres, the IAT posts were met with excitement by senior clinical academics. The numbers of ACFs and CLs recruited in Oxford in 2006 were tiny (seven ACFs and seven CLs) compared with the main specialty recruitment and, although this increased in 2007 and 2008, the numbers remained a small fraction. Furthermore, the programme launch coincided with many of the other organisational changes mentioned above (including the Medical Training Application Service [MTAS] debacle). This meant that trainees taking up the early posts spent a considerable amount of time attempting to explain the nature of their post and negotiating their research time, generating widespread feelings of being unwelcome and unwanted.

Against this backdrop, the dean of the medical school in Oxford, the postgraduate dean and senior academics approached South Central Strategic Health Authority with a proposal to establish a new academic school that would bridge the university/NHS divide, and take on the promotion of clinical academic careers. The Oxford University Clinical Academic Graduate School (OUCAGS) was established in early 2009, with the aim of encouraging the most able clinicians into academic medicine and ensuring that the experience they received was of the highest calibre. Financial support from the strategic health authority was crucial to recruitment of dedicated staff and in the establishment of locally funded ACF and CL posts – although this support was significantly reduced almost as soon as OUCAGS was started.

OUCAGS is led by a senior clinical academic director who is also the associate dean for academic affairs within the Oxford deanery. The administrative staff spend time on a weekly

Box 1. Summary of research, education and training provision for clinical academic trainees in Oxford.

- > Career and research methods seminars
- > Regular informal meetings (including some with senior academics) to build a community ethos and esprit de corps
- > Weekly academic medical forum to present and discuss research
- > Formal postgraduate diploma in health research for ACFs
- > Management and leadership programmes
- > Mentoring by senior academics who have become formal academic training programme directors, and who are also involved in recruitment and academic annual review of competence progression (ARCP)
- > Research-funding bursaries
- > Support to maintain academic progress for clinical lecturers with caring responsibilities
- > Academic e-portfolio to facilitate joint clinical and academic ARCP
- > International research placements
- > The university's graduate studies programme

ACF = academic clinical fellowships; ARCP = annual review of competence progression.

basis within the deanery and work alongside the teams there. It cannot be emphasised too much how important these dual roles have been in simplifying the information flow, resolving funding issues and troubleshooting any other problems associated with academic training posts. OUCAGS has now become the single point of contact across university/deanery/NHS partnership for advice and information on academic careers, recruitment, training and funding – a ‘one-stop shop’. Again it cannot be over-emphasised how important this has been because the complexities of each trainee’s situation can be considerable.

One of the further advantages of OUCAGS is that it ensures strategic assessment of the training priorities of both the university and the NHS locally, and promotes their coherent development. In addition OUCAGS undertakes a formal role within the deanery quality management procedures to assure the standard of the academic programme across the current 52 ACF, 42 CL and 48 academic foundation posts (allowed 4 months protected academic time in foundation year 2 [FY2]).

Before OUCAGS began, academic trainees across the deanery reported widespread feelings of isolation and uncertainty. This has been addressed by offering all academic trainees, including the academic foundation programme (AFP) and clinical doctoral students, a supportive research education programme. The components/benefits of this programme and of OUCAGS generally are summarised in Boxes 1 and 2.

It is widely recognised that the route to a clinical academic career needs to be flexible, so that additional funding for career support and academic opportunities outside the IAT pathway is necessary. Furthermore, the introduction by NIHR of a non-competitive formula mechanism for the bulk of their posts has seen the number allocated to Oxford decrease from 22 ACFs per year in 2009, to 12 in 2014, and from 8 CLs to 5 per year. Consequently, one of the roles of OUCAGS has been to act as

a focus to identify and provide leverage for funding to give additional academic opportunities of benefit across medicine at Oxford. In the last year we have used the money raised to fund four 1-year fellowships, a small number of local ACF posts and an expanded academic foundation programme (24 places per year instead of 18), and we also awarded six further academic FY2 placements to trainees selected from our standard foundation programme. In addition we have launched a new career support scheme for CLs who have taken an extended period of leave to care for children or relatives. However, many of the funding streams used are short term, and the identification of supplementary funding remains a vitally important challenge to allow us to continue to offer the rich diversity of the Oxford biomedical research environment to a reasonable number of current and future clinical academic trainees.

Other approaches

As far as we are aware no other centre has established a similar academic school integrating university, deanery and the NHS. A variety of different approaches were adopted across the country, such as having an interested academic running the programme, often with little formal support, or a named lead within a deanery having oversight. However, in the last few years, most of the centres have developed their academic training programmes, with, for example, Cambridge, Newcastle and UCL all having clinical academic training offices. An important new initiative nationally has been the establishment of regular meetings of IAT leads and managers, allowing vastly improved communication, facilitating a broader range of training and funding opportunities, and providing a forum for the sharing of ideas.

Future and conclusion

The NHS faces a challenging future with markedly increasing demands, far outweighing the minimal increase in funding in real terms. The problems of Mid Staffordshire and other trusts have engendered a sense of crisis. The creation of HEE has been accompanied by proposals to re-balance training posts, with reductions in hospital specialty posts and the intent to increase general practitioner (GP) trainees. There is clearly a danger that the crucial importance of clinical academic trainees will be lost in this turbulent future, although encouragingly the HEE mandate³ has a commitment to support research and innovation that explicitly mentions support for clinical academic careers.

In the meantime, the extraordinary advances in science are resulting in an avalanche of new approaches to understanding the pathogenesis of disease, thus allowing the development of new and improved methods of prevention and treatment. To maximise the potential of these developments we need more doctors with attitudes of drive for excellence, challenge, openness, curiosity, critical analysis, refusal to accept the status quo and willingness to experiment, all characteristics exemplified by the clinical academic. Furthermore, and importantly, many characteristics of academic practitioners chime with the recommendations of the recent Francis report. Accordingly the need for clinical academic training has never been higher.

In Oxford, we have used the IAT to create a postgraduate school for clinical academic training, the advantages of which have been summarised in Box 2. Through OUCAGS we have

Box 2. Summary of advantages of the OUCAGS model.

- Central point of advice for trainees and supervisors – ‘one-stop shop’ – highly valued in trainee feedback
- Joint appointments leading to improved communications with deanery/LETB
- Regular meetings both formal and informal with senior academics, heads of schools and training programme directors
- Identifiable route for quality assurance of the academic training programme against GMC domains
- A clearly defined point of accountability for IAT matters and liaison with the NIHR
- A point of contact for other academic foundation and IAT programmes
- A recognisable brand
- A focal point for strategic discussions with trusts and university
- A focal point for fund raising for clinical academic purposes

GMC = General Medical Council; IAT = Integrated Academic Training; LETB = local education training board; NIHR = National Institute of Health Research; OUCAGS = Oxford University Clinical Academic Graduate School.

increased our numbers of clinical academic trainees and provided them with a focused infrastructure and support system. We are building on this by providing leverage for funding from other sources and also using this model as an exemplar to provide similar support for our non-medical colleagues in nursing, allied health professions and clinical science. In this rapidly changing environment, we suggest that the need for a structure similar to our OUCAGS to ensure the future of academic medicine, and through it the highest standards of healthcare, has never been greater. Since writing this article, the *Shape of Training* report has been published. We believe that the unified structure of the Clinical Academic Graduate School will enable us to continue our flexible and constructive support of academic trainees through this latest change to medical training in the UK.

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