The future of medical education and training

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County Durham and Darlington Foundation Trust (CDDFT) has stated its aim to be the best-performing Foundation Trust in the country. If it is to achieve this its education and training must match that ambition. Nationally, medical education and training (ME&T) is undergoing major re-organization and it is hard to over-estimate the challenges that CDDFT, as an education provider, faces in an increasingly regulated and competitive environment.

Sir Liam Donaldson's report *Unfinished Business* laid the template for a structured, time limited, training programme with progression based on competency assessment. Whilst the overall aims were in many ways laudable the chaos engendered by their initial implementation led to Sir John Tooke's report into ME&T – *Aspiring to Excellence*. A far reaching report with 47 recommendations it was highly influential in Lord Darzi's report – *A High Quality Workforce: NHS Next Stage* Review. The NHS Next Stage Review describes a vision of an NHS delivering high quality care to all and giving the staff freedom to focus on quality and recognises that to deliver that vision the NHS must provide the best possible education and training for all staff. To ensure that the money dedicated to education and training is spent appropriately, funding streams are to be made more transparent with the aim of promoting fairness and reward quality of education. The current historical funding arrangements for the multi-professional education and training budget (MPET) are to be rebased and replaced by a tariff-based system with money following the trainee. There will be a clear separation between the commissioning of education and training and its provision which is deliberately intended to challenge educational providers to improve the quality of their training. In addition the report proposes to explore options that will give trainees a greater say in where they train and as a consequence where they will take their funding. It is clear that just as in clinical services the aim is to create, at least in part, a market in education with the aim of driving up standards as providers compete for trainees on the basis of the quality of training that they offer.

These fundamental changes in ME&T are taking place against a backdrop of another profound change in the way junior doctors' work, namely the reduction in hours to 48 per week in August 09. Richards (2009) suggests that as a result ME&T in the UK will finally change from an apprenticeship model to one based on shift work. Paradoxically as hours have been reduced many juniors are reporting increasing stress levels. There is less continuity of care, a well-known cause of medical error and when on-call they are covering more patients, many of whom they are totally unfamiliar with. At the same time service commitments for consultants will increase and many claim to be working harder than ever.

It is in this context that an MMC Programme Board Task and Finish Group on Quality have suggested ME&T can be divided into three components. Firstly, education which is often delivered away from the workplace by courses and simulation labs, etc., secondly training which is usually on the job and thirdly experience which consolidates learning by working under less direct supervision. Education and training deliver a competent doctor; experience allows the competent doctor to become a confident doctor capable of independent practice commensurate with their stage of training.

In a working environment of fewer hours there will be increased pressure on training time increasing the importance of maximising the benefit of each clinical placement. Clinical

sessions designed for training will need to be carefully matched to the trainee's current skill and future needs in terms of case mix, volume of activity and duration of the session. As a local education provider CDDFT will be expected to produce a "training opportunity matrix" matching its posts and the training they offer against the curricula of the various specialty and foundation schools. This will allow trainees to be placed, or increasingly choose to be placed, in units that are best able to meet their training needs.

The CMO's annual report for 2008 has highlighted the potential contribution to this agenda of high fidelity simulation training. Well established in the airline industry, where mandatory and constantly refreshed training allows pilots to prioritize and make crucial decisions rapidly in the event of a rare but potentially disastrous emergency, it was magnificently exemplified by Captain Sullenberger landing his engineless passenger jet on the Hudson River saving all 155 people on board. Sir Liam contrasts his calmness under pressure with the tragic case of Elaine Bromley, a healthy mother of two young children, who died during a routine operation when the anaesthetist was unable to successfully intubate during induction of anaesthesia. She therefore could not be ventilated and instead of defaulting to recognised emergency procedures to ensure adequate oxygenation repeated attempts were made to intubate resulting in fatal brain anoxia. It is salutary to reflect that the risk of death on a passenger flight is 1/10,000,000 whereas the risk of serious harm or death from medical error in hospital is 1/300. The reduction in junior doctors' hours means that they are exposed to fewer patients and have less opportunity for practical procedures, a gap that could be bridged with simulation training. Its use in laparoscopic surgery has been shown to reduce errors with juniors who had not had the opportunity to practice their skills on a simulator being three times more likely to make an error, and taking 58% more time to perform the procedure than their colleagues who had. Whilst the aim of simulation training is to avoid serious untoward incidents, where they do unfortunately occur it is an excellent environment in which to re-run the incident so that the team can learn lessons to prevent recurrence.

Tooke recommended that the training implications relating to revisions in medical education and training needed to be reflected in appropriate staff development and job planning. The Postgraduate Medical Education and Training Board (PMETB) have produced generic standards for trainers which are intended to address the need for faculty development.

Standard I states that the trainers must provide a level of supervision appropriate to the competence and experience of the learner. This entails allowing trainees to gain experience by undertaking patient care within the confines of patient safety and clinical governance, have their progress assessed using approved assessment tools and be given appropriate feedback.

Standard II states trainers must be involved in and contribute to the learning culture in which patient care occurs, so that clinical care is of high standard and valued as a learning resource with training integrated into service provision.

Standard III states trainers must be supported in their role by a post graduate education team and have a suitable job plan with an appropriate workload and time to develop trainees. Trainers taking a more advanced role should be selected for the role and should be able to demonstrate their abilities as effective trainers.

Standard IV states trainers must understand the structure and purpose of, and their role in, the training programme of the designated trainee. Trainers must be aware of PMETB standards

and ensure that all involved in the training and assessment of their trainee understand what is required.

The responsibility of providing supervision, particularly clinical, should not be underestimated. In a recent survey of consultant surgeons in the North East, 81% admitted to either moderate or high level of concern relating to the role (Young, Redfern, and Sher 2008). It is of concern that in the same survey 51% reported that they had had no formal training in educational supervision.

The BMA Education Committee warned in 2006 that the role of the doctor as a teacher should not be acquired through chance, aptitude or inclination alone. Paul Streets, Chief Executive Officer PMETB, questions whether the current system of training in hospital medicine can continue to deliver and suggests that "nationally there may be a case for considering the wider adoption of the GP trainer model with funding and financial incentives to Trusts, Boards and trainers to train". He observes that GP trainers are selected, trained and paid for the job whilst by contrast few consultants have specific educational qualifications, work in an environment with increasing service pressures, often with no clearly identified training time and are frequently responsible for several trainees. This is clearly an issue that will not go away and the quality of medical education will become increasingly regulated, with standards becoming explicit rather than implicit and with trainers being expected to be as professional in their approach to education as they are to their own clinical practice. It has been strongly suggested that the measurement of the quality of training provided by local education providers, including Foundation Trusts, should be part of the remit of the Care Quality Commission so that educational governance becomes central to Trusts' strategic objectives and helps to drive up standards.

At a regional level there is also significant re-organization, largely to facilitate the separation of the commissioning and provider functions. A new body, NHS North East People (NNEP), has been created to champion multi-professional education and training as a core responsibility of the NHS, and to coordinate workforce planning. It will sit in the strategic health authority (SHA) responsible to the SHA Board via the Chief Executive who will be accountable to the Department of Health for the commissioning and effective quality management of education in the region. The exact position of the Deanery, however, and particularly the speciality schools, of which there are eleven overseeing the running of specialty training programmes, is not entirely clear at the time of writing. Whether one, or both, will sit within NNEP as commissioners of training or will be separate from NNEP as independent providers of training is yet to be finally decided. Regardless of the outcome, however, the schools and their Heads will be very powerful players with significant influence on the placement of trainees and it is important that CDDFT both encourages and supports its consultants to actively engage with them.

At a local level, perhaps not surprisingly given the scale of external changes, there have been significant changes, and considerable investment, in ME&T as outlined in the Trust's ME&T strategy (available on the intranet). In line with Tooke's recommendation a Director of ME&T has been appointed reporting to the Medical Director who has Board responsibility. CDDFT has a proud record of high quality education in many areas but to compete in the new environment it is vitally important that ME&T is recognised as a core business to be developed in the same way as clinical services. To this end the tutor team has been considerably strengthened and structured to support the four clinical divisions. Peter Blakeman heads up the specialty tutor team of Ian Hawthorn

(surgery), Namita Kumar (medicine) and Sujith Bahulayan (family and diagnostics). Their role is to work closely with college tutors and other educational leads to ensure the effective delivery of education and training that meets the trainees' needs within the clinical divisions, working towards compliance with PMETB's standards for trainers and actively engaging with the specialty schools.

The requirement of adequate dedicated time to train is fully recognised and is currently under discussion with the Trust's Medical Negotiating Committee. The aim is for an approximate average of one SPA per consultant – approx. 200 SPA's, equivalent to 800 hours per week - devoted to corporate activities of which the most significant proportion will be education. This is a major resource but is unlikely to cover everything that could possibly be badged as "educational". Open and honest discussion will have to be had within the clinical directorates as to how best to deliver the required education and training for trainees.

In order to develop a faculty that will ensure that PMETB standards for trainers are met David Laird is leading on the development of an in house Training the Trainers programme which it is hoped might be developed to a level where it could be accredited by a local University allowing credits to be built up towards certificates or diplomas in clinical education.

It is important to recognise that health care is increasingly a multi professional team effort and CDDFT has an enviable reputation for the quality and range of its inter-professional education with strong links at a corporate level between all aspects of educational training within the Trust. Further development of inter-professional education will be facilitated by the appointment of Peter Cook as lead tutor. The SAS doctors within CDDFT are an indispensable part of the medical staffing and the Trust benefits greatly from their expertise, skill and dedication. Palani Muthu is preparing plans to enhance their access to high quality continued professional development and career development with a high profile launch on 10th June 2009. The emphasis of this article has for understandable reasons centred around specialty training but it is important to acknowledge the undoubted strengths of the very successful foundation programme within CDDFT under the guidance of Sushma Saksena, Julie Cox and Sivakumar Manickam.

CDDFT is the only Trust in the region in the difficult position of serving two undergraduate base units (Tees and Wear). One of the challenges for the new undergraduate team led by Richard Hardern (Trust Wide Lead), Namita Kumar (Wear Base Unit) and Steve Cowie (Tees Base Unit) will be to work with the two base units to find a way forward such that the Trust is not tasked with stretching its resources to teach two different programmes, often at different times. Despite this difficulty the Trust continues to provide a very high level of education and training to the medical students placed with it, in no small part due to the hard work and professionalism of the nurse teaching fellows.

CDDFT is notable in its paucity of joint academic appointments and in not having a single professorial department. There would be major advantages in terms of improving quality of service, developing centres of excellence and attracting and retaining high quality staff by developing one or two academic departments within the Trust. Given the nature of the Trust it's likely that the academic interest would be in clinical or service delivery research or possibly in education.

In an environment where education will undoubtedly become more professional and competitive it is essential that CDDFT has first-rate facilities in which its trainers can

train and its trainees learn to best advantage. It therefore goes without saying that there is an urgent need to replace the education facilities at UHND and there are active discussions taking place.

In addition, the advantage of using a ward area on which to base a high fidelity simulation centre has been recognised. This would be a multi-purpose facility for a range of activities including highly specialised training in surgical procedures, advanced resuscitation courses, hosting of undergraduate and postgraduate exams as well as providing a realistic environment for scenario based multi-professional team learning.

Processes are now in place at a national level that will inevitably see the role of medical educator as becoming part of the career path of significant numbers of doctors who will be selected and trained appropriately to do the job. Clinical departments will make business decisions as to how much resource they are willing to invest in training. The probability is this will need to be a balance on the one hand between investing in other staff or alternative ways of working to reduce reliance on trainees for service delivery, and on the other, improving the quality of the education provided by a smarter, more focused use of training opportunities and developing a faculty of skilled trainers. These decisions will be influenced by the knowledge that there will be competition amongst the educational providers for trainees who will have increased choice as to where they train.

These are exciting times and whilst there are undoubtedly many challenges there are equally many opportunities which if grasped open up the prospect of a bright future for ME&T with trainees competing to come and work in CDDFT.

Acknowledgements

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Further Reading

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