Is training shaping up?

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The Cardiology Curriculum[1] describes the specialty of cardiology as a subspecialisation for physicians who were predominantly concerned with the care of patients with cardiovascular disorders. It goes on to state that care of such patients embraces a wide range of clinical activities and cardiologists need a broad view of the cardiovascular needs of individual patients and the communities in which they live, including an understanding of any prevailing health inequalities. This requires knowledge of not only the diagnostic and therapeutic modalities available, but also an appreciation of the importance of the epidemiology and potential for prevention of cardiovascular disease. Although cardiology is generally stereotyped as a highly practical skill-based medical specialty, with invasive and interventional skills as high-profile components of the workload, competence in other areas of practice such as cardiovascular clinical pharmacology and non-invasive imaging are equally important.

Multiple skills required

Cardiologists need the ability to work as leaders of, or within, teams and systems involving other healthcare professionals in order to effectively provide optimal patient care. Cardiologists generally work as hospital-based specialists and need to integrate their work with, not only community-based primary care colleagues, but also other hospital-based physicians, as well as working closely with cardiothoracic surgeons and anaesthetists and the imaging specialties, e.g. radiology and nuclear medicine. Cardiologists may work some of their time as part of acute medical admissions teams looking after emergency medical admissions admitted to acute medicine units. Further subspecialisation within cardiology has become commonplace, with individuals focusing the development of their expertise in areas such as cardiac imaging, coronary intervention, heart rhythm disorders, adult congenital heart disease or heart failure.

Providing this range of cardiological care is a tall order for any one individual, but this last decade has seen major changes in the delivery of cardiology services, and there has been a move away from the often single-handed general cardiologist model to a more team-based, subspecialised approach. During this period, and to accommodate these changes,

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the Cardiology Curriculum has effectively been rewritten. Two versions[1] have been created since 2007 under guidance from the Postgraduate Medical Education Board (PMETB) and later the General Medical Council (GMC), once the former organisation had been subsumed by the latter. The curricula are based around a new model (one year shorter than the previous specialist registrar system), which splits specialty training into an initial three-year period of core general cardiology, which includes general medicine (GIM), followed by a two-year period of modular subspecialty training. Training is now intended to be more transparent, reproducible and competency based, and an assessment strategy is available to monitor effectiveness.

In the same time frame, the working week for trainee doctors has reduced significantly from approximately 72 hours to 48 hours, when in August 2009, we saw the full implementation of the European Working Time Directive (EWTD) into UK legislation.[2]

The current cardiology training programme has to negotiate tensions between the requirement for high procedure numbers, a demonstrably high standard of competence and rapid completion of different modules of training, all within the constraint of limited weekly hours. The difficulty of achieving this balance is compounded by a sometimes mainly service-based general medicine on-call requirement.

Impact of changes

There are little data collected nationally to provide information on the impact of all these changes on trainees. In addition, although the NHS Plan,[3] published by the Department of Health in 2000, directed a significant increase in health spending and wide-ranging changes to health service

delivery, consultant posts may not have increased to match the increase in training numbers, and there is a perception that many qualified trainees will struggle to find consultant appointments. Since 2004, the British Junior Cardiac Association (BJCA) has conducted five cardiology trainee surveys to address these issues and inform debate. The results of the most recent survey were published in this journal.[4] There have been changing subspecialty choices of cardiology trainees; changing experience of training and changing views on their prospects of a consultant appointment.

With one-third of the trainee base responding, we see a predominantly male population, but a steady increase in female trainees now reaching 21%, although Joint Royal Colleges of Physicians Training Board (JRCPTB) figures[5] would suggest an increase to 25% by 2016.

An interesting observation in this survey sample is that 51% of trainees intend to dual accredit in cardiology and general medicine, whereas certification figures for 2012[5] show that only 19 trainees out of 95 (20%) dual certified, with most of them being on the pre-2007 curriculum (which is a six-year programme). This is consistent with the survey observations that many trainees (now on the five-year curriculum) are finding difficulty in achieving cardiology competencies, e.g. echo and angiography skills, within this time period because of an onerous service commitment to GIM, as a consequence of which, many trainees opt for single certification. The cardiology Specialty Advisory Committee (SAC) is very much aware of this concern and has made an approach in the Shape of Training Consultation[6] to extend the programme back to six years. We believe that an extension in the training time will also facilitate increased exposure to clinical procedures in the craft subspecialties of percutaneous coronary intervention (PCI) and electrophysiology, which is again consistent with the BJCA survey findings of a decreased experience between 2009 and 2012.

Shifts in training choice

There has certainly been a shift in subspecialty training choices over the last five years with a marked decrease in applications for training in interventional cardiology, but this is mirrored by an increased demand for training in the three imaging modalities of cardiac computed tomography (CT), magnetic resonance (MR) and echocardiography. Adult congenital, electrophysiology, heart failure and academia, however, have remained relatively constant over the years. Onerous and demanding rotas in primary PCI may be one of the explanations for a decrease in PCI popularity, and this issue may need to be addressed in time by the relevant bodies so that the already excellent service provided for patients is maintained within an acceptable work–life balance for the interventionalists and their teams.

An alternative explanation, however, may be more general, as reflected in the survey findings of a perceived dearth of consultant posts in future years, with a view that many of the intervention posts are already 'filled'. Our recent workforce assessment in a joint project with the Centre for Workforce Intelligence (CfWI), Royal College of Physicians (RCP) and British Cardiovascular Society (BCS) should dispel such apprehensions with latest figures suggesting a balance between new post creation (5%) and retirements (3%) against new certificate of completion of training (CCT) holders. Indeed, there are no immediate plans to cut training numbers in cardiology. A survey of cardiology Training Programme Directors (TPDs) in 2011 showed that of the 89 CCT holders that year, 66% were appointed to UK consultant posts, 15% became UK locum consultants and 6% obtained overseas consultant appointments; 13% went abroad to do post-CCT fellowships in electrophysiology and PCI.

The present Cardiology Curriculum appears well adapted to train tomorrows' cardiologists into a workforce capable of not only accommodating the changes in the delivery of cardiac care that have occurred over the last decade, but also in allowing flexibility to change with the times ahead. The results of this well-constructed survey of the trainees, however, would suggest that significant service pressures within a restricted working week is impeding delivery and that an extension in training time may be required. Such surveys prove invaluable to those who write the curricula and who are ultimately responsible for delivering the programme, and the SAC and BCS warmly encourages such interactions

Conflict of interest

None declared.

Further resource

Shape of training review available at www.shapeoftraining.co.uk

Editors' note

Results from the BJCA survey were published in the last issue *Br J Cardiol* 2013;**20**:22–4 with an accompanying editorial by Niall Keenan *Br J Cardiol* 2013;**20**:8–9.

References

1. Joint Royal Colleges of Physicians' Training Board (JRCPTB) website. Available from: http://www.jrcptb.org.uk/trainingandcert/ST3-SpR/Pages/Cardiology.aspx [accessed 13/02/13].

2. Directive 2003/88/EC of the European Parliament and of the Council of 4 November 2003, concerning certain aspects of the organisation of working time. The European Parliament and the Council of the European Union. Available from: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32003L0088:EN:NOT [accessed 13/02/13].

3. Department of Health. The NHS plan: a plan for investment, a plan for reform. Crown Copyright 2000. Available from: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4002960 [accessed 13/02/13].

4. Holdsworth D. Cardiology training in the UK – an observational study based on the 2012 BJCA survey. *Br J Cardiol* 2013;**20**:22–4.

5. Joint Royal Colleges of Physicians' Training Board (JRCPTB) database. Available from: http://www.jrcptb.org.uk/trainingandcert/ST3-SpR/Pages/Cardiology.aspx [accessed 13/02/13].

6. Shape of training review of postgraduate medical education and training. General Medical Council 2013. Available from: http://www.shapeoftraining.co.uk [accessed 13/02/13].