Key Points

- Clinician scientists are a vital part of a first rate evidence-based healthcare system and we must establish a training system that supports their development, enabling the UK to train a cadre of the highest calibre people.

- The extremely inflexible nature of training pathways has a negative impact on the training of both clinicians and clinician scientists.

- Referring to periods of research training as “out of programme” is unacceptable. These periods must be viewed as an integral part of training for clinician scientists. We strongly advocate greater flexibility over the length of these periods, while recognising this causes some challenges for training and service pathways.

- The creation of Health Education England and the Local Education and Training Boards provide an important opportunity to review education and training pathways. It is vital that these organisations deliver their important roles in promoting research.

INTRODUCTION

1. The Wellcome Trust and Medical Research Council are pleased to have an opportunity to contribute evidence to the Shape of Training review. As major providers of research fellowships for clinicians at PhD and postdoctoral level, we are extremely disappointed by the inflexible attitude taken towards trainees who want to spend more than three years of their training in a research setting. We welcome improvements that have been made in postgraduate academic training through the combined efforts of funders such as the National Institute for Health Research. However, existing supervisory structures have failed to provide sufficient flexibility in clinical training to maximise the benefit of this funding.

2. It is vital that reform of the training pathway follows a clear vision of what role will be required of doctors in the future. Important elements of this vision will be to create a flexible workforce that values and commits to education, training and development throughout an individual’s career. We fully support the Review’s position that “training and development are never really completed” and see this as essential to ensure that clinicians stay up to date and deliver the best care to their patients.
3. The Trust co-hosted a meeting to discuss what had gone wrong in postgraduate education and training, which formed the basis of a letter to the Prime Minister from the Council for Science and Technology in July 2012. We strongly support the analysis and action points set out in this letter.

BALANCE OF THE MEDICAL WORKFORCE

Q.1 Over the next 30 years, how do you think the way patients are cared for will change?

4. New technologies and approaches have significant potential to transform care. In order to ensure that these technologies are deployed effectively in the NHS, it will be essential that healthcare professionals are given the education, training and time needed to support this. For example, the greater specificity provided by genomic medicine will lead to a transformation in diagnosis and therapy. This is already starting to happen in areas such as cancer and in understanding the spread of infectious diseases. The significant investment in understanding disease stratification will lead to novel biomarkers, diagnostics and interventions based on a much more personalised approach to disease prevention and presentation.

5. Information technology also offers vast potential to transform healthcare. Electronic health (eHealth) records will facilitate the sharing of records between patients and practitioners. Used effectively, these records will help providers deliver seamless care for patients between specialties and primary and secondary care. Further, eHealth records will permit better surveillance to monitor and improve the quality of care. Combined with new diagnostic devices, eHealth will also facilitate a move to more remote monitoring and the provision of care in patients’ homes and communities. In light of the findings of the Mid Staffordshire NHS Foundation Trust inquiry, we note that eHealth records will underpin the rigorous data that will provide the strongest mechanism for accountability in the system to promote the delivery of high quality healthcare.

6. In addition, research and innovation allow us to develop new interventions; test whether interventions are effective; and to roll out those interventions that offer the greatest benefits for patients. They also provide the evidence for stopping less effective, and sometimes wasteful, practices. Research therefore becomes particularly important as the resources of the NHS are increasingly stretched by an ageing population and the growth of chronic diseases such as obesity and diabetes, within the context of a difficult financial climate.

Q.2 What will this mean for the kinds of doctors that will be needed in primary care? In secondary care? In other kinds of care?

7. The pace of technological and scientific developments means that it is more important than ever to ensure that the clinical workforce contains significant numbers of fully trained researchers. It is also important that the wider clinical workforce is sufficiently research aware to build the capacity of the NHS to apply research findings and contribute to research and the spread of innovation. The NHS Chief Executive’s Review, *Innovation: Health and Wealth* said that “innovation is central to the future of the NHS”
and recognised the importance of the workforce in realising this ambition. We agree and consider that an appropriately trained clinical workforce will be essential to deliver the duties towards research and innovation in the Health and Social Care Act (2012).

8. Developments in science and technology, such as genomics, must be adopted into generalist and specialist curricula in timely fashion to facilitate the uptake of innovation across the NHS.

Q.5 How can the need for clinical academics and researchers best be accommodated within such changes?

9. The Review is considering a move towards more general training during the first phase of a doctor’s postgraduate career to achieve a more sustainable balance between doctors with generalist and specialist skills. We support the development of a clear but flexible career pathway for training clinicians that avoids specialisation too early in the process. A reformed training pathway should enable trainees to develop a fully rounded set of skills and devote time to activities away from the bedside, such as research.

10. The current Integrated Academic Training Pathway (IATP) developed following the Walport review is one route into academia. The IATP is proving popular, robust and promises an important reversal in manpower losses sustained around the year 2000; therefore, if significant changes in clinical training are recommended and do not map well on to the IATP, urgent work needs to be sponsored that will ensure that a new and clear IATP is implemented at the same time as new clinical training pathways. Any reforms of the training pathway must also take care to accommodate other existing routes of entry into research.

11. It is vital that the reforms create a clear but flexible career pathway that supports clinical trainees who wish to pursue research. The system must enable these trainees to undertake research training alongside their clinical training. We consider that referring to periods of research training as “out of programme” is unacceptable and sends an inflexible signal about this training. These periods must be viewed as an integral part of training for clinician scientists and should not be treated separately to their clinical training.

12. We consider that the training system should enable clinicians to continue education, training and development throughout their career. We support the division of training into two phases: a generalist phase enabling independent clinical practice, followed by modular highly specialist training, as recommended by the Tooke inquiry into Modernising Medical Careers. As part of a transition to this new skills mix, it will be important to consider the boundaries of specialities – for example how public health can be integrated into cardiology – and how to facilitate the transition of clinicians across specialist boundaries and between primary and secondary care. Such a system would

www.mmcinquiry.org.uk/draft.htm
enable specialism and expertise to form in critical areas and make the workforce more responsive to changing needs. The training of clinician scientists must be an integrated part of a reformed training system in order to build a high calibre of scientific leadership across all specialties. For example, it will be important to ensure that research training and academic opportunities are available in generalist training programmes, as well as in the specialities.

13. In this trajectory to a more generalised base for training it is also important to recognise the needs and potential for clinician scientists, particularly those destined to be research leaders of the future. There should be flexibility to adapt training approaches to allow their academic development recognising that some will ultimately practice medicine in a very specialised role.

14. In light of a transition to more community-based care, it will be important to consider whether there is a need for more research training for clinicians working in these settings, rather than in hospitals. This change may also require the development of new research skills in the workforce.

15. It is vital that reform of the training system is consistent with existing incentives for clinicians to undertake research, for example NIHR funding for academic posts and Clinical Excellence Awards. Similarly, care must be taken to ensure that the reforms do not inadvertently create disincentives to research training and conduct.

**FLEXIBILITY**

Q.6 a-d How would a more flexible approach to postgraduate training look?

16. In order to continue to strengthen the clinician scientist workforce, greater flexibility is needed in the training pathway to enable trainees to balance their need for clinical training with research opportunities. For example, for clinical trainees interested in pursuing an academic career, it is vital that the pathway facilitates periods of research training – for example taking a PhD – and enables doctors to balance their postdoctoral research and clinical work. There must also be sufficient geographical flexibility in clinical posts to ensure that trainees can conduct their research in strong academic centres.

17. The establishment of Health Education England (HEE) and the Local Education and Training Boards (LETBs) creates an important opportunity to reform training pathways, including clarifying and enhancing those for clinician scientists. A key aim for HEE and the LETBs must be to ensure that there is sufficient flexibility to enable clinicians to devote time to high quality research training. These organisations must help employers to create a supportive environment for their staff to train in, and conduct, research.

18. The draft Care and Support Bill includes a duty for HEE to “have regard to the need to promote” research and the use of research evidence (clause 57(2)). As drafted this duty is ambiguous; fails to commit HEE to action; and is not equivalent to the research duties on the Secretary of State and others. We have recommended that the Department of Health strengthen this duty simply to “promote”. This change would recognise the
important role that HEE must play in championing research within the new education and training system.

19. It is absolutely crucial that universities play a central role in the delivery of training to maintain links to the academic research environment. We welcome the approach of the LETB Authorisation Framework that notes that LETB boards “should include representatives from the education sector”. We consider that the draft Care and Support Bill should also be strengthened to reflect this, by mandating the inclusion of persons who provide education and training on an LETB governing body.

BREADTH AND SCOPE OF TRAINING

Q.13 How do we make sure doctors in training get the right breadth and quality of learning experiences and time to reflect on these experiences?

20. The current time-based system for gaining the Certificate of Completion of Training (CCT) creates a rigid framework in which most trainees move at the same pace, for example the system does not allow for differences between individuals and the fact that combining clinical and academic activities may extend the timescales for training. We would therefore support the development of competency-based accreditation system that would provide greater flexibility for trainees to progress at an appropriate pace for their needs.

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