Summary

The Academy of Medical Sciences welcomes the Government’s commitment to providing the highest standards of education and training to every member of the healthcare workforce. Although we are concerned by the scale of the wider NHS reforms, we recognise that there is an opportunity to improve the current system to generate a workforce that is equipped to deliver the very best care.

Undergraduate education at our universities remains among the best in the world. The creation of effective local partnerships between health providers and academia (for example Academic Health Science Centres) has been successful in bolstering health research and driving the UK’s future prosperity. It is clear that we must now build on these strengths to ensure that postgraduate training and education of the entire healthcare workforce are similarly world leading.

Form should follow function – not the other way round. With its starting point being the goals of the workforce reforms, the Academy of Medical Sciences considers that the proposed model for educating and training the future health workforce is cumbersome and will be extremely difficult to implement effectively. We are mindful of the complexity of the other ongoing reforms to the organisation of the NHS and higher education; there must be no repeat of the disastrous implementation of the reforms to junior doctor training. The Academy believes there is a simpler, more effective way forward and offers an alternative model. This draws on existing partnerships and networks, requires less structural change and defines clear responsibilities and accountabilities for all of those who will be involved in workforce education and training.

A key feature of the model is a central role for partnerships between higher education institutes (HEIs) and healthcare providers, which will provide education and training in the context of continuous quality improvement. These partnerships between HEIs and healthcare providers will share their expertise in healthcare provision, research and innovation across the NHS, thus equipping the healthcare workforce to utilise the latest knowledge and research to deliver first class patient care.

Other key features of the model include:

- The key purchaser/provider split for the provision of education and training should be between HEE and local education and training providers.
- The education and training of healthcare professionals should be nationally coordinated by Health Education England (HEE).
- HEE should be governed by a small Board. It should hold and allocate funding, which should be ring-fenced for the sole purpose of education and training.
- HEI/healthcare provider partnerships should lead the local provision of education and training.
- We do not agree that local skills networks should commission education and training. Instead, they should act as advisory bodies that collect local workforce intelligence and provide a forum for discussion and debate.
- The schedule for implementation must be carefully considered and allow sufficient time for piloting and evaluation.
Introduction

The Academy of Medical Sciences welcomes the Government’s commitment to providing every member of the healthcare workforce with the highest standards of education and training. We agree that the current system could be improved and welcome the opportunity to comment on the Government’s proposals.

The NHS is the largest single healthcare system in the world. An outstanding workforce, dedicated to providing the best care, is vital to its effective functioning and we agree that principles such as security of supply and responsiveness should be central to any system for workforce planning and development. To respond to changing healthcare demands, now and in the future, it is imperative that the workforce has appropriate educational foundations, is well trained, and is practically and intellectually flexible. The Academy has previously highlighted the importance valuing academic endeavour, ensuring flexibility and providing long-term career pathways in developing and maintaining a first class workforce throughout the NHS.¹ We are delighted by the recent National Institute for Health Research (NIHR) investment in the Clinical Academic Training Programme for nurses, midwives and allied health professionals.²

While in principle we agree with many of the proposals set out in the Government consultation, we believe that the ambition for developing the healthcare workforce should be substantially greater. The NHS reforms provide a unique opportunity to enhance postgraduate education and training, and to improve service delivery, both of which will lead to substantial advances in health outcomes. The Academy proposes that an important means of achieving these advances will be through enhanced partnership working between leading universities and healthcare providers. Undergraduate education and biomedical research at our universities are among the best in the world. We need to build on these strengths to ensure that UK postgraduate training and education are similarly world leading. Placing the provision of both undergraduate and postgraduate education and training firmly in the universities and their partner healthcare providers will ensure that it is seamless. This will also strengthen accountability by enabling partnerships between universities and their healthcare partners to take full responsibility for the quality of undergraduate and postgraduate education and training. There are major opportunities to improve postgraduate education and training of the entire healthcare workforce and the ambitions of these proposed reforms should apply equally to the medical, nursing and allied health professions.

Many effective local partnerships have been established between health providers and academia in the past few years, thanks to the NIHR and other initiatives, such as the creation of Academic Health Science Centres. There is now an opportunity to build on these existing local relationships to transform the education and training of all healthcare professional staff. Continuing education and training is vital throughout the entire career of all healthcare professionals. Our world class universities must have greater involvement in these endeavours. Building on the success of the NIHR, we present a model in this paper in which university/NHS Trust partnerships play a central role.

In line with the Government’s vision set out in the White Paper ‘Equity and Excellence: Liberating the NHS’, multi-professional University/NHS Trust partnerships will drive cultural changes in the NHS to make it ‘the largest social enterprise sector in the world’.³ In order for the NHS to thrive, it requires a workforce and leadership trained to demand, understand and utilise research and innovation for patient benefit. Academic values and a spirit of enquiry should thus be pervasive throughout the service and we have previously highlighted the value of providing all staff with a
diverse education and exposure to research.\textsuperscript{4} Our leading universities have a reputation for enterprise and innovation world-wide and they can instil the culture of enterprise and innovation in NHS services through effective partnership with the NHS in workforce development.

We believe that multi-professional University/NHS Trust partnerships will be in a unique position to strengthen the global competitiveness of the NHS by harnessing research and innovation for health and wealth. Many of our leading universities are already global brands and others will be able to grow to rival world leaders like Johns Hopkins and Harvard. Through University/NHS partnerships in workforce development we will be able to compete globally for the best international talent to ensure a steady income stream for the partners, and most importantly to provide world-class service for our local and global patient communities.

The Government’s proposals are being advanced at a time when unprecedented changes to the structure and function of the NHS are planned. Similarly, there are major changes being implemented in higher education. Changing education and training arrangements during a period of such extensive reform brings not only unique opportunities to add value to the nation’s health system, but also potential unintended negative consequences. We would stress that the schedule for implementation must allow sufficient time for effective piloting and evaluation. There must be no repeat of the disastrous implementation of Modernising Medical Careers.

\textit{Education and training}

Any workforce development strategy must clearly distinguish between education and training. Education occurs in universities and medical schools via a relatively generic curriculum. High quality education requires national coordination and regulation, but local and variable models of provision. As students move through the system, they participate increasingly in training, which by contrast is an area where local ownership and innovation from employers has much to offer.

While we agree that the current system could be improved, we must stress that there are many examples of good practice and it is important that reforms do not inadvertently eliminate these. There are numerous examples of excellence in pre-registration teaching, post-registration training and continued professional development across many sectors, including medicine, nursing and the therapies. We would particularly highlight the success of the NIHR integrated academic training pathway and the work of the NIHR Trainees Coordinating Centre. This organisation has been excellent in developing and delivering integrated clinical academic training and in balancing regional and national workforce needs. These investments have enhanced flexibility, increased research capacity and are stimulating more clinicians in the NHS to engage in research.

\textit{Harnessing research and innovation for health and wealth}

The NHS offers the UK a unique strategic advantage as a resource for medical research and innovation and we have previously emphasised the importance and potential health and wealth benefits of embedding research within the NHS.\textsuperscript{5,6} The Government’s recognition that medical and health research conducted within the NHS is a major driver of the UK’s future prosperity, their decision to protect investment in these endeavours as part of the recent spending review and the commitment of the NHS Constitution to research and innovation, will allow the UK to continue to translate advances in medical science into benefits for patients and society. It will be essential that this commitment, along with education, training and well-structured career pathways, is at the core of the NHS Operating Framework.

Delivering this translational research agenda, to which the Government has recently committed a £775 million investment\textsuperscript{7}, relies on providing the healthcare workforce with suitable skills to
increase the pace of innovation. Medical specialist skills are a national resource and we must ensure there is equity of access to such skills, consistent national standards and the maximum impact on national and regional economies. Developing world class education and training enables the UK to compete internationally for the best students and trainees, bringing immediate economic benefits in terms of the funding that these individuals bring, as well as the future economic benefits of an exceptional and efficient workforce.

Prioritising the strengthening of clinical research capacity through education, training and exposure to research will ultimately support the Government in meeting its objectives set out in both the Health and Public Health White Papers, for example by: 

- Providing a foundation for improved health outcomes.
- Enabling more effective mental and public health measures.
- Increasing the efficiency and productivity of the NHS.

**Academic-health provider partnerships**

Over the past few years the UK clinical and academic community has been active in establishing many effective local partnerships between health providers and academia, supported by commissioners and strategic health authorities. Examples include the NIHR Biomedical Research Centres and Units (BRCs and BRUs), Collaborations for Leadership in Applied Health Research (CLAHRCs), Academic Health Science Centres (AHSCs) and Health Innovation and Education Clusters (HIECs). These partnerships enable integration of research and clinical training, which enhances research activity, facilitates the movement of junior doctors between these activities, and promotes the implementation of innovations across the academic-NHS interface. The work of the NIHR has significantly increased effective high quality collaborations between universities and NHS Trusts. This provides lessons for the formation of Health Education England (HEE) that would help to ensure that the tripartite mission of the highest quality of patient care, education and research, is at the core of education and training plans.

The Academy believes that the new proposals should build on these foundations. We consider that the success of the integrated academic training pathway illustrates that effective national leadership and coordination have much to offer in enhancing education and training.

**The Academy’s response and proposals**

In this response we first consider the implications of the Government’s current proposals for the NHS workforce. We then offer suggestions as to how these proposals might be improved.
The proposals

We consider the model that is proposed in the consultation document to be unnecessarily complicated and lacking in clarity. The nature of the problems that the reforms are trying to fix is unclear. Form should follow function, rather than the other way round. We believe that there needs to be a clear vision of the goals of education and training. We would argue that the goal is to educate, train, recruit and retain a diverse workforce that can deliver a first class health service.

To achieve this there are three high level essential requirements:

i) The NHS requires a well educated and trained workforce that is flexible and capable of responding to evolving healthcare needs at a local and national level.

ii) There needs to be the best intelligence gathered at a local and national level on educational and training needs to match supply to need, recognising that predicting workforce requirements is fraught with difficulties.

iii) There must be clarity about the responsibilities and accountabilities of the many staff who provide and oversee the education, training and continuing performance of all staff working in the healthcare system.

There are then a series of subsidiary issues that follow in the wake of these requirements:

i) Excellent supervision and mentoring of trainees and healthcare professionals must exist throughout the NHS.

ii) This must be responsive to a diverse workforce, working in a flexible fashion.

iii) Quality assurance and continuous improvement of education and training are mandatory.

We agree with one key principle which is implicit in the consultation document – that at the national level, there should be clear separation between those that commission and pay for education and training and those that provide that education and training.

We do not agree with the suggestion that commissioning should be provided by local skills networks, which would by necessity have to be set up as legal entities. We recognise that it is superficially attractive that local commissioning should be responsive to local service needs. However the counterargument is that most ‘local’ service needs are in fact more effectively provided nationally. The training of healthcare professionals is a nationally coordinated and governed activity. The UK is small country geographically and much of the health workforce is mobile. If it is hard to define workforce requirements accurately at a national level, it is even harder to achieve this at a local level, where individual clinical services may be dependent on small teams and it is impossible to predict when team members will move, take career breaks or retire. Furthermore it is recognised increasingly that first class healthcare provision for many conditions, e.g. cardiac surgery and many forms of cancer, needs to be planned and delivered at a national, or at least sub-national level. The Academy of Medical Sciences predicts that this trend will continue as more accurate data on the quality of care and the resulting clinical outcomes are collected.

There is an additional issue of complexity in the proposed arrangements. Over the next few years, there will be major challenges for the reorganisations in healthcare delivery system to ‘bed down’ and work effectively. The first priority must be to establish effective GP Commissioning Consortia and to establish the optimum relationships between these, the NHS Commissioning Board and secondary and tertiary healthcare providers.
Adding a further layer of reorganisation with an additional set of legal entities at local level would create potential confusion between the roles and responsibilities of the GP Commissioning Consortia and the local skills networks. This is unnecessary.

We recommend instead that the skills networks are set up as advisory bodies and the key purchaser/provider split for the provision of education and training is between HEE and local providers of education and training. Furthermore we suggest that the simplest and most accountable model for provision of education and training is a partnership model between healthcare providers and higher education institutions (HEIs).

In this model, local skills networks would still be necessary but would be advisory bodies that collect local workforce intelligence and feed this into the Centre for Workforce Intelligence and/or HEE directly. The Centre for Workforce Intelligence would have a strong board structure and would hold the local skills networks to account for this information. In turn it would provide advice to HEE.

This model has the virtue of simplicity and accountability.

What is then needed to ensure its success? There needs to be clarity on the roles and responsibilities of HEE and local providers of education and training. We will deal with each of these in turn.

**Health Education England**

The first requirement for Health Education England is that it is effectively governed to be able to receive appropriate inputs and hold the providers of education and training to account. It needs to be able to liaise effectively with the different regulators of education and training, e.g. Higher Education Funding Council for England (HEFCE), General Medical Council (GMC), General Nursing Council, Medical Royal Colleges etc. It is also important that it is able to influence those bodies to ensure that their roles remain ‘fit for purpose’.

It is essential that the Board of HEE is small (i.e. approximately 10 members) and whilst the Board membership would be diverse, it would not attempt to represent every stakeholder group, which would make the Board potentially large and ineffective.

The Chairman of HEE must be in turn accountable to the NHS and should be a member of the NHS Commissioning Board. Ideally it would be a part-time executive role accountable to the Chairman of the NHS Commissioning Board, i.e. an executive member of that Board. HEE would need an effective, though lean executive structure to be able to hold the providers of training and education to account. HEE would hold and allocate the funding for education and training and we recommend that for the time being, the education and training budget should be held by HEE from a central levy.

It is essential that education and training budgets are of sufficient size to provide for high quality education and training across the full range of professions and specialisations. The budgets allocated for both the training funded via HEE and the continued professional development supplied by service providers, should be ring-fenced to protect them from being diverted to meet short-term pressures of service delivery. These budgets should be allocated in a transparent process, on the basis of the quality and quantity of teaching activity. We would like to see a quality incentive mechanism introduced, overseen by HEE, to promote excellence in education and
training. As an example of how the correct incentives can deliver excellent results, we would highlight the success of the NIHR in encouraging providers to invest in research. Criteria including metrics would need to be devised to measure time and effort spent on education and training to ensure that the correct incentives exist for the appropriate allocation of funding. Such criteria might include clinical performance, evidence of innovation and research output, and the extent to which education is embedded within providers’ internal processes. NHS and university partnerships would be well positioned to manage such schemes, for example, the NIHR Trainees Coordinating Centre already has experience here.

**Providers of Education and Training**

The Academy proposes that multi-professional University/NHS Trust partnerships will lead the provision of education and training. The form of these will have flexibility, to be agreed with HEE, and one size will not fit all, but they will typically include:

- A university with a medical school.
- The major partner NHS Trusts to this school.
- A partner School for Allied Health Professionals.
- Partners from primary, public health and community care.

The multi-professional University/NHS Trust Partnerships that will act as lead providers will be selected on the basis of the quality of their education, training and management capacities through a competitive process. They will be accountable to HEE and will take responsibility for the functions that are provided presently by Postgraduate Deaneries such as training, career support, innovation in education and quality assurance; while the experience of NHS Trusts make them well placed to acquire other functions, including human resources. Lead providers will work closely with other key partners, locally including primary care providers, public health partners and patients, and nationally including organisations such as the GMC, the Nursing and Midwifery Council and the Medical Royal Colleges.

Over the past few years the UK clinical and academic community has been active in establishing many effective local partnerships between health providers and academia, supported by commissioners and strategic health authorities. NIHR has led the way in creating, enabling and facilitating partnerships that have demonstrated the strengths and effectiveness of clinical and academic partnerships for clinical training and research. Such partnerships include the NIHR Biomedical Research Centres and Units (BRCs and BRUs), Collaborations for Leadership in Applied Health Research (CLAHRCs), Academic Health Science Centres (AHSCs) and Health Innovation and Education Clusters (HIECs). New opportunities and models for partnership include Integrated Care Organisations (ICOs) and Accountable Care Organisations (ACOs). These partnerships, assembled in variable geometric form according to local circumstances, collectively illustrate the potential for the development of fully accountable organisations that can integrate education, clinical training and research. The Academy proposes that these and similar partnerships will be the substrate for the provision of outstanding multi-professional education and training.

**Skills networks**

We recommend that skills networks are established as advisory bodies. These will be geographically largely co-terminus with university/NHS Trust partnerships. Each skills network should have a lean executive structure with strong governance including independent chairmanship and strong patient representation. Skills networks would act as a forum for local discussions and debate, and collate local information about the workforce and future workforce needs by receiving inputs from stakeholders that are sufficiently diverse to assess varying regional
demands. This information will be passed onto the Centre for Workforce Intelligence (and/or HEE directly), who would then support its integration into central policy decisions and national commissioning plans. Skills networks will work closely with GP Commissioning Consortia (which themselves will have training responsibilities for health professionals working in primary care), with local authorities and with other provider partnerships for education and training. All providers of education and training should have a duty to provide appropriate information to the skills networks, which in turn will be responsible and accountable to the Centre for Workforce Intelligence for the provision of timely data and analysis. Close links between the Centre for Workforce Intelligence and HEE will ensure that workforce information is appropriate and that it is acted upon.

**Conclusion**

The Academy of Medical Sciences proposes that this simplified model will achieve the goals set out in the consultation document from the Department of Health. It will do so with less structural reorganisation and with clearer responsibilities and accountabilities for all of those dedicated staff working on the education and training of one of the best healthcare workforces in the world. Furthermore, through lean and cost-effective management structures it will provide a form of education and training that follows function, rather than vice versa. There are many key issues that will need to be faced in providing the optimum human resources for the NHS over the next few years. HEE, working closely with the NHS Commissioning Board, needs to be designed and positioned effectively to provide the best analysis and advice. These proposals will maximise the chance that this can happen. Finally, we stress again that the schedule for implementation of these crucial changes must allow sufficient time for effective piloting and evaluation.

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The Academy of Medical Sciences

The Academy of Medical Sciences promotes advances in medical science and campaigns to ensure these are converted into healthcare benefits for society. Our Fellows are the UK’s leading medical scientists from hospitals and general practice, academia, industry and the public service. The Academy seeks to play a pivotal role in determining the future of medical science in the UK, and the benefits that society will enjoy in years to come. We champion the UK’s strengths in medical science, promote careers and capacity building, encourage the implementation of new ideas and solutions – often through novel partnerships – and help to remove barriers to progress.

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