

House of Lords Select Committee on the Long-term Sustainability of the NHS

The Select Committee on the Long-term Sustainability of the NHS of the House of Lords, chaired by Lord Patel, is conducting an inquiry into the sustainability issues facing the NHS and the impact they will have over the next 15–20 years. The Committee invites interested individuals and organisations to submit evidence.

Background

The Institute of Physics and Engineering in Medicine (IPEM) is the Learned Society and professional organisation for physicists, clinical and biomedical engineers and technologists working in medicine and biology. We are a charity with around 4,300 members from healthcare, academia and industry and our aim is to advance physics and engineering applied to medicine and biology for the public good.

Our members help to ensure that patients are correctly diagnosed and safely treated for illnesses such as cancer and stroke. They also maintain and manage medical equipment such as MRI and ultrasound scanners, X-ray machines, drug delivery systems and patient monitors. Their research and innovation leads to new technologies and methods that improve on existing medical treatments. They provide new solutions that enable older people and patients with injuries or long-term conditions to complete everyday tasks.

IPEM's response to this consultation focuses on the questions surrounding the workforce issues.

Workforce

3. What are the requirements of the future workforce going to be, and how can the supply of key groups of healthcare workers such as doctors, nurses, and other healthcare professionals and staff, be optimised for the long term needs of the NHS?

- a. What are the options for increasing supply, for instance through changing entry systems, overseas recruitment, internal development and progression?**
- b. What effect will the UK leaving the European Union have on the continued supply of healthcare workers from overseas?**
- c. What are the retention issues for key groups of healthcare workers and how should these be addressed?**

4. How can the UK ensure its health and social care workforce is sufficiently and appropriately trained?

- a. What changes, such as the use of new technologies, can be made to increase the agility of the health and social care workforce?**
- b. What are the cost implications of moving towards a workforce that is equipped with a more adaptable skill mix being deployed in the right place at the right time to better meet the needs of patients?**
- c. What investment model would most speedily enhance and stabilise the workforce?**

1. Addressing matters concerning the UK leaving the European Union:
2. European Union professionals, including healthcare scientists, employed in the NHS need special protection. They are already important contributors to our health service, often in shortage disciplines. Arrangements also need to be put in place to continue to attract healthcare workers from the EU to UK shortage professions. The simplest mechanism would be that EU workers who were already ordinarily resident [as confirmed by council tax or voting register, or had a National Insurance number] on 24 June 2016 can convert to indefinite leave to remain. Those who enter the UK after this date, do so knowing the Brexit situation and therefore cannot assume automatic leave to remain. A scheme similar to that of the [EU Blue Card](#) or five tier points-based system (currently used for non-European members) should be introduced for EU citizens. This system would need to respond in a timely manner.
3. The UK NHS workforce is ageing. If the UK is to become less dependent on employing staff from Europe, then the NHS needs an urgent national strategy to invest in funding the training of more Clinical Technologists and Clinical Scientists. To date, this long term vision and funding has been lacking from the national agenda.
4. In order to protect patients, Clinical Scientists are state-registered in the UK and the title 'Clinical Scientist' is protected by law. There are reciprocal arrangements with other EU countries so that Clinical Scientists registered in the EU can register and work in the UK. The UK should continue to recognise European equivalence, irrespective of EU membership.
5. UK and EU legislation requires the appointment of Medical Physics Experts (MPEs) to work in the fields of Diagnostic and Interventional Radiology, Nuclear Medicine and Radiation Oncology/Radiotherapy. The UK Government should seek to encourage harmonised systems of training, education and competence of MPEs throughout Europe. This need not be limited by the EU if all countries are following the same system.
6. Moving away from issues surrounding the UK leaving the EU to address those concerning training:
7. The Modernising Scientific Careers framework covers the career pathway from Assistants and Associates, Practitioners, Scientists and Higher Specialist Scientists. The training models and delivery differ along the framework, but a significant element of the training is delivered in the workplace, and strong links are needed between the employers and the HEIs. The current programmes are the Practitioner Training Programme (PTP), Scientist Training Programme (STP) and Higher Specialist Scientist Training (HSST)
8. There is a need to increase the workforce in Medical Physics and Engineering. The UK Shortage Occupations List includes Radiotherapy and Nuclear Medicine Scientists and Practitioners. Health Education England's 16/17 Workforce Plan for England states there has been a 4.3% increase in the number of healthcare scientist STP commissions for 16/17. However this overall figure for healthcare scientists disguises the changes in commissions in the individual specialties. The Clinical Scientists (Medical Physics) commissions for 16/17

have decreased by 8% compared to the previous year. The reason for the reduction in the number of commissions is not clear - there is evidence that some training centres have reduced their commissions due to the high training workload that the STP generates, while on the other hand at least two large centres have not had their requests for trainees to start in 2016 fulfilled.

9. To produce a high quality healthcare workforce both the HEI education and the workplace education and training are essential and cannot be decoupled. The PTP requires 50 weeks of clinical placement over 3 years. A Clinical Scientist (Medical Physics) 3 year STP trainee may typically spend up to six months directly at the HEI with the remaining 30 months of the programme within the workplace.
10. To increase the workplace training capacity workplace funding and investment would be required, to provide the training infrastructure and training support. There may be particular difficulties in providing placements for smaller specialised groups of health workers, where the small number of students, and the associated workplace funding may not be sufficient to support the workplace training infrastructure required, and there may be difficulties in providing the breadth of training required.
11. The NHS will be a major contributor to the apprenticeship levy. Supporting the use of the levy through encouraging apprenticeship schemes within the Modernising Scientific Careers framework would benefit the scientific workforce.
12. The experience with the Practitioner Training Programme (Medical Physics) has shown that it is not attractive at undergraduate level without funded places; only the places **funded** by the Welsh Assembly have ever been filled in physics. The **self-funded**, undergraduate PTP has yet to produce **any** trained staff in Radiotherapy Physics, Nuclear Medicine Physics or Radiation Physics, and only very few (less than 25 over 3 years) in Engineering.
13. The failure of the PTP programme to attract suitable trainees and deliver the practitioner workforce required in Medical Physics and Engineering has demonstrated that without adequate funding for clinical placements including the provision of suitably qualified supervisors/mentors, self-funded undergraduate schemes that require substantial clinical placements find it extremely difficult to produce the required numbers of qualified staff.
14. The Scientist Training Programme (STP) , which is currently a salaried programme, is in competition for candidates with other highly-paid graduate programmes from industry. If Clinical Scientist training ceases to be an attractive option to high quality physics and engineering graduates, this will be detrimental to the patient care.
15. Without access to a salaried programme the STP training becomes unworkable. IPEM's view is that a salaried programme is essential to underpin postgraduate clinical scientist training.

16. IPEM's view is that funding to the workplace training providers is essential to ensure an increase in the numbers of trainees and to maintain the quality of the training.

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