

## **IPEM Response to 2016 Independent Review of the Engineering Profession**

### **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.

**(i) the effectiveness of existing arrangements between education and training establishments, employers and the professional engineering community in supporting their delivery;**

*Since 1997 IPEM has been at the forefront of developing and supporting the education and training of engineers moving into the Clinical Engineering discipline in the National Health Service. The symbiotic relationship between Engineering and Physics in this environment has enabled NHS employers and the professional engineering community to avail itself of effective training programmes, which led to formation of IPEM. There are now approximately 300 Clinical Scientists, a statutory title, practising in Clinical Engineering across the UK in membership of IPEM. The accredited training centres that are used for work-based learning under the new NHS Modernisation of Scientific Careers are primarily IPEM recognised centres, especially for Clinical Scientists. IPEM are involved in collaborating with the NHS to ensure that work based training departments meet required standards<sup>1</sup>. IPEM has also been instrumental in promoting engineering registration within the Clinical Engineering profession, and in obtaining recognition of the CEng title as a requirement of the new Higher Specialist Scientist Training programme for Consultant Clinical Scientists. IPEM asserts that there is an effective arrangement between education and training establishments for the Clinical Engineering professional community and that it is best placed to deliver on engineering professional assessment of this modality.*

**(ii) the governance of the profession, its relevance to the future and measures to achieve improved governance;**

*IPEM has no key recommendations for improved governance, but concurs with feedback from similar specialist PEIs that any improved governance must:*

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<sup>1</sup> This is via a Memorandum of Understanding with the National School of Healthcare Science, part of Health Education England, within the NHS.

- *Recognise small PEIs for their specialised work and develop non-competitive ways of speaking with Government etc*
- *Embrace the concept of PUBLIC GOOD whilst at the same time recognising that individual benefit is absolutely vital to maintain, increase and retain membership and registrant numbers which in turn will increase public benefit.*

*IPEM Trustees have agreed that IPEM would support the exploration of options to increase efficiency and effectiveness, but could not at this stage agree to any specific options proposed in the original paper, such as sharing back office functions, which might not be appropriate for a medium-sized PEI with other elements to its work, such as IPEM.*

**(iii) whether other models might produce deliverable results;**

*IPEM have no key recommendations on models*

**(iv) Whether current arrangements by which Engineering Council and Engineering UK are funded primarily by the three PEIs are effective and should be continued;**

*IPEM has no major issues with the current funding arrangements but would welcome changes that lead to reduced registration costs. However, any changes should be fair to registrants applying through specialist PEIs and recognise the volunteering role that many engineering registrars within these PEIs provide.*

**(v) lessons to be learned from earlier reform initiatives and their effectiveness;**

*IPEM has no comment*

**(vi) strategies to achieve improvements; risks, mitigation and associated opportunities including a timetable for implementation and an execution plan.**

*IPEM has agreed to support the exploration of options to increase efficiency and effectiveness, but could not at this stage agree to any specific options proposed, such as sharing back office functions, which might not be appropriate for a medium-sized PEI with other non-engineering elements to its work.*

**IPEM June 2016**