

## **Written evidence submitted by The Institute of Physics and Engineering in Medicine (IPEM) (ECS0024)**

- The Institute of Physics and Engineering in Medicine (IPEM) is a professional association and Learned Society with 4,700 members working in hospitals, academia and industry, who are medical physicists, clinical and biomedical engineers and technologists working with applications of physics and engineering applied to medicine and biology.
- Our mission is to constantly improve human health by the application of physics and engineering to the prevention, diagnosis and treatment of disease through research, innovation, education and clinical practice.
- As a charity, IPEM's aim is to promote for the public benefit the advancement of physics and engineering applied to medicine and biology and to advance public education in the field. We do so by supporting and publishing research and supporting the dissemination of knowledge and innovation through project funding and scientific meetings; and by setting standards for education, training and continuing professional development for healthcare scientists and clinical engineers.
- In compiling this response, IPEM consulted with members of its Radiotherapy Professional Standards Panel.

### **Workforce**

There are major concerns from IPEM that scientific and engineering professionals that specialise in radiotherapy, are not being considered in the Cancer Workforce plan at all.

Clinical Scientists, Clinical Technologists and Radiotherapy Engineers are all an essential part of the workforce enabling delivery of radiotherapy to patients with cancer - indeed, Clinical Scientists are a requirement by law (reference: IR(ME)R17).

In a recent radiotherapy workforce survey, the vacancy rates were confirmed for each of these professions at between 7 and 10%. This clearly indicates that a major investment is needed to get the Radiotherapy Physics workforce up to establishment, and yet more to increase capacity.

A commitment to increase the training numbers and training capacity in the various training routes for all the medical physics specialisms is needed to address this problem.

### **Innovation and Technology**

Although there were a small number of Linacs purchased using centralised funds over the timeframe under discussion, the application process was hugely oversubscribed.

The final allocation of these Linacs was not communicated to radiotherapy centres and neither was the rationale for their allocation. Transparency for a nationally commissioned service is important to ensure health inequalities are being addressed.

Looking ahead, there is no commitment for radiotherapy machine replacement that is far-reaching enough, and there is no transparency regarding future planning. This makes it very difficult to plan a replacement programme within a Trust, while delivering a clinical service.

Finance directors are likely delay decisions on local initiatives to replace equipment where the possibility for central funding exists.

IPEM would support centralised funding for a country-wide replacement programme for radiotherapy equipment, that should include Estates enabling works where required. The national criteria for replacement should be applied consistently across the country and the process should be transparent.

The rollout of Proknow has largely been successful in England; and should be able to support the communication between our clinician colleagues, enabling peer review of rare tumour sites; thereby improving standardisation and quality of treatment for patients.

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