

Viewpoint column for mid-April 2006 issue of Engineering & Technology Careers

HEALTH OF THE NATION

A planned registration scheme for medical equipment engineers needs to be considered more carefully, says Kevin Haylett

Publicity surrounding mistakes by healthcare professionals has resulted in a strong political will to ensure that everyone working in the sector is registered in some way. Considering recent health scandals, it seems reasonable to include medical equipment engineers. After all, if they make a mistake, can't they affect the patient?

In fact, steps are afoot to ensure that engineers who manage, maintain, service and repair medical equipment are registered and have a protected title. But with new regulations being discussed by the Department of Health and the Health Professions Council, questions abound. Is this the first step in a legal title for all engineers? Is this the best way to protect the public? Should we look to other critical engineering services, such as the Civil Aviation Authority, for a model of service provision? What impact will these regulations have on a multi-billion pound industry?

The hospital departments that are responsible for medical equipment can come in many guises. They give life to the NHS, ensuring that the right equipment is fit for purpose, safe and ready for action. No mean feat considering the array of equipment in daily use. Looking at these departments reveals a range of names and models of service provision including private companies that also manage and run hospital equipment services. Maintenance is rarely all in-house, and often depends on contracts with equipment manufacturers and suppliers. However, all these organisations employ staff who will be affected by the current proposals.

Enter the Health Professions Council. Formed in 2002 by the Labour government, its role is to register healthcare workers - including medical engineers. For a profession to be registered, a proposal is put forward showing basic requirements have been met. The Institute of Physics and Engineering in Medicine initiated a voluntary register, one of the HPC prerequisites. Called the Voluntary Register of Clinical Technologists, it added a new job title and acronym to the existing pea soup. The VRCT panel, with representatives of IPEM, the Association of Renal Technologists and the former IIE (now part of the Institution of Engineering and Technology), feels it can represent the staff concerned.

Once accepted by the HPC and DoH, the registration proposal goes to public consultation. Despite doubts about all the entry criteria being met, the political will to forge ahead was made clear when the NHS Chief Scientific Officer announced in October 2005 that a consultation would be scheduled for 2006.

The proposed protected name - 'clinical technologist' - encompasses not only staff who maintain equipment, but also a wide range of technical jobs including nuclear medicine technicians, vascular technologist, renal technologists, mould room technicians and many more. Would the man in the street understand what a clinical technologist is? Can this term really mean anything when it covers such a wide group of workers? And can there really be a 'common body of knowledge', another HPC requirement, for all these different jobs?

If the prime goal is it to create a protected title then surely it must mean something to the public. Personally, I feel that for those professionals maintaining medical equipment the term engineer should be included, for example 'medical engineer' or 'medical equipment service engineer'.

One purpose of registration is to ensure competency. Most of us know that competency doesn't always equate with qualifications and the proposed model uses a vocational degree. However, there are concerns that this approach may form a barrier to entry for those with experience or alternative engineering qualifications such as full-time degrees.

Another concern regards complex equipment. Can competency be assured without product training? Unsurprisingly, some manufacturers are reticent to supply parts to engineers without device-specific training. It would be unimaginable in the aircraft industry for an engineer to sign off work without type-based competency certification.

What about the service engineers employed by manufacturers and suppliers who enter our hospitals every day? Have they been asked about the new proposals? The plans won't just affect NHS staff. By law, anyone carrying out the same job will have to be registered and have the same qualifications including for example engineers working on medical equipment used in the home such as electric wheelchairs.

Surely there needs to be much further consultation with industry and the medical engineering departments within the NHS before these proposals are taken any further. It is vital that all private and public stakeholders are involved in developing the proposals and not just a few managers in the HPC and NHS, but it appears that many organisations with an interest in the subject have not been involved.

The Engineering Council has worked hard to define registration levels and competencies. Alarm bells must be ringing when we think of an organisation as new as the HPC being called to register engineers, especially when its main focus has been on healthcare workers.

The current process gives at least one engineer a great deal of concern. If you or your organisation are affected I suggest you contact, the HPC, the DoH, your MP or the DTI. If such a registration scheme is necessary, it is vital that it is well thought out and all the stakeholders are consulted. We need a real practical, pragmatic engineering solution and not a political fudge cake!

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Note: If you are interested in this subject you may be interested in the report I have made for the IEE (follow this [Link](#)) and for the latest open meeting with the NHS Chief Scientific Officer regarding this subject (follow this [Link](#)).