

## **Academy for Healthcare Science response to Medical Innovation Bill consultation**

Thank you for the opportunity to contribute to the development of a Medical Innovation Bill. The Academy for Healthcare Science is the overarching body for the 50,000 Healthcare Scientists working across the NHS. Healthcare Scientists play a key role in both the diagnosis and delivery of treatment across the vast majority of clinical pathways and have a particularly important role in the delivery of specialised services. As Scientists, we make a particular system-wide contribution to innovation and the adoption of new techniques and approaches.

### **INNOVATION WITHIN THE CLINICAL SETTING**

1. Innovation is an important part of clinical practice and includes new methods by which medical practitioners seek to diagnose, treat or otherwise help patients and clients.
2. Innovation includes two elements: invention and acceptance/uptake. In an effective health system, both of these stages must be supported by a body of evidence. Where new or novel interventions are being tried, however, a significant body of evidence is likely to be lacking.
3. Clinical teams and medical practitioners need to act not only in the light of research and of previous experience with similar procedures but also by undertaking comprehensive risk assessments, adjusting their plans accordingly.
4. The range of knowledge required to do this is increasingly beyond the capacity of a single individual to hold or access, and it is welcome that this Bill recognises the need for a structured approach to justifying the undertaking of any novel or new procedure.
5. This approach needs to involve not just medical practitioners but also the entire clinical team and others who might be able to contribute to increasing safety and reducing risk, and indeed to the decision as to whether or not the proposed procedure will be beneficial.

### **A STRUCTURED APPROACH TO GOVERNANCE OF INNOVATION**

6. The best institutions allow invention and innovation to take place but do so within a structure that seeks to minimise risks to patients (and staff).
7. An example is having a 'New and Novel Procedures' committee or process that allows a range of clinical staff to scrutinise and contribute to the acceptance, rejection or amendment of proposed procedures.
8. 'New' in this sense means new to the local health community or individual, where access to an established body of experience and opinion already exists; 'novel' means something undertaken for the first time, anywhere.
9. Novel procedures are clearly the ones where the risk is greatest, and there should be an effective way to speed up the dissemination of experience with both 'novel' and 'new' procedures whether successful or not.
10. There is no place in a safety conscious healthcare system for avoiding the recording and sharing of negative experiences.

## ISSUES WITH THE BILL AS CURRENTLY DRAFTED

11. A worrying element of this Bill is that it restricts the duty to consultation to '*opinions expressed by colleagues whose opinions appear to the doctor to be appropriate to take into account.*'
12. This bill allows a doctor to exclude healthcare scientists and the many other clinical professionals who are involved in the selection, planning and delivery of treatment approaches - such as public health specialists, dentists, pharmacists and nurses. Placing the emphasis in this way limits the scope of knowledge and opinion used to search for evidence on efficacy and risk. This is particularly important in an era when interventions are becoming more technological.
13. With new innovations, the devil is very much in the detail. It is vital to include the views of, and access the knowledge of, scientists, engineers and technical staff working in healthcare who have been specifically trained to introduce new technologies safely. These staff are used to working with and assessing the risks associated with new types of technology, in collaboration with manufacturers and innovators and with other clinical and medical staff.
14. A particularly important example comes from the application of new and novel radiotherapy techniques. The devising, planning and assessment of a regime of radiotherapy is the explicit responsibility of Healthcare Scientists within the multi-professional team and the development of new radiotherapy techniques such as Intensity Modulated Radiotherapy has been led by Healthcare Scientists in the specialism of Radiotherapy Physics.
15. It should be noted that the European Directives on Radiation Protection and associated UK legislation sets out the role of a *Medical Physics Expert* in assessing the risk of any diagnostic or therapeutic radiological exposure. Within the NHS, this role is predominantly carried out by a Healthcare Scientist.

## THE WIDER ROLE OF HEALTHCARE SCIENTISTS IN INNOVATION AND ADOPTION

16. Healthcare scientists have historically contributed significantly to improving the safety of clinical procedures, and to introducing effective novel treatments while minimising risk and maximising the collection of evidence to show wider efficacy.
17. The application of scientific thinking and processes plays a crucial role in any innovation and also in the assessment of its results and any unintended consequences. Every effort should be made to encourage and support such scientific input into innovation through the involvement of suitably skilled staff. Healthcare Scientists can provide valuable input beyond their professional specialist area through the exercise of their broader scientific skills.

## **This Bill should be amended to ensure that:**

- The language and thrust of the Bill embraces the entire multi-professional clinical community who play a role in treatment and care – and be explicit about the other professions that this includes, particularly Healthcare Scientists
- The Bill integrates with other legislation around the identification and assessment of clinical risk, such as that defining the Medical Physics Expert
- Any proposed innovation is subject to extensive local scrutiny which includes wide consultation across multi-professional clinical groups, including scientific and technical staff.

- A comprehensive risk analysis is undertaken and documented before any novel procedure is carried out, to contribute to this scrutiny and to the informing of the medical community, patients, relatives and the wider community. Consideration should be given as to the best way for this information to be available and shared across the health and social care system.
- Use of existing systems to register novel procedures and innovations is encouraged and these systems are unified to prevent unnecessary patient morbidity by reducing the duplication of learning and encouraging the sharing of knowledge about new and emerging improvements.
- No clinician is permitted to justify undertaking a novel or new procedure in the absence of a supporting process and structure unless this can be shown to be an emergency situation where an individual's life is immediately at risk.

## FURTHER INFORMATION

The Academy for Healthcare Science would be delighted to contribute to further development of the Medical Innovation Bill in any way that would be helpful. Please contact Judy Hawksworth at our secretariat on [admin@ahcs.ac.uk](mailto:admin@ahcs.ac.uk) or 0845 450 2858 if you have any questions about this submission or if we can contribute further.