

## Coventry University's response to the Cooksey Review of UK Health Research

### **1. What are the strengths and weaknesses of the MRC and NHS R&D programmes at present? How do each of these support the research and training needs of the NHS, social care, industry and academia? Does more need to be done?**

The MRC focuses on *medical* research, which is a double-edged sword: whilst a core strength, is also a weakness as it means that it provides few opportunities for nurses and allied health professionals to secure independent funding through the MRC unless they are providing technical support to the medically-based research.

Furthermore, the MRC's funding tends to focus on basic research programs conducted at the more established universities, at the expense of applied research (which is more the domain of newer universities). Furthermore, its research programs exclude the majority of health professionals. More should be done on applied research, and on translational research.

The NHS R&D programme has encouraged areas which are relatively new to research, and so is fostering the development of research, but more needs to be done to make up for previous under-investment.

Fellowships, including relatively junior awards, normally require significant research experience, which is often unrealistic for many capable, junior staff. These awards have not been used to create clinical research capacity, particularly in non-medical research areas of the NHS.

### **2. What do you believe are the key scientific and organisational challenges facing health research, and underpinning training, in the UK over the next decade? How might the UK Government best help address those challenges? What do you believe should be the Government's objectives for health research, and why?**

One of the key challenges facing health research over the next decade is the low baseline from which health research is starting. As has been discussed in Q1, relatively few opportunities exist for non-medical health researchers to secure funds, and as healthcare moves out of the acute hospital setting into primary care, the rôle of nurses/AHPs in health research will grow and the lack of capacity become more apparent. The Government's objectives for health research should be expanded and support an internationally acknowledged research infrastructure in which the research themes should reflect the current and projected challenges to the NHS.

Other significant challenges facing health research include the following:

- i) The revised ethics process has become a major disincentive to conducting clinical research. This is compounded by many scientific journals requiring ethics approval for submissions involving human participants. Whilst upholding the rights of the individual this prohibits the publication of audit cycles, which for many nurses/AHPs is the first step to a career in research. The time taken for ethics approval also acts as a serious barrier to engaging time-limited undergraduate students in clinically-based research
- ii) Lack of funding to collect pilot data: local NHS R&D department budgets have been withdrawn. This was a competitive, peer reviewed process that allowed researchers to collect 'pump priming' data. Without this, clinical researchers become disengaged from the process and AHPs and nurses rarely have the opportunity to participate in industry sponsored research.
- iii) If clinical research is to be developed, the NHS organisations need to foster the local research culture across all disciplines within the NHS.

**3. What should be the Government's priorities for health research? Is there anything it should stop doing or funding? What is it not doing or funding that it should do, and, in the absence of further sources of support, what can it lower in order to release the necessary funds?**

The priorities should be related to the major health and social care issues that challenge the NHS now and in the future; the majority of funding for health research focuses on basic, medical research, and this needs to be re-focused on applied rather than basic, and broadened to encompass more than just 'medical'. Applied research will have an impact on patients much more quickly than basic research, much of which may never translate into an improvement in patients' experiences. Clearly review mechanisms need to ensure that this shift in emphasis does not lead to a fall in research quality, but to quote JA Muir Gray, 'The *application* (our emphasis) of what we know will have a bigger impact on health and disease than any single drug or technology likely to be introduced in the next decade'

**4. How should decisions be taken on the balance between the long-term economic and social benefits of a high quality biomedical research base; and the needs for research to improve healthcare and other public services? What is the appropriate balance between public funding for investigator-led and priorities led research? How do we balance funding for basic science, translational science and applied science? Is this something that should vary over time? What mechanisms should be used to make judgements about this balance?**

The immediate economic/ social burden of disease should drive clinical research, to have an immediate and obvious impact on the patient and society. Priority led research should take precedence over, but not obviate, funding for investigator-led research. The (longer term) search for a 'cure' should not preclude efforts to improve prevention and care for the current patient.

Mechanisms need to be developed to translate the results of basic science into improved prevention and care, including delivery systems and organisational factors, and it may be reasonable to factor in funding for implementation/translational research in the mid-latter stages of longer-term basic science programmes. The new Database of Uncertainties about Effectiveness of Treatments (DUETS) being established by Sir Iain Chalmers should help inform discussions about future research questions.

It is important to recognise that the balance of research will evolve over time, in response to, for example, crises such as Avian flu, and to changing demographics such as an aging population. Furthermore, the economic evaluation of research should have a higher focus in any award.

**5. In your experience, how have the results of publicly-funded health research in the UK been used, both in the development of new treatments and to influence / change wider policy and healthcare practices? What lessons can usefully be learned to improve the uptake of advances in science and medicine**

Publicly funded research into (e.g.) cardiovascular diseases has helped support development of policies (e.g. NSF) and guidelines (e.g. NICE) across the spectrum from prevention to systems improvement (e.g. Whitehall Studies and HTAs on chest pain, thrombolysis, primary angioplasty etc.), but it should be noted that the NICE guidelines are however only guidelines and therefore there is no obligation for these to be followed completely.

It is important to note also that whilst Cochrane outputs and other syntheses of research have authority in the academic community, clinicians appear to give more credence to journal articles, particularly those reporting randomised clinical trials, than to systematic reviews or metanalyses.

**6. How might better links be forged between ‘basic’, translational and applied researchers, working across the whole field of health research, from the laboratory bench to the front line of the NHS? How might better links be forged across disciplines, e.g. with engineers, physicists, and social scientists?**

Many AHPs/ nurses work as part of a multi-disciplinary team, but usually this is in silos defined by the organisation. Within the NHS it would be unusual to have research active personnel across the spectrum. Therefore cross collaboration is required, which could be initiated by local networks of researchers in universities and health communities. These groups do exist and should be actively supported/ encouraged by both organisations, a process which could be helped by the creation of funding to support multi-disciplinary research. At the moment, local networks are usually exclusive to active researchers and the challenge is to use the networks to enhance research capacity across the disciplines.

**7. How can the Government encourage translation, entrepreneurship and innovation in health research to improve public services in the UK?**

Entrepreneurship and innovation is now a key activity in many undergraduate programs at Coventry University, and elsewhere. The University is working with the NHS Institute for Innovation and Improvement to develop modules on entrepreneurship and innovation, and these could be delivered to health professionals across the UK. Such ‘entrepreneurship and innovation’ training would help to move the NHS towards a more innovative stance. The University has recently developed a ‘Health Design and Technology Institute’, (HDTI), which is working with public and private sector partners, including MidTECH, the regional Innovations Hub, to encourage the development of new products and services in community-based healthcare and this model of co-operation and collaboration should be studied lessons learned taken to the rest of the UK.

**8. How can UK health research funding be most effectively used to provide the appropriate infrastructure for basic, translational and applied research, whether funded by the UK public sector or other sectors? How can UK health research funding be most effectively used to support the work of NICE, facilitate innovation and collaboration with industry, and address market failures in the application of healthcare?**

Funding bodies should co-ordinate activities through a systematic transparent forum. Clear incentives for translational research should be promoted. Once proof of concept has been established from basic science through to testing in the clinical environment opportunities should exist for the broader application of this science in healthcare provision.

Translational research should be positively encouraged, but, as has been stated elsewhere, often funding for this is much more difficult to obtain than for basic research.

NICE produce evidence based guidance which is an excellent resource, but Commissioners are frequently driven by meeting financial targets and will compromise on guidance advice. This is frustrating for the researcher. How this conflict may be resolved is a challenge. The government must encourage the widespread application of clinical research to provide an effective health care system. Clinical practitioners must be encouraged to appreciate the literature to develop evidence based practice. This should be orchestrated through professional bodies. Equally commissioners should have clear guidelines for developing evidence based services for the local population.

Development of novel clinical services within the NHS organisation should be fully justified to the senior management team. Lack of evidence should not mean lack of support; resources should be allocated to explore the feasibility of developing a novel service. This should also be supported through the local NHS R&D department to ensure accurate and appropriate data collection (and ethics as necessary). Currently there are no systems to support this type of local activity for clinical researchers. Inevitably the vicious cycle of pilot data/ethics/funding follows.

Research knowledge should be embedded into the knowledge and skills framework for all health care workers: the suggestion is not for all clinicians to be research active but to develop an appreciation of the process. CPD requirements indicate that this will be evaluated retrospectively

**9. What lessons should the UK learn from other countries in making the proposed changes to the institutional arrangements for the funding of health research?**

We have insufficient knowledge of how other countries and how they have made relevant changes to be able to comment.

**10. In implementing the single fund for health research, to what extent should the MRC and DH / NHS R&D be merged or brought together? And to whom should the single, ring-fenced fund be accountable? Please provide reasons and any supporting evidence for your response.**

If the intention is to get research findings from "the laboratory bench" to the "front line of the NHS", then a major concern is that any merged body would be dominated by the MRC's 'medical' focus; therefore, we would not be in favour of a merger unless the merged organisation had at its core an understanding of, and desire to support, health research and researchers in its widest sense.

The single fund should be accountable to Parliament, possibly through the relevant Select Committee.

**11. To what extent does the success of recent innovations in health research (e.g. Clinical Research Networks) and the proposed structures rely on the new Connecting for Health NHS IT system, and to what extent should it do so?**

The principle aims of the Clinical Research Networks are excellent, but we are concerned that the clinical areas covered are largely limited to medical topics.

Connection for health should provide an enormous epidemiological resource, but the Networks should not be reliant on CfH, given the history of major government IT projects.

**12. Given that NHS R&D is currently devolved, but that the work of Research Councils is not, how can these functions work best together to maximise the health and economic benefits to the UK?**

There is almost certainly a dichotomy between what will maximise the health benefit and what will maximise the economic benefit. This is demonstrated in the contrasting emphasis between the DH strategy, which emphasises the former, and the priorities of, for example, the biomedical industries. The former requires a more local, devolved approach whereas the latter may well benefit from a more centralised approach.

The Research Councils' focus is on basic science, and the vast majority of its funding goes to the traditional universities with little to those universities whose healthcare professionals were largely from nursing and the allied health professions. Given the need (as discussed in earlier parts of this response) to ensure that more is done to support research from nursing and AHPs, and to support translational rather than basic research, we would want to stress the importance of ensuring that the single fund for health should not look like a larger form of the MRC, but that it should have new priorities, as discussed in this document.