

University of Glamorgan

Faculty of Health, Sport and Science

Response to the Cooksey Review of UK Health Research

C1. 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 **Strength** of the MRC is in its rigorous peer review system and in its internationally excellent research track record. One **weakness** however has been in its focus on medical and biomedical research rather than across the spectrum of health disciplines. In addition MRC funding has in the main supported research using quantitative methods. It could also be said that young 'successful' researchers are typically part of an already very well established research team and this can also be perceived as a weakness.

The **Strength** of the NHS R&D Programmes is that they have been devolved across England, Northern Ireland, Scotland and Wales and they DO support research across the whole spectrum of health related professions.

Neither scheme appears to invest heavily in translational research although more funding is given to this via the NHS R&D Programmes than the MRC. We should perhaps clarify at the outset that by translational research, we refer to work that not only is alert for opportunities to translate findings to the commercial sector, but also seeks to maximise the benefits of research findings through their integration into practice. We see important elements of this thus being education and change management, as well as including research that considers the *implications* of research application from policy, socio-economic and ethical perspectives.

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?

The key challenges are

- Lack of research capacity funding not only in Medicine and Dentistry but across all health professions including nursing, midwifery, public health and the allied health professions. Significant funding should be made available to advance knowledge through adequate research training and encourage, for example, clear innovative thinking amongst allied health professionals.

- The lack of a clear research career structure encourages potential leaders of the future to remain in practice and to be reluctant to put their pensions and higher wages at risk in order to gain research experience at bottom rate wages (£12,000 per annum stipend for a full time PhD student).
- Since the largest professional group in UK universities is now nursing and the allied health professions rather than medicine these persons need clear encouragement to build capacity and research expertise.
- There needs to be a powerful pro-active shift towards preventative medicine to combat self-inflicted abuse as well as more focus on mental health issues.
- Academic wages are low in the UK compared with those overseas and in industry.
- Applications to UK Universities show a reduction in science subjects although 2006 shows an increase.
- 'Best Research for Best Health', is the English health research strategy. It must be recognised that other constituent countries have developed different health research strategies that need to be acknowledged and addressed.
- Other challenges need to be addressed such as telemedicine, information technology, ethics and research governance bearing in mind the finite funds available for resources and research.

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?

More research should be undertaken into issues that affect the general population and that are of immediate importance to communities rather than blue sky research that will be unlikely to influence patient care. The implication of this is that more funding will be required to support translational research, the findings from which will have an immediate impact on patient care. At the same time, there is already a huge body of evidence that is not incorporated into patient care, and further support needs to be channelled towards research that seeks to synthesise evidence and offer comprehensive solutions (including education) to effect change in practice.

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 judgments about this balance?

It is acknowledged that funding for basic science should continue but there should be a better balance of funding across all of these priority areas.

Within the MRC the balance is in favour of basic science while there is more of an equitable balance in the NHS R&D Programmes.

The balance should be determined by government priorities bearing in mind the Haldane principle “*research money derived from Government sources should not be linked to government agencies.*”

Parallel evaluation will identify changes in priorities and therefore where changes should be made in the balance of funding. Equally, evolution in policy will exert changing demands on research priorities.

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?

1. Examples of this are:
 - Changing professional roles
 - New formats of service delivery
 - Secondary to Primary healthcare shifts
 - User involvement in service planning

2. Examples of lessons:
 - Education
 - Change management
 - Collaboration between HEIs and service delivery organisations
 - Harnessing voluntary sector involvement and contribution

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?

At the pure end of the spectrum there is no place for funding the devolved administrations and at the applied end for example there are significant differences in the Welsh Health dimension

Incentives, perhaps in the form of a condition of funding, should be put in place to encourage researchers to collaborate across these linkages at the outset of a project. Multidisciplinary funding should be made available (with training in research management skills). Basic research should lead to applied research and then onto translational research, including a consideration of the implications of application.

The same principles should be applied to promoting research collaborations between researchers in different fields of science. The implementation of interactive conferences should be considered as well as holistic multi-angled grant applications (a prerequisite very much a feature of the American NIH funding system).

A further important incentive should come through research assessment as part of the dual funding system, where multidisciplinary and collaborative research is not disadvantaged in any new metrics system.

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

As well as continuing schemes targeting collaboration with industry, HEIs and the NHS should include innovation and knowledge transfer as criteria for promotion and advancement. In the NHS, the Knowledge and Skills Framework offers a vehicle for this. However, the Government needs to continue to offer funding that targets each step of the career pathway in research. Schemes to encourage end-of-career researchers to create opportunities for succession planning (with perhaps a staged withdrawal from a funded project) should also be considered.

The MRC and the NHS R&D Departments should shift emphasis to encouraging translation, entrepreneurship and innovation in health research, with clear guidelines and criteria for success. There should be a clear understanding that these are not 'audit'. Innovative methodologies should also be afforded due consideration. Whilst the randomised control trial is regarded as the gold standard for evidence, the constraints of using human subjects with complex lives often means that more innovative approaches are needed, and the solutions and insights that may be afforded through such routes represent no lesser 'quality' in terms of research methodology, than a formulaic clinical trial.

Innovation should also be promoted through encouraging greater collaborative research. This becomes particularly important if research centres/units funded in preference to a responsive scheme are not outward looking in actively seeking wider collaboration.

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?

Health researchers need up to date skills in the most appropriate and robust methodologies for undertaking translational and applied research.

There should be ring fenced funds to support translational and applied research since this is where there is direct benefit to patients and their families. There should be more examples where social needs drive and prioritise research as well as an increase in interaction with health and social care professionals.

Committee representation by peer reviewers and experts from different disciplines (including social care) and with expertise in all methodologies will be required.

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?

It should be recognised that worldwide there is a multiplicity of health research funding models. These might range from highly centralised trans-national funding arrangements to regionally based decentralised arrangements. It might be useful to consider whether one funding model is appropriate across the whole of the United Kingdom. Lessons should be learned from the experiences of peers in other countries and other schemes.

The American NIH system is one that should be considered carefully however, whatever scheme is adopted, it is important that application to the scheme should not require substantial expenditure of resources in order to collate a submission.

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.

The MRC and the NHS R&D Programmes should only be brought together if the new model applies from bench to bedside including all of health and social care research, researchers, and research methodologies.

The single, ring-fenced fund should be accountable to the public through their elected representatives.

There needs to be appropriate representation on decision making bodies in respect of countries, professions and research methods.

A single fund might ensure equitable distribution of funding opportunities across the UK. That is not currently the case under present arrangements.

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 Coordinating Centres hold great promise in rationalising and streamlining research activity as well as in support of researchers. This will help secure the most effective and efficient use of monies supporting health research.

We are not able to comment on the IT system but feel that there needs to be greater flexibility of communication between HEI and NHS IT systems, without the problems associated with current 'firewalls'.

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?

These functions can work best through the use of clinical research networks and coordinating centres.

England does better than the devolved administrations in terms of MRC funding – it is feared that a new single fund may perpetuate this situation.

Any new fund should bear in mind the different health structures in the devolved administrations.

It may be that a UK fund would address Welsh perspectives but there would need to be appropriate safeguards to ensure Welsh questions receive a proportion of that funding.

However, the new scheme should guard against the devolved administrations being protectionist whilst ensuring that questions from these agencies are being addressed.

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General observations

The review plan itself raised the following concerns:

1. Social Care does not appear to have been addressed and this review should take the opportunity to address this.
2. Some elements in the health agenda are under funded and under represented

3. Question: Is there mileage in applying metrics to budget proportions. X = clinical trials and y = qualitative research. The percentages set in advance and audited.
4. Question: why fund clinical trials if research is not implemented?