Cooksey Review: Comments from Napier University, Edinburgh.

1) The current strength of the MRC is that it operates on the same basis as the other research councils to make awards for excellent research. In many cases, the work supported has potential clinical relevance. However, much of the work is truly basic research, without an obvious clinically-relevant end point. Thus, overlaps occur with the remits of other research councils, particularly BBSRC. What MRC clearly is not is a Research Council focussed directly on clinical priorities, and this is perhaps one of its weaknesses. These comments hold both for the grants given by the Research Council, and the Research Centres supported by the Council.
   A real strength of the MRC approach is that the project funds are available to a wide range of researchers, in the NHS, Research Institutes and Universities. Widely understood and accepted processes of peer review are employed allowing the best researchers, wherever they are located, to seek funding for responsive-mode or themed research.
   NHS R&D programmes on the other hand are limited to researchers operating within the NHS structure, and there is often little engagement with colleagues, for example, in the HE sector. The processes of peer review applied to MRC projects are generally less rigorous for NHS programmes, and opportunities for collaborative research are often missed. NHS R&D is inevitably concerned with local priorities, and opportunities to make an international impact are therefore often lost.
   Training needs for the NHS and social care are notoriously difficult to meet, requiring the provision of programmes from HEI's on terms and conditions that often fail to meet economic realities. There is a frustration within the HE sector that the NHS and social care sector cannot crystallise their requirements in a clear way so as to facilitate new training programmes.

2) With regard to training, there needs to be much greater coordination of the requirements of the NHS and Social Sectors with the FE and HE providers. Research training is now provided for many graduate-level clinically related disciplines, such as nursing, midwifery and the allied professions. However, opportunities for intercalated degrees and joint clinical / research responsibilities are still largely limited to the medical profession. This is a funding / planning issue that urgently needs to be addressed. A priority area must be to support the building of capacity for research in a much wider range of disciplines than is currently the case. It may be that that would be helped by a more sensible approach being taken by the NHS to the recognition and approval of science degrees in a number of disciplines. Some of the current difficulties in attracting and retaining staff centre on an outdated and inflexible approach to degree structure that could be solved relatively simply by the design of top-up CPD rather than an insistence on complete approved programmes.
   With regard to funding of research activity, the pooling of MRC and NHS resources is to be welcomed, as it should provide a means to tackle the problems of focus and clinical relevance outlined in 1) above. It may also provide a means for proper funding of the full range of research and training activities in which HEI's engage with the NHS and other partners. These activities cover a breadth of disciplines, for example business management and IT that would normally sit outside the remits of the MRC and the NHS R&D budgets.

3) Maintaining the process for the support of investigator-led research is important, as is the capacity for practice-focussed research within the NHS. However, there should be emphasis placed on a closer collaboration between HEI's and the NHS, and closer collaboration between the MRC Research Institutes and HEI's. The government priorities should include capacity building in the NMAP sector, and should give greater weight to those activities most likely to affect clinical practice. There should also be thought given to the funding of clinical trials in areas unlikely to be funded by the major drug companies. Many potentially useful pharmaceuticals are not thoroughly researched because their commercial prospects make them unattractive to the larger pharmaceutical companies. In such circumstances, government initiative are the only likely way forward.
4) Simply stated, investigator-led, translational and applied science are all important, and deserve to be supported. Many would argue that the levels of support available for translational and applied science are currently too low. If translational and applied science are to be supported to the extent they deserve, it is essential that their intrinsic importance is recognised, and that funding streams are established that do not constantly put investigator-led research in direct competition with them. There is little evidence that greater funding for investigator-led research would give a greater yield of significant developments – the RAE currently drives a set of behaviours that result in a relatively small proportion of outstanding science, and a large bulk of routine work. Greater thought should be given to supporting truly novel (indeed, risk-taking) projects through all research strands.
5) Healthcare practices are notoriously slow and difficult to change. Awareness of scientific advances amongst clinicians is often limited, and too few clinical staff (medics and NMAP) are fully trained in scientific disciplines. It should be much easier for clinical staff to be trained to PhD level in scientific disciplines, and it should be much easier for qualified scientists to train for clinical posts. The US PhD /MD combination is a model worth consideration and results in clinical staff with a very different approach to that found in the NHS. The combined funding council could take a real lead here by making funding available for these cross-over opportunities.
6) The responses in the above sections refer to the need to broaden the research engagement between the NHS and the full range of disciplines within HEIs. Almost no area should be excluded – the growth of activity in Art Therapy and Music Therapy indicate the possibilities that exist even in apparently unlikely combinations of disciplines. Clinicians very often have joint appointments between the NHS and Universities. Serious consideration should be given to joint appointments and secondments of scientific and NMAP staff. The most direct driver of behaviours if of course money. Specific funding for joint NHS / HEI cross-disciplinary projects would almost certainly bring results (as has happened in Scotland with the three collaborative Health Research Centres).
7) It is difficult to drive translation, entrepreneurship and innovation when the key players see these activities as peripheral to their main role. For the NHS, clinical priorities will always take precedence; for Universities, blue skies research and / or teaching must take precedence. A coordinated network of business developers and IP assessors working across the HE (&FE) / NHS structures could drive this agenda forward. However, it would be essential to get sector buy-in to the importance of these activities, and not to try to impose an externally-driven

agenda. These behaviours are again best driven by appropriate funding mechanisms, underpinned by central support.

8) We believe the only way these aims can be achieved is by establishing distinct funding streams for each type of activity, and avoiding competition between them. The Scottish model of QR and KTG provides an excellent example of the ways in which this can be achieved, although the balance of funding for the different streams will require careful thought. Again, there needs to be appropriate support and encouragement for collaborations with industry and charity funders; in this context the challenges brought about by Full Economic Costing need further consideration.
9) No specific comment
10) One strength of the Research Council approach to funding is that it is truly independent of government / treasury influence. DoH funding on the other hand quite properly reflects executive priorities and provides thematic funding to support appropriate research. If the new combined research fund were to create the three different support streams identified in 8), it would be appropriate to reflect the benefits of the current funding systems within the single unified process. Horses for courses. Our preference would be for accountability to lie with a single independent body, combining the current expertise of the MRC with DoH / NHS.
11) Clinical research networks have undoubtedly brought considerable benefits, and there must be considerable further benefits to come from Connecting for Health when it is fully operational. However, it is only one factor in the wider picture and considerable progress can be made now, in its absence.
12) Perhaps there is scope for a dual funding model, in which all institutions contributing to healthcare research receive a formula based allocation (i.e. devolved), and in which access to responsive-mode funding (i.e. non-devolved) is widened. Thus, NHS colleagues might have to make rather more grant applications to a national body, while Universities might receive an increased allocation of QR (and / or KTG) to reflect their health-related research. If the response-mode funding is directed towards joint projects, this might provide the means to drive collaborative developments.