Cutting the cake: allocation of NHS research and development funding

The recent consultation paper on a new national health research strategy¹ and the advent of the UK Clinical Research Collaboration (UKCRC) following the Academy of Medical Sciences report² presents both opportunities and challenges for the primary care research community.

The consultation paper sets out proposals for the future direction of health research for the Department of Health and the NHS in England and the UKCRC is 'a new partnership to establish the UK as a world leader in contributions to clinical research by harnessing the power of the (www.ukcrc.org.uk). government is investing £100 million in the UKCRC, which is designed to improve the clinical research environment. These two initiatives have profound implications for primary care research in terms of funding opportunities and the contribution primary care can make to health research.

At present, the sources of research funding on which studies depend fall into a small number of broad categories: the Medical Research Council (MRC), the Wellcome Trust and the charities that focus on specific diseases such as cancer. A further source of research funding is the Department of Health the Health Technology Assessment (HTA) the Service Delivery Organisation (SDO) programmes, together with research capacity development funding, have particularly important in developing and supporting research in primary care. The Department of Health now spends more than £500 million per year on research and development (R&D) and it is essential not only that primary care research get its 'fair share' of this money but also that it is equitably distributed across all of the UK.

Although £500 million sounds like a great deal of money, as a proportion of the total current spend on the NHS, it is a relatively small amount — about 1.5%. Most major industries allocate at least 5%

per annum of their turnover to R&D, and the pharmaceutical industry, the UK's most successful manufacturing industry, allocates far more than this. Indeed, pharmaceutical research constitutes some 25% of all UK R&D.3 Even an allocation of 2% for R&D from the NHS budget would be a small proportion of spend. With £90 billion a year now planned for the NHS after 2007, the NHS R&D budget and that available to support primary care research should be rising proportionately with this increased expenditure. In the US, for example, approximately 5% of available R&D funding goes into primary care research, although there is an absence of reliable

It is crucial to the future well being of primary care research that R&D resources are distributed equitably across the UK. One of the main aims of the new R&D strategy is to establish a transparent, sustainable, incentive-based funding system that is linked to research activity. The precise nature of the proposed incentives is, at the time of writing, unclear, although if the money is to follow research activity this presents a considerable challenge for the Secretary of State for Health and the Department. The 2004/2005 NHS R&D Budget 1 allocation, for example, is £481 million.5 However, some £322 million (approximately two-thirds) of this, is allocated to the London region with the remainder divided between the other regions of England. It is surely not the case that the London region represents more than two-thirds of Budget 1 R&D activity in England, nor two-thirds of the best. Of course, London should receive proper support since it contains many world class research teams, although it needs to be pointed out that primary care research in London has been generally under-funded in relative terms. Although it is difficult to determine precisely all the resources available for research in London, it also has, and has long had,

unique research advantages not available in the same way to other UK regions. The endowment funds of the great London teaching hospitals, for example, support valuable charitable work but are also used to fund much research, mainly in London. Similarly, the 100 plus Guilds of the city of London, such as the Worshipful Society of Apothecaries, have also funded research and charitable purposes for generations. The different research funding bodies, of course, have different agendas and any assessment by formula will tend to oversimplify. However, despite the uncertainties, all of this suggests that most of the UK has proportionately fewer resources for research per 'unit of academic activity' than London. The proposed allowance for 'young' researchers in the forthcoming research assessment exercise is one example of how this imbalance can be compensated for.

Looking at the UK overall, both of the country's leading two universities on external ranking lie outside London as does the University of Manchester which houses the National Primary Care R&D Centre. Specialist research international quality has come from all parts of the UK and, similarly, some of the most innovative research in general practice/primary care has also come from all parts of the country, not primarily from London. A good example of high quality research from the outside of London, which has had a demonstrable effect on our clinical practice, comes from Southampton with the use of delayed prescribing antibiotic tract infection.6,7 respiratory allocation of some two-thirds of NHS R&D funding for the whole of England going exclusively to London is therefore a remarkable historical anomaly.

The responsibility for correcting this imbalance in the allocation of the Department of Health's research funding now lies with Professor Sally Davies, the Director of R&D for the NHS. She will

need the wisdom of Solomon in ensuring both quality and equity in the system she has inherited as she develops the new NHS health research strategy.

A UK-wide primary care research NHS health network based on economies, composed of a maximum of eight regional networks with linked academic centres has been proposed as part of UKCRC developments with the regions being committed to participating in nationally run studies as well as continuing their own work. General practices that contribute to a new UK primary care research network could be registered through a simplified version of Royal College the of General Practitioners' current primary care research team assessment programme. Such an 'entry level' registration could provide a national quality standard as part of the College's 'core' business and increase the number of practices taking part in primary care research.

Although additional financial resources will be available to develop these networks, their precise relationship with the new UKCRC disease specific networks remains, at the time of writing, unclear. However, it is essential that the new regional networks are not viewed solely as a substrate for recruitment to multicentre pharmaceutical trials. Primary care research needs to be done both in and on primary care. Indeed the majority of the existing networks are conducting good primary care research in their own right as well as contributing to national collaborative studies through, for example, the MRC General Practice research framework. A great deal of research capacity has been created by these networks and this must not be lost. Similarly, the role of Research and Development Support Units should not be viewed in the future as primarily facilitating research grant applications for others and their role should also include initiation and leadership of research as well as collaboration in larger studies.

The results of the 2001 research assessment exercise revealed a large increase in the outputs of academic departments of general practice, some of whom achieved 5-star status for highquality. internationally important research.8 The UKCRC and the new NHS research strategy give us an opportunity to build on this success and to shape the primary care research agenda for the next decade. The next important step is not only to increase the amount of high quality clinical research undertaken but also to increase the number of clinical trials in primary care. However, primary care research receives only a tiny fraction of the UK research funding and the ratio academic to service general practitioners is very small compared to the other medical disciplines — in fact, only 5% of senior academic clinical staff in the UK are academic GPs.8

In summary, the recent initiatives emanating from the Department of Health provides us in the primary care research community with both an opportunity and a threat. We have an opportunity to increase the amount of high-quality research being done in primary care, to influence the geographical allocation of research resources and to develop our existing networks. The threat is that we will fail to maintain our outputs and a clear identity for our research and be viewed primarily as a substrate for centrally directed multicentre pharmaceutical trials rather than continuing to make our own unique and distinctive contribution to health research and primary care.

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REFERENCES

- Department of Health. Best research for best health: A new National Health Research Strategy — the NHS contribution to health research in England. London: Department of Health, 2005.
- Academy of Medical Sciences. Strengthening clinical research. London: Academy of Medical Sciences, 2003.
- McKillop T. Can Europe compete in biomedical research? Forum lecture. London: Academy of Medical Sciences, 2004.
- Phillips B, Fryer E. Expenditures for departments from research grants and contracts, in the LCME (Liaison Committee for Medical Education). Part 1A Schedule B. Washington, DC: Robert Graham Centre, 2005.
- Department of Health. Personal communication, 2005.
- Little PS, Williamson I, Warner G, et al. An open randomised trial of prescribing strategies for sore throat. BMJ 1997; 314: 722–727.
- Little PS. Delayed prescribing of antibiotics for upper respiratory tract infection. BMJ 2005; 331: 301–302.
- Mathers N, Carter Y, Marshall M. New century, new challenges. Fam Pract 2003; 20: 360–361.

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