

Best Research for Best Health: A New National Health Research Strategy

Consultation Questions

Closing Date: 21st October 2005

This questionnaire is to be completed based on the consultation document at <http://www.dh.gov.uk/Consultations/LiveConsultations/>. Please email the completed document to RDconsultation@dh.gsi.gov.uk. For any queries or information, please contact this email address or telephone 020 7972 4113.

Are you responding as
a) an individual, or b) on behalf of an organisation?

Organisation

Name: **Dr Keith Ison**
Position: **Chairman**
Organisation: **The Federation for Healthcare Science (FHCS)**
Address: **12 Coldbath Square, London**
Post Code: **EC1R 5HL**
Email Address: **keith.ison@gstt.nhs.uk**
Contact Number: **020 7188 3812**

Question 1- Challenges

a Are these the main challenges?

Many but not all.

b Are there other important challenges that we need to take account of?

1) INNOVATION:

Innovation is a major challenge. Effective working across research councils, NHS, charities and industry is important to ensure innovation is effective (Health Industries Task Force Report and subsequent developments). Reaping the fruits of research, both in improvements to quality and financially, is critical – the outputs of research need to be disseminated effectively into the service. This requires research and technology transfer skills in the health services to make this happen – see (2) below.

2) MAKING BEST USE OF HUMAN RESOURCES IN RESEARCH:

The document seems torn between an assumption that high-quality medical research must of necessity be led by medically qualified staff, and a desire to indicate that other staff are important. Much of the phraseology and a number of the proposals have this concept embedded within them. Medical research is a multidisciplinary process.

Healthcare scientists, a grouping which includes staff in grades such as clinical scientists and others, both lead and are involved in research. A number of these staff have good research training, including higher degrees by research, and have worked across both academia and service. They contribute significantly to the health of the nation through research, being

recognised internationally for work in areas such as genetics, medical imaging (MRI, CT), biochemistry, renal and respiratory physiology, nuclear medicine and clinical ultrasound. Many lead research projects and work alongside medically-qualified staff. Healthcare scientists span the academic and service arenas.

NHS healthcare scientists engaged in research provide a stable source of expertise, in contrast to short-term research contracts in academia, and are well suited for involvement in leading edge, clinical and translational research.

Healthcare scientists form a crucial part of the research team and support infrastructure. The involvement of individuals with physics, chemistry, biology, mathematics, engineering and other backgrounds is vital to widening and exploiting potential opportunities for research.

Research policies need to encourage and develop this important resource.

3) SETTING PRIORITIES FOR RESEARCH

Healthcare scientists in the NHS are involved in applied, clinical and translational research. Appropriate measures need to be applied when setting priorities; judging the value of work by purely academic criteria (such as publication impact factors) underestimates the value of this research to clinical practice. There is a challenge in setting research priorities to balance long-term and basic research with shorter-term and applied research, into both clinical and technological developments.

Question 2 - Building Blocks

a Are these the main building blocks that we (Department of Health/National Health Service) have at our disposal?

The 'building blocks' considered are valid but are not the only ones. They need to be integrated together with research councils

b Are there other important elements that we need to consider?

Other significant funding streams available to NHS healthcare scientists to support research include charitable funding such as the Wellcome, British Heart Foundation, Cancer UK etc who have supported healthcare scientists through project and programme grants. Healthcare scientists also have access to funding from the research councils, when working with academic colleagues. Major resources are available to the NHS in existing healthcare scientist departments (Medical Physics and Clinical Engineering, Life Sciences and Pathology, Physiological Sciences), both in human and scientific/technical infrastructures. These build on service requirements that have been imaginatively extended using charitable and research funding to provide facilities for research.

The newly re-badged Device Evaluation Centres (CEP under PASA) contain a wealth of healthcare science expertise, which can be harnessed to support research and the associated development of regulation and evaluation required by clinical and infrastructure research.

Question 3 - National Institute for Health Research

a Will the creation of a virtual National Institute for Health Research achieve the objectives of creating coherence and focus for the different strands of our work?

A “virtual” National Institute for Health Research will only work if individuals and institutions participate and cooperate fully. There should not be a division between NHS-funded healthcare scientist academics and those funded from other sources such as HEFCE; seamless collaboration is vital, particularly in translational research. Healthcare professionals who have something to contribute should be able to participate in the NIHR and the other proposed new structures regardless of funding source, discipline or organisational affiliation.

b Would another mechanism work better?

Research networks can be very effective where they are structured round a clear focus, such as a clinical condition or particular technology. For example, diagnostic testing is a major issue for the NHS and one where healthcare scientists make a significant contribution.

A major effort should be made to link NHS scientists working in diagnostic and therapeutic facilities such as laboratories, diagnostic imaging and physiological measurement into R&D networks and collaborations.

c If so, what?

Investing in well-resourced networks, with clear leadership and an inclusive approach, would provide an effective way to harness research efforts. The ‘Institute’ would then be embodied through the interaction of network leaders and members, using a variety of electronic and other information-sharing techniques.

Such networks can also be built to a hub and spoke model, allowing for different degrees of involvement and commitment.

Linking these networks to other professional structures, for example by providing channels to professional bodies for the interchange of ideas and information, would have the potential to leverage both effective input and achievement. This could be extended to research councils, charities and potentially industrial partners.

d Does the name National Institute for Health Research appropriately describe its role?

The implied primary role for this body is that of coordination and linkage, not a formal Institute.

Question 4 - National Institute for Health Research Faculty

a Do you agree that we should create a staff structure, which ensures proper support for all those engaged in research for the benefit of patients?

All staff engaged in research need to be properly funded, trained and supported. This includes healthcare scientists. This is not done well in the current NHS system, restricting opportunities for scientists to develop through suitable training and to participate in research.

b Do you agree with the concept of a National Institute for Health Research faculty?

Whether a new structure of staffing will solve the support problem is debatable. There is no

intrinsic merit in developing a new structure, if revised funding to existing systems would be adequate. What is important is that healthcare scientist and other support staff are supported, encouraged, developed and enabled to deliver effective research.

c If no to **a** and/or **b** above, what mechanism(s) should be used to ensure these staff are supported?

World-class talent needs to be encouraged and supported, as do the skills necessary to introduce research into clinical service. Identifying the work that needs doing, and setting classes of support to encourage researchers into the field, is a logical approach. Providing additional support targeted at giving NHS staff the ability to move into research for defined periods and/or projects will meet a need that is currently satisfied only through ad hoc grant mechanisms. This may require a specific type of post to be created.

d Do you agree with the three groupings (Senior Investigator, Faculty Associate, and Junior Investigator) as proposed?

The level of each grouping is unclear, as are criteria for selection, length of appointment and any review/appraisal processes. Groups need to reflect research needs, and it is not clear either how many are required.

e If not, what groupings would you use?

The titles of these groupings is non-profession specific, which is welcome.

These groupings already exist in practice in both academic and NHS research groups, under a range of different titles, alongside other functions (including research support posts). It is not clear why a more restricted set of groupings is needed.

f Do the names Senior Investigator, Faculty Associate, and Junior Investigator appropriately describe the different groups?

No.

g If not, what names would describe them better?

The level labelled as 'Senior Investigator' appears to be restricted to clinical (medical) academics only. However, academic Clinical Scientists have been and are lead investigators on many clinical projects with appropriate clinical support, rather than always working under a clinical lead. The Federation opposes a non-inclusive concept to this position, or any equivalent.

Using existing titles such as 'Chief investigator' in a project context rather than 'Senior Investigator' would be appropriate, or another title reflecting their position in a research network or other embodiment of the Institute in a different context.

'Faculty Associate' is inappropriate unless defining what the Faculty represents and what association means. It is not generally accepted UK terminology.

h Is it appropriate to include the NHS-funded staff in universities?

It is difficult to see why these staff should be treated differently, particularly where a stated aim of the proposals are to provide a seamless approach to NHS research.

i Should the funding for these staff be held centrally to ensure protection of research time?

Research time needs to be protected. Central funding of individual posts is not the only way to achieve this. Protection is needed at different levels; for example, funding can be needed for nursing, scientific and technical support, and the contribution of healthcare scientists in this context is often overlooked.. With these considerations, it is difficult to conceive of the best balance of investment being determined centrally.

j What would appropriate 'allowances' be for the three groups of faculty staff?

Allowances need to meet research support needs. As stated above, these are difficult to determine without understanding particular project and programme needs. Where staff need to be supported for research training and development (as occurs in some existing fellowship schemes), the level of support reflects seniority and project extent. The purpose of any allowances is what needs to be considered.

Question 5 – Infrastructure (i)

a Are the proposals for Support for Patient Research appropriate?

Not in their entirety.

b If not, what would achieve the aims better?

Research funding following patients works for large clinical trials, but not for technology-based projects which often involve no or few patients in their early stages but which may then benefit many (eg laboratory testing, medical imaging, assistive technology). It can be difficult to strip out and identify all the costs of a technological development, and particularly translational research, within a single research grant – infrastructures take time to develop and investment to maintain.

Question 6– Infrastructure (ii)

a Are the proposals for Academic Medical Centres appropriate?

No.

b If not, what would achieve the aims better?

The proposal is to channel major resources into five institutions. While the aim may be to develop world-class research centres, it does not recognise that the NHS has both clustered and distributed expertise in many different areas and disciplines.

Establishing research networks which build on and develop expertise can facilitate the emergence of strong centres of research without focusing on particular institutions.

c Should we support both comprehensive centres and specialist centres?

The NHS currently does this. Both are needed, particularly when considering the requirement to translate specialist into general practice. This is an area where healthcare scientists can make a particular contribution.

d How many of each can we support if they are to be truly world-class as the exemplars?

The proposed funding is insufficient for the purpose described.

e What time period should be awarded before a new competition round?

The creation of these centres requires a set time limit, but only if the process is a stochastic rather than an evolutionary one.

Question 7 – Infrastructure (iii)

a Are the proposals for Leadership Funding appropriate?

The concept of leadership funding will help to encourage research excellence. However, the criteria for awarding the sums needs to be carefully chosen.

b If not, what would achieve the aims better?

Allocating funding by research type would only make sense if the type of research is a predictor of the funding need. It is not clear that this is the case. Some other measure may be more appropriate.

Question 8 – Infrastructure (iv)

a Are the proposals for Technology Platforms appropriate?

Investment in leading edge technology is required. Carefully chosen, this can complement research into both basic science and translation into clinical practice. How this is to be done remains to be discussed; simply linking these to a limited number of centres may not be the best way forward.

b If not, what would achieve the aims better?

The resources and needs of both NHS service and the academic sector also need to be taken into account.

Particular donations or sponsorship should not be allowed to undermine a longer term, strategic view of where such investments are placed or how they are used. Joint usage for research through to service development is often the best way to bring new techniques into clinical use.

c What should be the first area(s) for focused support?

Healthcare scientists in the NHS have extensive experience of technology and are well placed to advise on and specify the choices of both areas for support and the appropriate technology and location.

Question 9 – Infrastructure (v)

a Are the proposals for Experimental Medicine appropriate?

This appears to be appropriate and suitably flexible.

b If not, what would achieve the aims better?

Question 10 – Infrastructure (vi)

a Are the proposed infrastructure elements to create optimum systems the right ones?

Yes, with additions – see b below.

b Are there other potential elements that we should consider?

The Government's response to the Health Select Committee's report on new technology highlighted the role of healthcare scientists – technicians, engineers, scientists – in supporting and developing medical devices. Modifications to, and the development of, laboratory and technical prototypes is often a key part of research projects. The infrastructure to support this in the NHS needs to be fostered.

The HITF (Health Industries Task Force) report addresses the need to develop a "Centre for Innovation" and support world class R&D between NHS and Health Industries. This is another potential element of support.

People are the key resource. Healthcare scientists should be included alongside medical, nursing and allied health professionals when considering how best to invest in this element.

c What should the balance of investment between the different infrastructure elements be? (i.e. what should be the percentage spend on each?)

This question needs an answer informed by a considered level of strategic analysis and study of different health and research systems.

Question 11 – Programmes

a Are the proposals for research programmes appropriate?

These suggestions will, taken together, provide for a good mixture of programmes. Innovation needs to be an important component, as does translation from laboratory to patient.

b If not, what should we amend, add or delete?

Programmes need to remain flexible and adaptive, subject to review. The overall aims of research excellence and clinical application should not be lost sight of in the setting up and running of particular programmes.

Question 12 – Research networks

a Are the proposals for research networks appropriate?

Topic specific or locality networks are not the only way to organise research networks.

b If not, what would achieve the aims better?

Networks for infrastructure support can also be appropriate where items are major foci for research (eg medical imaging). These research networks can gain additional value if linked to existing professional and service networks, for example in exchanging scientific or technological information. Healthcare scientists across the NHS already have experience in managing these kinds of networks.

It is not clear how these networks will be supported.

Question 13 – Bureaucracy ‘busting’

a Do you agree with our guiding principle that procedures and data input should occur once and once only and that where duplication exists, we will seek to streamline it?

Bureaucratic barriers should be removed where possible, to make research simpler and easier to do and to use.

b Are the proposals for bureaucracy ‘busting’ appropriate ?

Paperwork must be simplified. Standard procedures need to be implemented across institutions and different sectors.

Funding arrangements for staffing need to be simplified across NHS and academic sectors. Proposals from the STLaR HR strategy need to be incorporated, including those covering the development of individuals from training fellows to active researchers.

c If not, what would achieve the aims better?

Cross institutional working needs to be facilitated, for example for issues such as honorary contracts and intellectual property. Research passports may help with this, if they cover a sufficient number of topics, and need to be open to both NHS and academic staff.

Question 14 – Transition

a How important is it that our funding is allocated transparently?

Transparency is vital. A number of the proposals in this consultation seek to establish centres and individuals of excellence, and the way funding is used to do this needs to be clear.

Expertise and research capacity already present in both NHS and academic sectors need to be retained.

Systems need to be flexible enough to allow funding to be directed to address important and urgent areas where further research is needed.

b How important is it that we establish a sustainable funding system?

This is very important, if individuals are to be consistently developed and supported to deliver high quality research outputs.

c How important is it that we establish a funding system that is responsive to changes in levels of research activity?

The funding system must take account of the need to retain research infrastructure. If the level of research falls, overhead costs increase, so there is thus an incentive to maintain research throughput to remain cost effective. The best companies invest in research when times are hard; the NHS should not be afraid to do the same.

d How important is it that we do not lose momentum in the move to the new system?

Existing expertise should not be lost.

e If the implementation start date is 1 April 2006, how long should the transition to the new system take to complete: 1 year, 2 years, or 3 years?

The transition should allow for reallocation of resources in a way that does not lead to a collapse of existing and planned research projects and investment.

f How important is it to ensure that we do not destabilise individual institutions as we move to the new system?

Service as well as research activity will be affected by these proposals. The effects will be wide-ranging, and deleterious effects on patients must be avoided.

Question 15 – Overall

a By what criteria will you judge us on the impact of this strategy?

- The ability of the NHS to sustain high quality research, using academic measures.
- The translation of research into clinical practice, using appropriate timescales.
- The creation of a cadre of researchers in all disciplines, working effectively together.
- The spread of a research culture through the NHS.
- Improvements in the health of the population.
- Effective R&D networks.
- Effective innovation and links to industry.

b Do you have any other comments?

The emphasis on world-class research must not stop local research initiatives. These should be supported to the point where they either flourish (and bring benefit to patients) or are clearly not of value. Discretionary and infrastructure R&D funds should not all be directed to a small number of centres, but there should be sufficient slack in the system to allow individual initiative to bear fruit.

Support is needed to exploit IPR.

Thank you for completing this questionnaire. Please save this document and email it as an attachment to RDconsultation@dh.gsi.gov.uk. For any queries or information, please contact this email address or telephone 020 7972 4113. Further copies can be downloaded from <http://www.dh.gov.uk/Consultations/LiveConsultations/>.

Alternatively, hard copies can be posted to Best Research for Best Health Consultation,

Response from the Federation for Healthcare Science

Room 723 Wellington House, 133155 Waterloo Road, London SE1 8UG. Further hard copies of the consultation are available from:

DH Publications Orderline

PO Box 777

London SE1 6XH

Tel: 08701 555 455

Fax: 01623 724524

Email doh@prolog.uk.com

DH will report on the outcome of this consultation at the end of November 2005 at www.dh.gov.uk.