Health Services Research Network

THE NHS CONFEDERATION

briefing

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Making sense of the new innovation landscape

Health minister Lord Darzi's NHS Next Stage Review final report contained a number of new organisational structures aimed at stimulating innovation. But a range of comparatively recent organisations that stem from the Department of Health's *Best research for best health* strategy pre-date the post-Darzi structures, while the NHS Institute for Innovation and Improvement also works in this territory. All these bodies have similar aims and ideals and it is not immediately apparent how they will sit together.

This *Briefing* describes the new innovation landscape and considers the aims of each initiative, the potential overlaps and the funds in place to support them.

Key points

- The NHS has a strong record in research, discovery and invention, but has a patchy record in adopting and diffusing the new services, technologies and ideas that result.
- The new emphasis on, and investment in, innovation is good news for the NHS.
- There is strong support for partnership with education and industry, and for collaboration across primary, secondary and social care.
- The innovation landscape is now quite crowded, and it can be difficult to discern how certain bodies differ from each other.

Background

The NHS Next Stage Review defined innovation as: "a new way of doing something that results in significant change making a large difference to performance, whether achieved by creating new ideas or adapting proven ideas from elsewhere". The report notes that while the NHS was acknowledged to be good at research, discovery and invention, it has been less successful at adopting and diffusing new ideas and technologies – a point also made in the earlier 2006 Cooksey Review which identified the need to address the 'translational gap' in taking the results from research activity, whether that be in potential new technologies, clinical practice or service design, and translating these into healthcare delivery.

The NHS Next Stage Review identified cultural, professional and organisational barriers to effective innovation adoption, and to overcome them promised stronger leadership, new funds, greater personal and organisational reward and recognition, as well as new infrastructure. It found strong support for partnership with education and industry, and for collaboration across primary, secondary and social care – approaches already taken by the National Institute for Health Research, set up to deliver the Government's research and development strategy, *Best research for best health*, published in 2006.

The NHS Next Stage Review aimed to consolidate and build on this strategy.

The post-Darzi innovation architecture

The Health Innovation Council (HIC)

The NHS Next Stage Review envisaged that the HIC will act as the overarching guardian for innovation, from discovery through to adoption, holding the Department of Health and the NHS to account for taking up innovation and helping overcome barriers to doing so. Its role is to provide strategic advice on how to develop innovation in health and social care, and how to tackle its variable uptake. HIC's role is to build on work already underway in existing structures. Chaired by health minister Lord Darzi and the NHS Chief Executive, David Nicholson, HIC's membership includes representatives from the NHS Institute, Office for Strategic Co-ordination of Health Research, NICE, academia and industry (including the HSRN and the NHS Confederation).

Academic health science centres (AHSCs)

In recent years, the NHS and universities have sought to work together more closely to realise the synergies between research, education and health services. The NHS Next Stage Review recommended designating a small (but not predetermined) number of partnerships between research, education and health services as AHSCs. In March, following an international peer review process, five AHSCs were named:

- Cambridge University Health Partners
- Imperial College
- King's Health Partners
- Manchester AHSC
- UCL Partners.

Definitions

Innovation: the process by which ideas are developed to solve problems, improve existing methods or devise new ones. It can refer to changes in thinking, products, processes or organisations, and may involve research, discovery or invention.

Adoption (or implementation): the process whereby innovative ideas are implemented. It can be where ideas in one area are 'pulled' and applied into another area. In many cases, the ideas are adapted to suit the local context.

Diffusion (the term 'dissemination' is often used): the promotion of innovation across a system. It can occur through a managed process where information is stored and shared, or though informal networks and relationships.

They will aim to improve patient care by speeding up the translational benefits of research, generating economic growth through spin-offs and industry investment. The five AHSCs will benefit mainly from recognition and prestige rather than extra funding, enabling them to compete with internationally renowned centres such as Harvard and Johns Hopkins in the US and Sweden's Karolinska Institute. Both foundation and non-foundation trusts could apply, and the DH was open to proposals for different forms of governance. All applicants had to be financially sound. They had to demonstrate excellence in patient care, education and international excellence in biomedical and clinical research across a broad range of subjects. They also had to present a compelling vision for their partnership, describing how they plan to promote new discoveries in the NHS and across the world.

The DH's commitment to AHSCs includes considering whether changes to legislation are desirable – for example, to allow more integrated governance arrangements. Designation is for five years and their progress will be subject to review and a re-application process. The DH believes AHSCs could potentially provide direct and indirect benefits that the NHS might not otherwise be able to realise, such as attracting world-class staff, establishing collaborative training and working across professions, adopting evidence-based practice for patient care and education, and redesigning patient pathways. **www.ournhs.nhs.uk/ahsc**

Health innovation and education clusters (HIECs)

HIECs will be collaborations across primary, community and secondary care, universities and colleges, and industry. They will share strategic goals and run joint innovation programmes reflecting local needs. Their aim will be to enable findings from clinical, applied, public health and social research to be adopted more readily to improve patient care and population health. The DH argues that international experience suggests clusters bring advantages such as the ability to attract more research funding and world-class researchers. Eventually, HIECs may be commissioned to provide postgraduate education and training for all healthcare professionals. HIECs will not be defined or imposed nationally but encouraged to emerge locally, building on existing collaborations. SHAs will remain responsible for commissioning and quality-assuring the training that clusters provide. Matched funding will be available for HIECs. They will probably number about 20, and may not be evenly distributed around the country.

New role for strategic health authorities (SHAs)

The DH believes an innovative culture cannot be driven from the centre. Therefore, SHAs will take the lead, and from April 2009 will have a legal duty to promote innovation "for the purpose of securing continuous improvement in the commissioning and provision of healthcare". The DH will not prescribe how SHAs fulfill the duty or actively performance-manage it, but SHAs must produce an annual innovation report detailing action taken, progress, investment, outcomes and impact. Their role will be to create the right context to stimulate innovation in frontline organisations, responding to local needs. All SHA board members will be responsible for this, not one individual.

SHAs will manage new regional innovation funds to identify, grow and diffuse tomorrow's best practice, focusing specifically on innovations in healthcare delivery, health improvement and patient empowerment and engagement. The intention is to accelerate innovation and diffuse it more widely. The money is additional funding from the DH's central budget, and £220 million will be apportioned equally among the ten SHAs – believed to be the largest single Government investment in innovation.

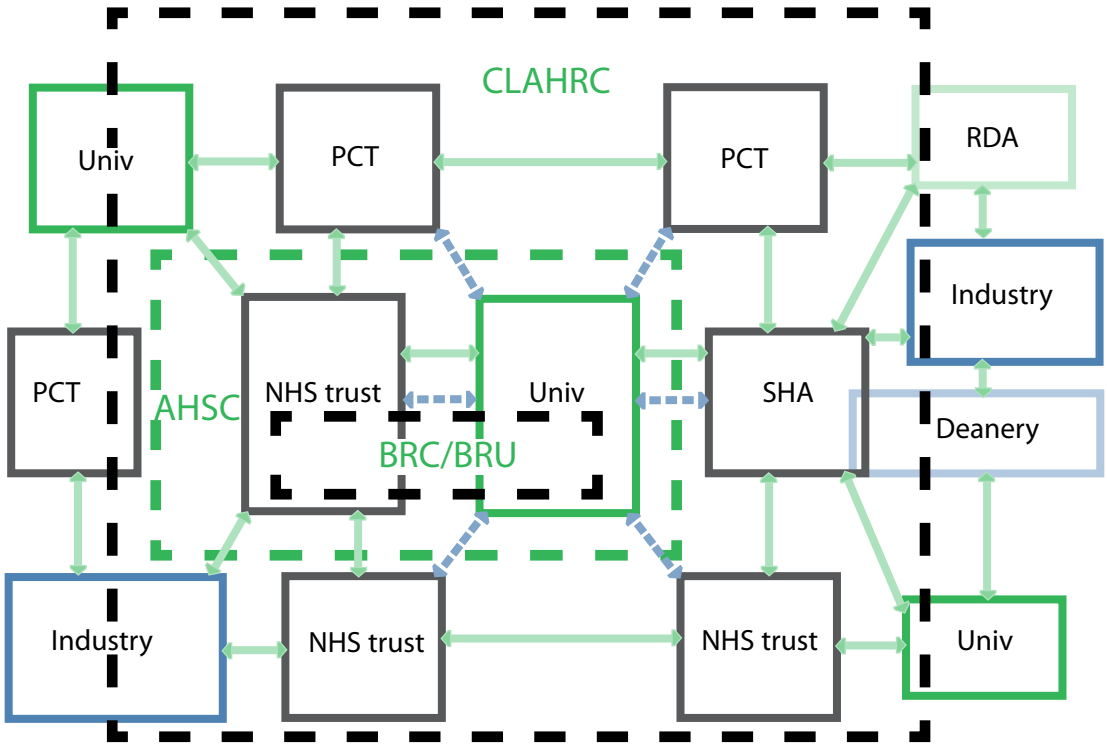
Health Innovation Challenge Fund

A fund worth £100 million over five years from 2010/11, jointly financed and administered by the Wellcome Trust and the DH, will support development of innovative technologies, devices and clinical procedures. Challenge prizes will be awarded for innovations directly benefiting patients and the public, to help foster an enterprise and innovation culture in the NHS. The DH believes such prizes will "legitimise the innovator" and create a culture where innovation is rewarded rather than seen as a risk. The DH intends the prizes to engage a wide range of staff: they will be focused on challenges such as making radical breakthroughs in the prevention and treatment of lifestyle diseases. Application will be by open competition and subject to international peer review.

Challenge prizes have traditionally been the province of philanthropists rather than government, but experience suggests the kudos of a prize can encourage investment far beyond its cash value. Competitions often result in spin-off benefits that may not qualify for the prize itself but add to the innovation's value. They may also attract public interest and awareness around the issue being tackled. Prizes will be most effective if they are designed with a clear goal in mind, the challenge is agreed by experts and focused on a single objective. If the challenge is not sufficiently ambitious or popular, it may fail to stimulate interest. If the prize is too large, attention may be diverted from more important fields and slow down innovation there; if it is too small, potential applicants may be discouraged.

Guide to the new landscape and its linkages

PCT: primary care trust
SHA: strategic health authority
RDA: regional development authority
CLAHRC: collaborations for leadership in applied health research and care
HIC: health innovation and education clusters
AHSC: academic health science centres
BRC/BR: biomedical research centres/units
Univ: universities



NHS Evidence

NICE was asked to establish NHS Evidence – a web-based service that will help people find, access and use high-quality clinical and non-clinical evidence and best practice. Built around a powerful search engine, the service will consolidate information from a wide range of sources in one central portal. NHS Evidence will meet the needs of users across the NHS – clinicians, nurses, pharmacists and commissioners, among others.

Innovation bodies in place pre-Darzi

Organisations under the auspices of the National Institute for Health Research broadly concentrate on invention and discovery. Activity and programmes led and developed by the NHS Institute for Innovation and Improvement are generally more concerned with adoption and diffusion.

National Institute for Health Research (NIHR)

NIHR was set up to deliver the Government's research and development strategy. It commissions and funds research, provides facilities, supports individuals carrying out research and creates knowledge management systems. NIHR has established seven topic-specific clinical research networks to support clinical trials throughout England and promote patient and public involvement in health research. In addition, a Comprehensive Clinical Research Network supports research in all areas of disease and clinical need. NIHR's funding will reach £1 billion by 2010/11 to support a major growth in clinical trials.
www.nihr.ac.uk

Biomedical research centres (BRCs)

NIHR has created 12 BRCs in partnerships between the NHS and universities. Selected by an independent, international panel through open competition, the BRCs benefit from £450 million that NIHR is investing in them over five years to investigate major causes of illness and death such as cancer, heart disease, asthma, HIV, mental illness, blindness, childhood diseases and ageing. Their aim is to translate fundamental biomedical research into clinical research that benefits patients, and be early adopters of new insights in technologies, techniques and treatments for improving health.

Biomedical research units (BRUs)

NIHR has established 15 BRUs to undertake translational clinical research in areas of high disease burden and clinical need that are under-represented in the BRCs. This includes conditions such as deafness, gastrointestinal disease, nutrition, diet and lifestyle, musculoskeletal disease, infection and pancreatic disease. BRUs are partnerships between an NHS trust and a university, and like BRCs were chosen through open competition by an independent, international selection panel. They aim to drive innovation in the prevention, diagnosis and treatment of ill-health, and translate advances in medical research into benefits for patients. Each BRU is receiving £3.75 million over four years.

Collaborations for leadership in applied health research and care (CLAHRC)

NIHR's nine CLAHRCs are collaborative partnerships between a university and the surrounding NHS organisations, focused on improving patient outcomes by applying health research. As with BRCs and BRUs, they were chosen through open competition by an independent international selection panel. They began work in October 2008, aiming to create and embed approaches to research and its dissemination which are specifically designed to take account of how healthcare is increasingly delivered across sectors and wide geographical areas. They are a response to the Chief Medical Officer's recommendation that the NHS should better harness higher education's capacity to support initiatives that enhance the effectiveness and efficiency of clinical care. NIHR provides core funding – typically £5 million to £10 million over five years. CLAHRCs must match this.

Office for Strategic Coordination of Health Research (OSCHR)

OSCHR's mission is to encourage more efficient translation of health research into health and economic benefits through better coordination of health research and more coherent funding arrangements to support translation. Jointly established as a Government office by the DH and Department for Industry, Universities and Skills (DIUS), it works with NIHR and the Medical Research Council to develop a single integrated health research strategy. It sets a budget for the strategy, monitors and reports on its progress and communicates health priorities to the pharmaceutical and bioscience sectors.

NHS Institute for Innovation and Improvement (NHS Institute)

A special health authority, the NHS Institute supports the rapid adoption and diffusion of new ideas by providing practical guidance on local, safe implementation. The NHS Institute is particularly interested in service transformation, technology and product innovation, leadership development and learning. At the DH's request, it is developing ways of measuring whether the NHS is getting better at promoting innovation and using cost-effective technology.
www.institute.nhs.uk

NHS National Innovation Centre (NIC)

Part of the NHS Institute, the NIC aims

to speed up development of pre-commercial technologies likely to benefit the NHS. It provides free online tools to help assess ideas and find resources. It can link with national and international organisations to tailor-make plans for rapidly developing intellectual property. The NIC also issues 'calls for solutions' to industry and academia to meet particular NHS needs. **www.nic.nhs.uk**

Innovation hubs

Currently, the NIC coordinates nine regional innovation hubs, which support entrepreneurial activity by helping trusts identify and commercialise their innovations, protecting intellectual property and seeking appropriate partners so the NHS can benefit financially from its own inventions. The hubs have been funded by DIUS, the Office of Science and Technology and the DH, although they will increasingly be responsible to the SHAs, which will take over their funding in 2009/10.
www.innovations.nhs.uk

NHS Technology Adoption Centre (NTAC)

NTAC's mission is to increase the NHS's uptake of new technology, identify technologies that will improve healthcare and promote greater cooperation between organisations developing and using healthcare technologies. It works at a clinical, managerial and procurement level, scanning the medical technology industry for innovations and organising regular calls for innovative products. Those selected form the basis of 'technology implementation projects', involving an NTAC project manager working with NHS clinicians and managers to integrate it into an NHS setting, whether an acute hospital or primary care centre. If NTAC is aware that increased uptake of a technology would benefit the NHS, it carries out a technology adoption review to identify barriers to adoption. **www.technologyadoptioncentre.nhs.uk**

Centre for Evidence-based Purchasing (CEP)

CEP evaluates medical devices and technologies, encouraging innovation by identifying its benefits. Established as part of the NHS Purchasing and Supply Agency in 2005, it helps make sense of technical, clinical, operational, economic and financial data by summarising evidence, undertaking equipment evaluations and collating product specifications and market intelligence. **www.pasa.nhs.uk**

Effect of the new architecture on the old

The new organisations have yet to begin work so it is too early to predict precisely how they will affect the existing ones. However, some impact seems inevitable. For example, the NHS Institute had been formulating plans for an innovation fund of up to £12 million that has been abandoned in the wake of the new Health Innovation Challenge Fund; the regional innovation hubs are to be brought under tighter SHA supervision amid a feeling that some have achieved insufficient returns; and the NIC, shedding responsibility for the hubs, aspires to become a resource for advising SHAs and frontline organisations on how to develop a culture supportive of innovation.

NIHR says its work stimulated the thinking behind the NHS Next Stage Review and there is a resemblance between the new AHSCs and NIHR's BRCs, and between HIECs and NIHR's CLAHRCs. NIHR points out that a significant distinction is that BRCs and CLAHRCs are contracted for specific purposes, whereas AHSCs and HIECs will not be. CLAHRCs are seen as experimental, piloting ways for organisations in the same health economy to work together; the HIEC concept may share similar ideas but will not be an experiment. Despite any similarities, NIHR intends to re-run its competition for BRCs, BRUs and CLAHRCs when the current five-year contracts end.

Some trusts and their university partners planned to adopt the AHSC designation before the NHS Next Stage Review formalised the concept. The DH has made clear that it would be both premature and needlessly heavy-handed for the Government to consider regulation for formal protection of the title at this stage.

HSRN viewpoint

There is no doubt that new emphasis on, and investment in, innovation is good news for the NHS. But of some concern to us is the lack of a clear distinction between aspects of some of the new and existing organisations, although differences may become more obvious as the new bodies develop their roles.

There may be an argument for having some overlap between organisations initially, but with different focal points. In the long run, to avoid duplication and ensure coherence, the system may need to be aligned and all its elements interconnected. However, the priority must be to generate energy and enthusiasm and to instill a culture of innovation throughout the NHS. It will also be important to avoid imposing a uniform structure when local control is what makes the difference.

The focus on innovation presents great opportunities for the NHS and the research community to work together towards delivering

improvements in the quality, safety and efficiency of healthcare. The strong linkages with the quality agenda and the new measures being introduced to deliver this – for example, quality accounts and world-class commissioning – provide further focus and opportunities.

We hope these new organisational approaches will assist in overcoming many of the obstacles to adopting innovation in the NHS, such as organisational culture, performance management systems, and also create improved research awareness and skills amongst frontline NHS staff. It is important that these new approaches are properly evaluated so we can better understand what does and doesn't work. But for any of these initiatives to be successful, it is essential that there is leadership inside the organisation promoting the research and innovation agenda, a topic – explored in the paper *Leading innovation* in the NHS Confederation's leadership series.

For more on the issues covered in this *Briefing*, contact **stephan.groombridge@nhsconfed.org**

We want to hear from you

Submit your comments to Viewpoint, our online discussion forum at **www.theknowledgexchange.co.uk**

- Do you think this new innovation architecture will help in advancing innovation and quality agendas?
- What is your experience to date of these new initiatives?
- Will the new initiatives result in winners and losers?
- Do they still fall short of the reorganisation that is needed?

Further information

Better health through partnership: a programme for action. Health Industries Taskforce, 2004

Best research for best health: a new national health research strategy – the NHS contribution to health research in England. DH, 2006

A review of UK health research funding (the Cooksey Report). HM Treasury, 2006

High quality care for all: NHS Next Stage Review final report. DH, 2008

The future of leadership: leading innovation. The NHS Confederation, 2009

The HSRN and the SDO Network

The Health Services Research Network (HSRN) – and its sister network, the SDO Network – are working as part of the NHS Confederation to create greater alignment between the research and NHS communities and promote the role of research and its use in policy, practice and managerial decision-making.

The HSRN is a network of over 100 organisations dedicated to promoting health services research. Membership includes 60 academic units, over 40 NHS trusts and a number of professional and commercial organisations. The HSRN produces communications and holds regular events across the country to showcase the latest research and to bring researchers together with managers and policy makers. For more information and an application form, visit: **www.nhsconfed.org/HSRN**

The SDO Network supports NHS managers to use research to improve and develop the services they manage. The network offers a range of services customised to the needs of senior, middle and new NHS managers. Services for its members include events which bring together the latest learning from research and the experiences of front-line NHS managers; action learning sets; a chief executives forum; academic fellowship placements; and support in conducting and sourcing the latest research. Membership is free. The SDO Network is funded by the National Institute for Health Research (NIHR) SDO programme. For more information, visit: **www.nhsconfed.org/SDONetwork**

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