Response to NHS Chief Executive’s Open Call for Evidence and Ideas

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Response to Call for Evidence and Ideas

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Background

This note in response to the consultation is based on the research I have undertaken over many years regarding innovation and the use of medical technologies. It also reflects my experience as a Non-executive Director of an NHS Foundation Trust for the past 6 years; as a Non-executive Director of Medipex, the Yorkshire and Humber SHA Innovation Hub; and my experience of working with the medical supply industries in the UK and internationally. The views expressed are my own, but I am sure they concur with those of many of my colleagues in YHEC.

Many of the ideas emerged from a study undertaken by YHEC for the NHS Institute for Innovation and Improvement: J. Hutton, T. Cardow and J. Kruger, Organisational and Behavioural Barriers to Medical Technology Adoption: Final Report, September 2009. I understand that this report has been made available to the Review. I shall therefore not repeat the findings of the study in detail, but develop those ideas which I think continue to be relevant to the current situation in the NHS.

Adoption and Diffusion of Innovations

The NHSI study focussed on the role of senior NHS management in facilitating adoption of innovation and concluded that their role was potentially important but insufficiently defined. Contrary to much of the general literature on innovation, most of those NHS interviewed felt that an absence of managerial control and organisational structure was holding back the adoption and diffusion of valuable innovations in the NHS. This highlighted the perception that the NHS was not short of inventions, but lacked the expertise, information and structures necessary to convert good ideas into innovations usable across the system.

It also indicated the dangers of applying private market models of the innovation process to the NHS. Creating the right environment for original thinking and rapid action is important in the discovery phase of research, but is dangerous in the context of consistent delivery of good quality and efficient health care. It could be argued that the unregulated environment in which many clinicians were previously allowed to operate has led to unjustified variation in clinical practice, and has been a major barrier to the effective spread of desirable innovations. Clearly local decision-makers must check that a general recommendation can be implemented in their specific circumstances, but the uniqueness of each location should not be exaggerated.
Once the evidence has been produced to show the most effective and cost-effective way to deliver a service, discipline and organisation are needed to achieve the benefits before allowing creative spirits to invent even better ways of doing things. A key factor in managing effective change is to engage the clinicians with the management agenda and vice versa. This requires alignment of the financial, performance and professional incentives facing the different groups and the determination of coherent corporate goals. Clinicians and managers working together are behind many of the successful case studies of innovation adoption.

**Product and Process Innovations**

A useful distinction drawn by economists is between product and process innovation. Product innovation is the production of a new version of an existing product or a completely new product for which a market must be created. Much of the innovative activity of the pharmaceutical and medical device industries, as perceived by the public, is of this nature. However, they also engage in process innovation – the development of new methods of developing and manufacturing their products. As a service industry the NHS is concerned with process innovation, often using industry’s products as a catalyst for new forms of service delivery, but many service innovations do not involve complex technology or major investment. Traditionally, process innovation has been seen as within the control of producers; motivated by cost reduction and driven by technical capabilities. Product innovation can only be successful if the outcome is acceptable to consumers. For the NHS the consumer is complex. Patients ultimately receive the care, but are not the sole determinants of what care they receive. Clinicians and service commissioners also have a voice in this as they control the budgets which pay for it. Some health care activities are delivered more on a business-to-business model, e.g. diagnostic and radiology services, between or within organisations.

Thus what is a product innovation in the health care industry becomes part of a process innovation in NHS service delivery. Given the importance of the QIPP agenda there is a strong focus on process innovations which reduce costs without reducing the volume or quality of service provided. This can only be achieved with strong management, close collaboration with clinicians and good information on the impact of any new approaches to care provision. Ensuring that senior clinicians share management responsibility for the use of resources as well as the quality of patient care (as, for example, at York Teaching Hospital FT) creates the right environment.

**Centralisation and Decentralisation**

As in many fields of policy there is a constant tension between the desire to identify and implement best practice at a system level, and the desire to devolve decision-making to the local level so that innovation fits better with the needs of the local population. Although there are significant differences in the geography and demographics of UK regions, on average the results of system level technology appraisals, such as those of NICE, are likely to be generally applicable. Even cost-reducing innovations take time and resources to implement, so initial investment may be needed. However, because of the differences in the history and development of health services between locations, what should be decommissioned in order to free the finance for a new service development may vary. Those closest to the local health economy are most likely to know what is appropriate. To make the system work, there must be understanding, at the local level, of the nature and purpose of centrally-funded studies and the resulting guidance, while at the centre there must be respect for some differences in local priorities.
Information Communication and Training

The creation of NHS Evidence and the continuing flow of new studies from NICE and NIHR in the UK and their equivalents in other countries, means that the NHS is well supplied with information on which to make innovation adoption decisions. However, experience shows that the NHS does not always have the skills and resources to make best use of that information. More formal and structured decision-processes within provider and commissioning organisations will provide the incentive for stakeholders to acquire and apply those skills. Support for the development of evaluative skills at the local level would be valuable in improving the quality and speed of decision-making.

Actions at National Level

The most important task of the National Commissioning Board will be to develop the incentive structure for commissioning groups and providers. The PbR tariffs will have an important role as they provide a mechanism for transferring cost savings achieved by providers to commissioners’ budgets. (p3). Equally, where adoption of an innovation with long-term benefits requires increased expenditure in the short-term, the tariffs should be raised to accommodate this.

Whilst the NCB should not attempt to prescribe in detail how each provider and commissioner should implement guidance emerging from central bodies, such as NICE, they should ensure that the local organisations have the right type and level of expertise to interpret the national guidance and implement it in a way which best fits their local situation. This expertise will have to cover patient outcomes, finance and cost-effectiveness as well as clinical aspects. Such resources are not readily available so a form of shared provision between groups of providers or commissioners might be efficient. This could be organised through the four NHS regions and their sub-offices.

The existing expertise of national agencies, such as the NHS Technology Adoption Centre, set up to help NHS organisations make best use of innovations, could be exploited and developed. The NTAC could provide an effective link between NICE and the NHS in working out the specific impacts of implementing new technologies as recommended by NICE.

Another role for the NCB could be to work with the DH in helping manufacturers to provide supporting evidence for their products in a form which makes NHS decision-making easier. The NICE MTAC appraisal guidance will help with this, but other bodies could contribute. The remaining SHA Innovation Hubs might help with this, given their understanding of the industry as well as the NHS.

Many current activities in the innovation arena are focused on technologies. There is also a need for a mechanism by which novel service delivery approaches, developed at the local level in the NHS, can be identified, evaluated and recommended for wider diffusion. These ideas are currently communicated through professional networks with varying degrees of supporting information. The NIHR HSR/SDO programme is encouraging more formal evaluation of such ideas, but a more formal structure for communicating and implementing the results would be beneficial.

Actions at Local Level

As well as responding to the stimuli from the centre as described above, local commissioners and providers will probably have much to gain from collaboration over innovative service delivery.
Commissioners may have the vision of a better service, while the providers will be aware of the practical difficulties, so between them they should be able to produce achievable plans. How this might happen in a system of competitive tendering and patient choice is less easy to see. Providing real choice without increasing overall costs is difficult. However, participation of patients in consideration of service redesign can produce new ideas and challenge entrenched views of professional groups.

Interaction with Local Authority Social Services will produce many ideas for innovative delivery of health and social care in the community, so CCGs and providers should take advantage of these. For example, current investment in telehealth and telecare to support people in their own homes may lead to technologies which are more economic if provided to serve multiple functions.

A major contribution to the more efficient use of resources in the community would be integrated NHS and LA budgeting. This is hindered by the differing funding mechanisms for health and social care. Any moves to work with the DH to solve this problem would be welcome.

Actions by NHS Partners

Potential actions by LAs, industry and patient groups have been referred to above. Universities are already heavily involved in research, training and educational activities related to innovation in the NHS. They could make a further direct contribution by directly providing some of the analytical and evaluative skills need by local NHS organisations to make best use of innovations.

Summary

Overall, I feel there is good understanding of the issues regarding innovation policy in the NHS. In the current financial climate there is an opportunity to drive home the message that all innovations are not necessarily beneficial. To identify those that are requires time, resources and analytical skill. To ensure their appropriate adoption and diffusion requires flexible thinking, organisation and determination. This is not incompatible with the general direction of health policy in England and the emerging organisations could accommodate the necessary structures to use innovation to help achieve the overall policy goals.

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