

Future of leadership

APRIL 2009

PAPER 3

Leading innovation

Key points

- Promoting and nurturing innovation is critical if the NHS is to continue to deliver high-quality care for all.
- The recession will put a major focus on delivering efficiency gains within the NHS and identifying opportunities to innovate should form a key plank of any efficiency drive.
- The championing and support for innovation by leaders can help to deliver a culture of identifying and developing innovation.
- Internal barriers to innovation need to be addressed, including lack of access to innovation budgets, unnecessary bureaucracy, and overly prescriptive tendering.
- While many of the obstacles to innovation occur within organisations, national-level improvements need to be made to the financial and organisational machinery to support innovation.

Background

The NHS Next Stage Review returns to an issue that has been a recurrent theme over the last ten years – the poor record of the NHS in exploiting innovations.

A number of high-level inquiries – including two substantial taskforces set up with the pharmaceutical and medical devices industries – have focused on this problem, concentrating on invention and the adoption and spread of new technologies and service models.

Many previous reviews have tended to focus on national machinery to stimulate innovation and adoption. While there are undoubtedly obstacles to innovation at national level, our discussions with members and previous research suggest that many problems with the adoption of new ideas occur within organisations. This paper concentrates on these internal issues and identifies some of the potential solutions.

To investigate, we asked clinicians and managers who had been involved in attempts to introduce innovation within their organisations to describe their experiences. The innovations included relatively inexpensive and highly effective medical devices and changes in the organisation and design of services. We also interviewed members and academics who have studied this issue.

While significant work is being undertaken at national level to foster innovation, adoption and diffusion, there is an important leadership responsibility within provider and commissioning organisations to address the slow uptake of proven technologies, service models and other innovative practice.

Issues about new ideas

Sources of ideas

There are numerous sources for ideas about innovations. At national level, these include the National Institute for

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The NHS Confederation annual conference and exhibition, **Local leadership: a national service**, in Liverpool from 10 to 12 June 2009, will offer the opportunity to progress the discussion further. Visit www.nhsconfed.org/2009 for more information about the conference.

“The literature on innovation and adoption stresses the importance of undertaking trials to test changes and how they fit with the local context”

Health and Clinical Excellence (NICE); the Centre for Evidence-based Purchasing (CEP); conferences; staff arriving from other units; specialist societies and journals; and, at European level, the European Commission. The extent to which these sources are monitored systematically by trusts or departments varies and there is no single source or easily navigable route. The sources of information about innovations in service and delivery models are even less easily navigated.

Evidence

In some cases, particularly with devices, there is often a lack of good randomised control trial-based evidence. However, in many cases the existence of a robust evidence base does not guarantee success. The evidence of cost effectiveness is incomplete and it is hard to work out the real costs and savings associated with a technology. Figures for savings that are quoted are often total costs, only a fraction of which can actually be realised in practice. This is made more difficult by the fact that many NHS organisations appear to be suspicious of data and experience from other NHS bodies.

‘Triability’ and risk management

The literature on innovation and adoption stresses the importance of undertaking trials to test changes and how they fit with the local context. This is not about trials for

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 also 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 through informal networks and relationships.

research, but about checking whether the innovation sits well with other systems in use and yields results similar to those claimed for it. However, our interviewees thought that bureaucracy established to manage risks and control the unplanned and random adoption of new technologies can sometimes act as a barrier. There are now too many parts of the system with too many incentives to say no. This is an issue with the way that research governance and ethics committees seem to work in many places.

Where pilots do take place, one problem is that they are often on too small a scale or in too narrow a part of the system to be able to achieve the full benefits available from a larger-scale implementation or a more complete redesign of the pathway. Many innovations and service model changes have a non-linear relationship between inputs and outcomes. For example, doing 80 per cent of the implementation may produce only 20 per cent of the results. The opposite is sometimes also true. Distinguishing which category the innovation fits into is important.

Culture and process issues

The basic evidence on cost and clinical effectiveness may miss an important point about innovation and in particular about new technology, its impact on the system, work processes and power.

Cultural issues

Many clinicians with innovative ideas reported opposition from colleagues in the form of cynicism and a concern about extra work. Our case studies highlighted that senior clinicians were sometimes uncomfortable with their junior colleagues possessing greater awareness of innovations and changes.

Technology has a significant impact on the structure of clinical work and can change the social structures of organisations, power relationships and how people relate to each other. This makes the adoption of technology much more complex and contentious than might immediately be apparent. This is particularly true where the new technology requires new techniques and ways of working.

Business cases

The process to introduce new technologies is tortuous. Our

interviewees suggested it requires a clinical champion with the determination to take on a system that often appears determined to stop innovation. The requirement for the clinician to write a business case is seen as a significant obstacle, for the reasons outlined below.

- The clinical staff interviewed told us that they and their colleagues do not have the skills or knowledge required to write business cases – getting managerial support to plug this gap was not always easy.
- It is difficult to obtain reliable cost and activity data to allow new technologies to be compared with existing methods or to assess the impact of the new technology on current costs.
- The business case process is seen as a way of saying no rather than of facilitating change.
- Innovation may produce quality improvements but few immediate or measurable savings. It is harder to make the case for these.
- A particular issue is that the onus is on clinicians to demonstrate the value of new technology without the same rigour being applied to areas that are already funded. This means that innovations are often competing against each other for limited growth money rather than against the full range of spending choices.

Financing issues

Where the costs and benefits fall across different parts of the organisation there are significant problems. For example, the replacement of some vascular surgery with radiological procedures shifts cost and income

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between service lines. In this case it also reduces the overall income to the trust. Despite the clear clinical benefits of shifting work into radiology, there are incentives to not do so. Commissioners are not yet well placed to spot this type of opportunity and use their power to make the change. This is even more of a problem when the savings are made in another provider.

The payment by results tariff is seen as a barrier as it tends to reflect the costs of previous practice. Commissioners and trusts need to be prepared to take local approaches where this is necessary to promote innovation.

The absence, in many places, of access to funding for the double running costs often associated with innovation is a significant barrier to change. The innovation funds held by strategic health authorities (SHAs) could provide one source for this.

Middle managers

Middle managers in our case studies were the facilitators rather than the source of new ideas. In some of the examples, they were mentioned as being very helpful in assisting innovators to navigate the system. However, there is a concern that too often they can represent a significant barrier to change because:

- they have a large number of competing priorities with short-term delivery dates

- in some cases, personal power is seen as being gained as much from the ability to veto as to facilitate
- they exercise caution because of difficulty in getting information to help them distinguish between good and bad ideas
- they operate within tight budget constraints.

In most cases, it would be wrong to blame individuals. The systems that have been set up create the conditions in which this behaviour is the rational result of the incentives. Some of our interviewees speculated that selection processes and features that make people successful for middle management roles might not particularly correlate with characteristics that foster innovation.

Procurement processes and innovation

A common complaint from innovators, is that giving creative ideas to the Department of Health and parts of the NHS is met with requests to tender and having the idea sent to competitors. This is the result of nervousness about open and creative pre-tender discussions on options and may stem from lack of understanding about what is and is not allowed under procurement law.

There is also a tradition of specifying not only what outcomes are to be achieved, but how. This is often based on existing NHS practices and processes, rather than having the courage to be clear about the desired outcomes and leaving the approaches for achieving them more open. This seems to be related to the issues of risk aversion mentioned so often in our discussions.

Proposals

Even if it were possible to introduce organisational targets for innovation and adoption in the current environment, the practical difficulties of definition and the potential for perverse effects are significant.

Boards and leadership

There is a challenge for leaders to remove the bureaucracy inside their organisations without losing some of the checks and balances which are necessary to ensure that innovations do actually fit with the organisation, and are safe and cost-effective. This in itself will not be enough – they also need to lead the creation of a culture which is open to experiment and evaluation, and that is curious about practice elsewhere. As noted in our case studies and in previous papers in this series, aversity to risk in the NHS is a significant problem and boards and leaders have a key role in addressing this.

The approach required for innovation is very similar to that needed for quality improvement and change more generally. Boards can ensure that some of the key factors to promote innovation, adoption and quality improvement are in place, including:

- protected time for staff
- ‘seed corn’ funding
- support in sourcing innovative ideas
- visits or secondments to other organisations
- developing learning networks beyond the organisation
- benchmarking and peer review
- linking adoption, innovation and quality to the appraisal system (what have you learnt, implemented or taught/spread?)
- support for small-scale experiments

- using patient and other front-line views on what needs to be improved.

As with many measures aimed at changing culture and behaviour, continuous action across a range of fronts is required.

Boards also need to help ensure that there is a supportive organisational context for this sort of change. There is a choice of good evidence-based models about what is required to create this. Pettigrew’s framework of receptive contexts for change is helpful (see box below). Bate et al. offer another helpful checklist (see box on page 5). Not all of these factors are under the control of boards, but even so they have an important role in making sense of them for staff.

Some of the trusts in our case studies had worked hard to address these issues. One of the foundation trusts had explicitly embraced a strategy of pursuing innovation in technology

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and service models as part of its differentiation strategy.

Removing obstacles

New vs. old – commissioners and trust boards need to be willing to consider reallocating investment to fund innovation and to subject existing therapies, systems and technology to the same level of scrutiny as innovations. What would happen if the business case for the innovation was presented in parallel with a shadow business case for some existing technologies, drugs or service models?

Budget silos – commissioners and providers need to continually check

Receptive contexts for change:

- the quality and coherence of policy
- the fit between the change agenda and the local organisation
- the availability of key people leading change
- long-term environmental pressure
- a supportive organisational culture
- effective managerial-clinical relations
- co-operative inter-organisational networks
- simplicity and clarity of goals and priorities.

“These features of receptivity should not be seen as a shopping list, but rather as a highly interrelated combination which, taken together, may raise energy levels around change that are highly [organisational] specific. However, even in relatively receptive settings, the process [is] full of complexity, indeterminacy and simultaneity. There [is] no simple recipe or quick fix in managing complex change.”

Source: Pettigrew, A., Ferlie, E., and McKee L., 1992: *Shaping strategic change – the case of the NHS in the 1980s*.

“Organisations that want to stay ahead invest time and effort in scanning for innovations and improvement”

to ensure that the ways that budgets are constructed do not obstruct the adoption of new ideas.

Innovation budgets and time to innovate – a major obstacle to innovation is the lack of access to budgets to support experiments outside of trials, or of support for time off to design implementation, double running and the other costs of adapting, trialling or implementing innovations. The NHS Plan did contain proposals for teams to have protected time for these activities, but this was not followed through. The consultant contract has provisions for programmed activities, but there are not arrangements to support the rest of the team. The proposals for SHA innovation funds might provide some help here.

Unlocking the bureaucracy – the machinery to assess ideas has developed for good reasons, in particular the need to stop the adoption of ineffective innovations and expense through stealth. However, there is a danger that it can be slow, over cautious, difficult to navigate, unnecessarily bureaucratic and hierarchical. Chief executives and boards should keep this machinery under review to ensure that it functions effectively and that those who need to navigate it are able to do so.

Costing – the development of patient level costing is required for effective clinical management and for payment by results. Knowledge of the real costs and how these behave

Organising for quality – checklist for leaders:

- **educational** – a learning process to support continual improvement
- **political** – addressing and dealing with the politics of change
- **cultural** – giving quality a shared, collective meaning, value and significance
- **emotional** – engaging and mobilising people
- **structural** – organising, planning and co-ordinating the improvement effort
- **physical and technical** – supportive technologies and infrastructure.

Source: Bate, S.P., Mendel P., and Robert, G. (2008): *Organising for quality: the improvement journeys of leading hospitals in Europe.*

when new approaches are adopted will greatly help the innovation process. The industry could help by using realistic costing savings which acknowledge that many costs are semi-variable or fixed, rather than idealised cost savings which incorporate full costs.

Ideas finding – organisations that want to stay ahead invest time and effort in scanning for innovations and improvement. It is not clear that this happens in a particularly systematic way at present.

Procurement – more needs to be done to develop specifications, allow suppliers to propose innovative solutions and work with preferred providers on innovative ideas. Avoiding prescriptive tendering which tries to specify so much detail that innovation is impossible, is also an issue in procuring consultancy, research and evaluation.

Commissioning

Innovation is not just a provider responsibility – it also is a fundamental aspect of commissioning. Done well, commissioning can promote an environment in which innovation can flourish and barriers to innovation are overcome. Done badly,

commissioning itself can be a barrier to innovation.

A number of solutions are also very relevant to commissioners – particularly those relating to procurement, financial mechanisms, testing existing services with the same rigour as innovations and the dangers of silos. In addition, commissioners have a key role in promoting innovation and adoption through:

- maintaining an active database of best practice, innovation, quality and outcomes
- benchmarking and comparison of current services against best practice and, where necessary, challenging provider services against best evidence
- translating research and knowledge into service specifications and other contractual mechanisms, where appropriate
- helping to create a supportive context for innovation
- taking a flexible approach to changing payment mechanisms where these are creating an obstacle to innovation.

National policy

The NHS Confederation’s Health Services Research Network (HSRN)

briefing, *Making sense of the innovation landscape*, suggests that there is already a significant amount of machinery in place to promote innovation at the national level, although it is not yet clear how all of it will work together. In addition to prizes, innovation funds and other initiatives that will help local efforts, there are two specific pieces of action that would be of particular assistance locally.

Payments by results tariff – policy-makers could do more to ensure that the tariff keeps up with innovation and that the adoption of a normative tariff is accelerated.

NHS Evidence, CEP, NICE and the SDO Programme – national bodies can help by providing easy-to-navigate routes to tested innovations.

Conclusions

National committees, duties to innovate and regional action can all improve the translation of inventions into practice. However, in common with the debate on leadership, there is a danger of underestimating the key role that boards, chief executives, middle managers and front-line clinicians can play in creating an innovative culture. As the economic downturn starts to bite, the pressure to improve efficiency without sacrificing quality will intensify. It is increasingly clear that the way to deal with this will

mean making very significant changes in practice. Adoption, innovation and the ability to change will be even more vital parts of the skills of leaders and the competences of organisations. Those that cannot

clear away some of the internal barriers to adoption and innovation and create a culture of continuous redesign, improvement and challenge to existing practice, are going to struggle.

Questions

This paper is designed to stimulate discussion and we look forward to hearing from members and others with their views on the following:

- What are you doing to overcome barriers in your organisation?
- What help do you need to find and implement ideas?
- What changes should be made to the payment by results tariff to stimulate innovation?
- Should we apply business case discipline to existing spending rather than just to innovations?
- What key messages would you give to SHAs and central government on this issue?

Have your say on these questions at www.nhsconfed.org/leadership
For further information on the issues covered in this paper, please contact leadership@nhsconfed.org

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