DISCUSSION PAPER

THE HUMAN FACTOR

How transforming healthcare to involve the public can save money and save lives

Laura Bunt and Michael Harris

THE LAB
Innovating public services

NESTA
Making Innovation Flourish

FOREWORD

Our public services face an immense challenge over the next few years. They will have less money but will be asked to do more in response to seemingly intractable social problems.

Yet a proper recognition of the scale of this challenge shouldn't induce despondency. Rather, it can be used to spur a powerful combination of creativity and commitment – that we can find bold new solutions that reform our public services to save money and improve lives.

This report examines the challenges faced by the National Health Service. It shows how radical new ways of innovating that give genuine power to frontline staff, patients and the public can reduce spending at the same time as increasing health and wellbeing.

We call this 'people-powered public services'. This is one of a series of papers that will show how this approach can be applied to public services so that they are better placed to cope with the immediate demands of the current crisis, and better able to respond to the long-term challenges of the future.

We welcome your input and views.

Jonathan Kestenbaum
Chief Executive, NESTA

November 2009

EXECUTIVE SUMMARY

The National Health Service (NHS) needs to save £15 billion to £20 billion over the next few years. This paper argues that these savings could be achieved through radical patient–centred service redesign and more effective approaches to public behaviour change. However, these approaches are difficult to develop within the existing health service. NESTA's experience of working with leading companies and developing projects in healthcare demonstrates that radical new ways of innovating that give genuine power to frontline staff, patients and the public are necessary to make these approaches widespread. This would unlock the savings we need and improve the nation's health.

Efficiencies are necessary – but not sufficient

Given the scale of the challenge to restore the public finances to order, the policy debate has focused on making savings in public services. The NHS – the world's largest public service – is not exempt from this. Despite strong support for the health service across the political spectrum, saving money is going to be critical because of increasing costs and rising demand. The NHS has been geared towards growth. Now it must be radically refocused on doing more for less.

Yet the general limitation of many proposals to save money is that they assume essentially unchanged services – doing the same thing, only trying to do it more cheaply – rather than focusing on the far–reaching reforms that can unlock the much more significant savings we now need.

Radical redesign and behaviour change are necessary for greater savings

This is in part a reflection of the health challenges that the NHS has to confront today. The biggest clinical challenges facing today's NHS are cancer, cardio–vascular disease and diabetes, rather than the infectious diseases that the service was set up to fight. But although this is well known, the NHS has not fully transformed itself to meet these new demands.

The scale of these challenges means that more cost–effective ways of tackling them offer very significant savings. Since many of these conditions are linked to public behaviour, and since treatments for them rely on patient compliance, tackling them requires a greater focus on patient–centred and preventative approaches. Numerous reviews and studies indicate that significant cost savings and improved outcomes can be achieved by harnessing self–management and prevention.

NESTA's work with some of the UK's most innovative businesses, from large corporates such as Virgin and Orange to small start–ups, indicates that these forms of innovation – based around what users and the public actually want – can be more productive. At a time when resources are scarce, leading companies are discovering that so–called 'user' and 'open' innovation can develop better products and services at less cost than traditional, closed innovation processes. This means innovating in more collaborative ways, including drawing on the innovations developed by their customers.

Modest projections, based on examples described in this report, suggest that the NHS could save more than £6.9 billion a year (£20.7 billion by 2014) by adopting these patient–focused approaches more widely; this saving reflects a relatively modest 10 per cent reduction in the cost of treating long–term conditions, achieved through a mixture of redesigning care with user involvement and more effective prevention.

But business as usual cannot deliver these changes

The radical changes needed to redesign services around patients or to set up effective preventative behaviour change programmes are hard to achieve within existing NHS organisations. NESTA's experience of helping clinicians develop

new services suggests that all too often the realities of NHS management structure stand in the way.

NESTA's experience of supporting projects in healthcare and other public services offers a better approach to both service redesign and behaviour change. For example, NeuroResponse, an innovative Multiple Sclerosis service, shows how genuinely empowering patients and clinicians can unleash innovative and cost–effective ways of doing things. Our work on people–powered behaviour change has shown that an approach that takes advantage of the ingenuity and strength of existing communities is cheaper and more effective than many larger and more expensive public health programmes.

These ways of innovating depend on giving genuine power to frontline staff, patients and the public, for example, through creating social enterprises to deliver new services and supporting community groups to drive behaviour change campaigns.

The NHS does not have to choose between saving money and saving lives, or between cost reduction and reform. It is possible to develop cheaper, more effective patient–centred services and approaches to public behaviour change – but only by adopting radical new ways of innovating within the NHS. Ultimately, the answer relies on frontline NHS staff, the patients and public that they serve, and policies that enable these ways of innovating.

We call this approach to reform 'people–powered public services'. This is one of a series of papers that will show how this approach can be applied to public services and the benefits that can result – so that our public services are better placed to cope with the immediate demands of the current crisis, and better able to respond to the long–term challenges of the future.

CONTENTS

Part 1: The new context for the NHS **7**

Part 2: Changing care **14**

Part 3: Transforming innovation **25**

Conclusion **37**

Endnotes **40**

PART 1:
THE NEW CONTEXT FOR THE NHS

Why doing the same things only more cheaply won't solve the problem

The financial crisis means a very different context for public services – including for the NHS. The health service has been geared for growth, but this is about to change. While the main political parties have promised to maintain NHS spending, making real savings in the order of £15 billion to £20 billion over the next few years will be critical to meet rising demand. The current debate has focused on cuts and efficiencies, but in isolation these are unlikely to be sufficient. The real savings are to be achieved by devising efficient, effective ways to tackle long-term conditions and change behaviours to prevent future ill health. The NHS has long recognised this need, but has only partially transformed itself to meet it. Rather than a constraint, tighter budgets should be a spur for radical change to meet the challenge.

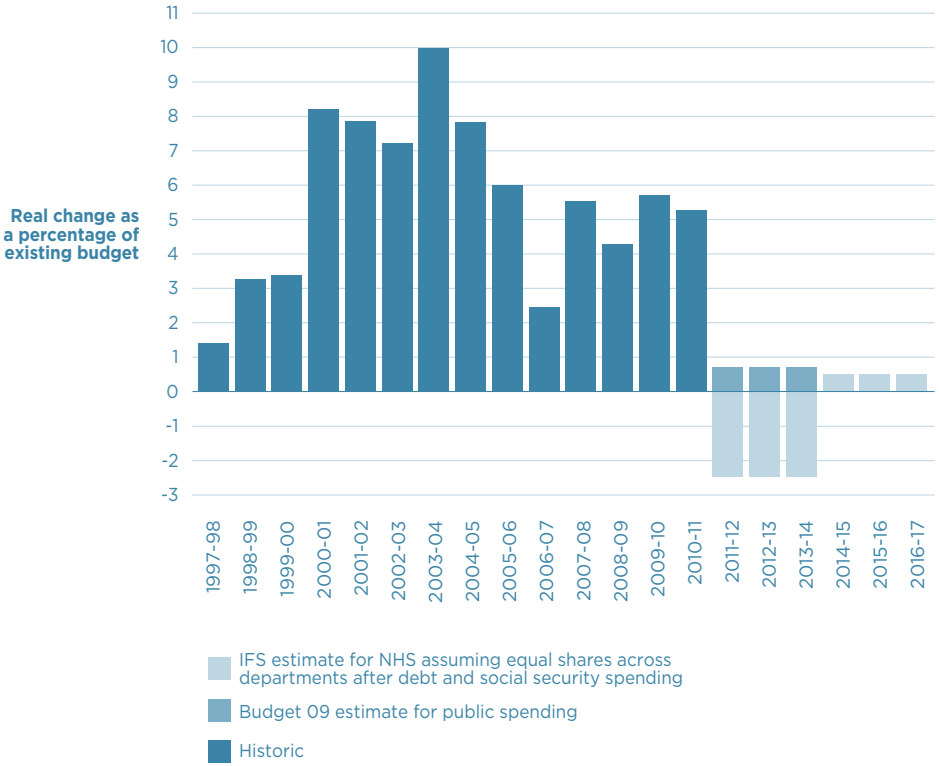
The financial crisis is the defining challenge for public services – including for the NHS

The recession has made real cuts in some areas of spending on public services inevitable. The Government's 2009 Budget forecast is that this year's tax take will reach its lowest since 1960–61 – just 35.1 per cent of GDP. But despite this shrinking resource, spending levels currently remain comparatively high. Next year's public spending will match its 1981–82 peak of 48.1 per cent of GDP. As a result, public sector net borrowing will be £175 billion this year and £173 billion next year, higher than our debt has been since 1945.[1] From 2011, spending is projected to rise by only 0.7 per cent a year to account for much higher levels

of debt. This is less than the 1.1 per cent rise that was predicted last year.

For the NHS, the world's largest publicly funded health service, this context is distinctly challenging. The NHS in England alone employs more than 1.3 million people and currently operates with a budget of over £100 billion – ten times its original budget. Since the 1940s, spending on health services has seen a ten-fold increase. After the 1997 election, the Government made a concerted effort to increase NHS spending as a percentage of overall GDP so that it compared more favourably with the OECD average.[2] Today, it takes up 17 per cent of total UK public spending, having risen 5 per cent per year in real terms over the last decade. In many ways, the NHS has been geared for growth.

Figure 1. NHS real funding



This is about to change. As the Treasury forecasts zero or negative growth periods after 2011 to account for public debt, the shift in fortunes for the NHS will really start to be felt.[3] As Figure 1 illustrates, the drop in NHS funding will hit home after 2011 as spending will continue to increase by 5 per cent up until that point. Never in its history has the NHS experienced a sustained period of zero growth, let alone one of real reductions.[4] This will have to be dealt with by a cohort of NHS managers, many of whom have no experience of working within a health service in which budgets do not rise significantly each year.

Cuts and efficiencies are a limited solution

How to reduce spending has already become the critical question amongst politicians and policymakers. All of the main political parties have promised to maintain NHS spending in real terms, at least for the next spending review period. Nonetheless, even in their most optimistic scenario, the King's Fund has signalled the forthcoming period for the NHS as presenting "the most significant financial challenge in its history". Making real savings will be critical.

'Efficiency' has become the driver of public service reform and the shield against acknowledging cuts. More effective commissioning, changes to 'back office' functions, extending 'Payment by Results' to community services, and collaborative purchasing are all offered as possible routes to reduce costs within an essentially unchanged NHS.[5]

But to deliver the real saving needed, efficiencies will need to be radical. David Nicholson, the Chief Executive of the NHS in England, has announced that the next spending review period from 2011–14 would demand between £15 billion and £20 billion of efficiency savings, an astonishing figure made all the more stark when compared to the overall expenditure of a large PCT for a whole year – Liverpool Primary Care Trust had a budget of just over £874 million in revenue in 2008–09.[6] This means the NHS living with over 5 per cent annual savings targets every year.

Because of this, understandably, the focus of the current

debate has moved to centrally mandated cuts and efficiencies. Some of the suggestions made so far include simply freezing or reducing the total spending allocation to the NHS, but also more specifically reducing staff levels (either through forced redundancies, recruitment freezes or early retirement programmes), complex and large-scale institutional reform (such as abolishing Strategic Health Authorities), scrapping public health campaigns, and generalised calls to increase staff productivity.

Some of these actions proposed by think tanks and management consultancies will be valuable, such as working to reduce the variations in performance of services in different parts of the country. Some will be necessary, such as setting more ambitious ('normative') tariffs to drive down the cost of hospital treatments and putting some capital expenditure on hold. There is certainly room for greater efficiency in the NHS.

But these kinds of centrally enforced efficiencies are somewhat limited, given the scale of the challenges. Recent proposals from the think tank Reform identify a possible £7.2 billion in savings (including charging for GP appointments). Reports of work done by McKinsey & Company for the Department of Health suggest that the NHS could make savings of up to £20 billion by 2014, but this would involve the NHS losing 10 per cent of its workforce, and nearly half of the savings (£8.3 billion) would derive not from improved practices but from acute trusts selling-off some of their estates.[7] In addition, some analyses neglect that, already, the NHS capital programme has been reduced by £4.4 billion, the numbers of health service staff have stabilised, and pay awards have reduced to around or below inflation.

The challenge of long-term illness and preventable disease is the real cost pressure facing the NHS

It has long been recognised that the biggest challenge facing the NHS is no longer acute illness, but long-term conditions. But the structure and management of the NHS has only partially changed to reflect this. Despite moves across the country to manage more care out of hospital and put

Primary Care Trusts at the centre of the system, the majority of spending and activity still takes place in acute hospitals, following models of care designed to treat acute illness.

But the predominance of chronic health conditions means that more people require long-term, complex care and support. There are currently over 15 million people living with a long-term health condition in the UK, and 60 per cent of people over 65 suffer from one or more.[8] Cases of coronary heart disease are set to grow by a third and heart failure by over half by 2025.[9] This year, two in five adults said that they live with a long-term health problem, four in five of whom report that they have made use of their doctor or GP services at least once within the last six months.[10] Long-term health problems already account for 80 per cent of GP consultations, a pressure that is set to increase as the effects of an ageing population take hold.

The King's Fund estimates the cost of caring for long-term illness at £69 billion per year, much of which goes on hospital-based care.[11]

Good health: a moving target

When the NHS was founded in 1948, it was assumed that government investment would make people healthier and more self-reliant. The backlog of disease would be dealt with, and the burden on the state would lighten.[12] But more than 60 years on, we face both rising demands and higher costs. The reasons lie in how our society and the health challenges faced by the NHS have changed since it was established.

UK society has both grown and aged. When the NHS was founded, the UK population was 49.4 million. Now, it stands at around 61.4 million, an increase of 24 per cent. We are also getting older. In 2008, for the first time, more people were over state pension age than under 16. By 2025, half of the UK adult population will be aged 50 and over. If current trends continue, by 2031 the number of over 75 year olds in the population will almost double from 4.7 million to 8.2 million.[13] Half of the

babies born in the UK today will live to be 100 or more.

Though life expectancy is rising quickly, healthy life hasn't caught up. Both males and females are living on average over ten years longer today than the life expectancy of 1948 – then 66 years for men and 70 for women.[14] But healthy life expectancy hasn't risen nearly as quickly, and the time men and women can expect to live with a limiting illness or disability has increased by over two years in the past ten years.[15]

As healthy life expectancy lags behind, demands on the health service will increase. An ageing population means a rise in patients with Alzheimer's disease and other forms of dementia, expected to double within a generation.[16] Demographic changes have been projected to cost the NHS £1.1 billion to £1.4 billion extra each year at 2010–2011 prices, and would require average real annual funding increases of around 1.1 per cent in order to maintain quality. Such an increase, as noted, is unlikely.[17]

Across all developed countries, lifestyles have changed significantly in recent decades. In some respects – reduced tobacco consumption for one – changes have had a beneficial impact on health and life expectancy. In others, the results are not so positive.

Obesity is the most prominent example. Recent research shows that although genetics might play some part in the spread of obesity, it is generally an individual's environment that encourages him or her to make less healthy lifestyle choices, especially if they are poorer and less educated.[18]

The UK compares unfavourably to other OECD countries, with 24 per cent of the population clinically obese.[19] Pressures from rising levels of obesity have already hit the health service hard. Currently, obesity costs the NHS £4.2 billion per year. On present trends, this could rise to £6.3 billion by 2015 and is set to more than double its current rate to £9.7 billion per year by

2050 when over half of the UK population could be obese. In this context, the wider costs to economy and society would reach £49.9 billion.[20]

The health threats of obesity cannot be resolved only through reactive, expert medical care. NHS spending on obesity–related equipment has soared 700 per cent in the last three years, in response to the increase in demand for critical surgery and treatment. Budgets for obese patients have increased seven–fold in 16 per cent of Primary Care Trusts, while a further 16 per cent said they had been forced to buy specialist equipment for overweight people such as oversized treatment couches, scales and blood pressure cuffs.[21] Costs associated with these demands are unsustainable at their current levels, let alone if the trends develop as they are projected to.

Systems designed to target acute illness, where fast treatment and short waiting lists are the highest priority, are not attuned to support people living with long–term, ongoing health issues. With causes rooted in complex behavioural patterns, lifestyles and collective behaviour, finding solutions requires more responsive, personal services based on closer relationships between professionals and the public.

As the structural deficit in the public budget deepens and our demands are increasingly complex, saving money and saving lives will depend on working with the public much more directly. For the NHS, only by trying new and better approaches can we deliver the kind of health service we need to meet the challenges we face.

PART 2:
CHANGING CARE

Why patient–centred redesign and prevention generate sustainable savings and improve outcomes

The twin challenges of managing long–term conditions and encouraging behaviour change cannot be addressed through centralised efficiency measures. The examples of both the UK's most innovative private businesses and its most ambitious health projects show that user and staff engagement and involvement is the way to achieve the kinds of innovation needed to meet these challenges. There are many excellent examples of patient–centred and preventative health within and beyond the NHS, which show how these approaches can save money and save lives.

It is clear that the challenges of managing long–term conditions and achieving behaviour change are difficult and pressing. However, there is evidence that approaches that engage users and frontline staff effectively can achieve remarkable success in making these happen. NESTA has seen examples of this in its work with the UK healthcare system, also reflected in its work with innovative UK businesses in the private sector.

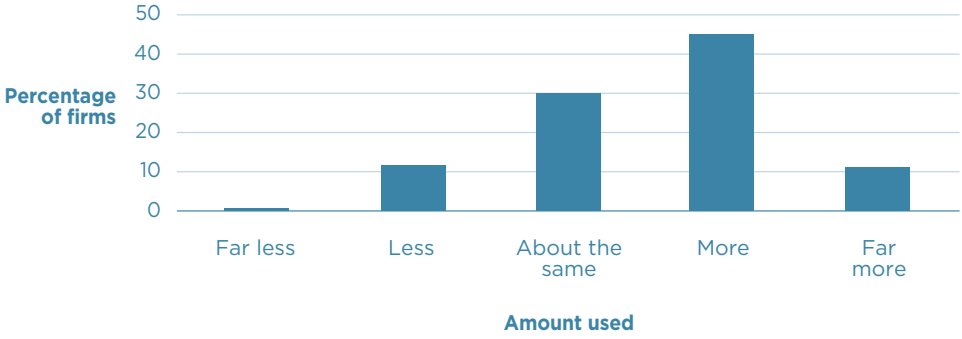
Innovative private sector firms are placing more reliance on user innovation

Let us consider first of all the lessons of innovative private sector businesses. NESTA has a track record of working with some of the UK's most innovative businesses, from large firms like Procter & Gamble and Virgin to small start–ups and design agencies. Many of these businesses have been hit hard by the recession, but rather than simply retrenching and cutting

costs, they are doing more innovation now than before. But it is the way they are doing this that is of particular relevance to the NHS: they are placing greater reliance on 'user' and 'open' innovation, relying on customers, partners and staff to provide innovative ideas and testing grounds.

Firms that NESTA works with have argued that this approach is cheaper and more effective than traditional, centrally controlled methods of innovation, particularly since users possess important tacit knowledge about how companies' products are consumed that can be harnessed to create value.

Figure 2. Open innovation in the recession



Source: Survey for NESTA by H–I Network (2009).[22]

This holds important lessons for our public services – and suggests the importance of new approaches to reduce costs and improve outcomes. One of the long–standing debates over public services has been between those who wish to see the introduction of more market mechanisms into public services and those who are critical of such mechanisms. But in many private market sectors today, the consumer can play an increasingly active role in what products and services are supplied, and when and how they are supplied.[23] Many leading firms have established very different relationships with their customers – leading to cheaper research and development

(R&D), products that customers actually want, and more personalised and responsive services.

This is not to argue that the NHS should just be more like these companies, but rather that innovation with and by the users of products and services holds the key to better products and services, and so better outcomes – whether in the private or public sector.

This user-centric approach has its parallel in parts of the NHS

Over the past 15 years there has been increasing interest from policymakers, practitioners and experts in how public services need to be more responsive to the needs of users and more effective in tackling seemingly intractable issues. Numerous strategies and research papers have emphasised how more effective and efficient services can derive from types of relationships between citizens and the state, especially greater user involvement in services.[24]

In one sense, this is nothing new. William Beveridge argued in *Social Insurance and Allied Services* that services should be delivered in partnership with service users, through "co-operation between the state and the individual". But in another way, it is profoundly radical. The establishment of the NHS and the process of systematisation that went with it necessarily led to the demise of a variety of user-led approaches (from mutual sickness funds to visionary experiments like the Pioneer Health Centre in Peckham), and to the establishment of a cadre of hospital managers to mediate between clinicians and patients.

The remainder of this section outlines the high-level evidence for patient-centred approaches, and gives examples of a number of service redesign and behaviour change programmes illustrating their richness and diversity, and the savings they have generated.

Patient-centred care is more effective

Properly understanding people's needs helps design better

services. This is particularly relevant for services relating to long-term conditions, where the actions and knowledge of the patient are especially important. The people who use services, and the staff who deliver services, generally have deep knowledge and understanding about how to make them better. This knowledge is often highly locally or personally specific, and is difficult to simply diffuse through centrally mandated best practice.

In the most basic sense, 'patient-centred care' means taking more account of the users of services. There is extensive evidence that this delivers improvements in care delivery, increases health literacy, and provides valuable feedback and assistance in setting priorities. To quote one review of a range of research studies:

"International evidence shows that involving patients in their care and treatment improves their health outcomes, their experience of the service, their knowledge and understanding of their health status and their adherence to chosen treatment."[25]

But the real benefit of a patient-centred approach comes from evaluating and redesigning services based on the input and participation of users, working closely with frontline staff.

Where services have listened and responded to user and staff ideas and experiences, outcomes have often improved markedly. In some of the examples described below, the role of professionals has shifted from managing transactions, to building and sustaining relationships between people and services. Other cases highlight how services can be redesigned to help patients care for themselves, through cheaper, more effective self-care that relieves pressure on other services. In most of the examples, there is both an economic and a clinical case for patient-centred care.

Understanding patient needs helps professionals to meet them

The NHS spends £13 billion a year on treating mental health issues and their complications. About 16 per cent of adults

and 10 per cent of children are affected by mental health issues such as depression or anxiety. Evidence suggests that approaches that recognise patients as active participants in shaping services can improve outcomes and moderate demand. In particular, where patients have diverse needs, involving patients can improve the appropriateness of care and identify where resources are best distributed.

Working with the Public Services Innovation Lab at NESTA, the Buddy Scheme, pioneered by Gillingham Community Mental Health team and piloted by Kent and Medway NHS Social Care Partnership, demonstrates how working directly with mental health patients can help practitioners to understand their needs better and therefore provide more effective services. The Buddy Scheme gives an opportunity for students to access the unique insights of the people who use mental health services. In an initial evaluation of the Buddy Scheme's five-year pilot, 75 per cent of the participants have reduced their need for input from mental health services in the form of care packages. To put this in a money-saving context, if the costs of responding to mental health issues could be reduced by only 5 per cent, the potential saving for the NHS is around £700 million.

Working with patients is also an effective way to develop new types of services which may be more effective in meeting rising demand. Across the NHS, there is developing interest in involving users directly in decision-making, monitoring and delivering services.[26]

One example can be seen in dementia services. Over the next 30 years, the number of people living with dementia is projected to double to 1.4 million, costing the economy more than £50 billion. Responding to this demand will require more effective and efficient services. In 2007, a team led by Think Public and the Alzheimer's Society worked with people with dementia, their carers and service providers in the North East to investigate their everyday experiences. These included social isolation, stigma, the difficulty of managing the wide array of existing services, and the tendency of carers and services to be over-protective. Co-design workshops generated ideas for a set of new approaches to service provision that tackled some of the challenges. The resulting Dementia Adviser service, which

helps patients and their families navigate available support in the early stages of their condition, is being rolled out nationally.

Self-care can relieve pressure on existing services

Traditionally, long-term conditions need a considerable amount of medical attention. Programmes and technologies that enable patients to care for themselves are increasingly recognised as an opportunity to relieve the pressure on existing services and patient dependency on these services. Patients also express an interest in more active self-care.[27]

Collectively, the treatment and care costs of long-term conditions account for 69 per cent of total NHS and social care spending in England, or almost £7 in every £10 spent. Already, one in three people is living with a long-term condition – over 15 million people – and by 2025 this is expected to rise to 18 million.[28]

The Expert Patient Programme is a much-cited example of a self-care programme that benefits from insights from service users and recognises patients as people with resources. The programme has already supported over 50,000 people to develop disease management skills and trained more than 1,700 volunteers as Expert Patients. The programme is a six-week course for people living with chronic or long-term conditions, designed to help them manage their own health. All of the trained and accredited tutors who deliver the course are themselves living with long-term conditions. Evidence suggests that participation in the programme generates high levels of satisfaction and improvements to quality of life and self-efficacy, as well as a considerable reduction in demand for services.[29]

An independent review of various self-care interventions commissioned by the Department of Health demonstrated how imaginative use of existing technology, personalised services and new processes can reduce visits to GPs by between 40 and 69 per cent.[30] Hospital admission can fall by 50 per cent, and the number of bed days in hospital by up to 80 per cent. Initial evidence suggests savings of 10–15 per cent in clinical performance and productivity. Similarly, a Cochrane review

found that computer-based programmes such as telehealth improved users' knowledge, social support, health behaviours and clinical outcomes, even for entrenched and long-term conditions.[31]

Effective use of technology can support self-care

In 2007, Birmingham East and North (BEN) PCT teamed up with Pfizer Health Solutions and NHS Direct to trial Birmingham OwnHealth, a telephone-based self-care management service for patients with a range of chronic diseases. Around 100,000 live with a limiting long-term illness in this catchment area, with morbidity and mortality rates higher than the average for England. Having already achieved real improvement in clinical indicators, use of resources and very high patient satisfaction, BEN PCT has committed to spreading the programme to reach 27,000 patients by 2013. The small initial investment is already seeing a considerable return – at least ten times in savings across the PCT. Birmingham OwnHealth is projected to make savings in the region of £32 million a year from 2012.[32]

Reducing the £69 billion the NHS will spend treating long-term conditions in 2009–10 clearly offers significant potential for savings. If the widespread adoption of these types of self-care interventions could reduce the cost of managing long-term conditions by even 5 per cent, the NHS could save over £3 billion a year.

Prevention that supports behaviour change is crucial to saving money and saving lives

As noted in Part I, behaviour change is critical to managing public health demand, since the roots of so many of today's health challenges can be traced back to social and behavioural causes. To cite just one statistic, the NHS spends £3,000 per minute on treating illnesses that could be prevented by people doing more exercise.[33] This amounts to £15.76 billion a year – that is, similar to the scale of the savings that need to be made by the NHS over the next few years.

Behaviour change is potentially controversial. It raises

concerns about a centralising 'nanny state'. Traditional policy interventions have focused on eliminating or restricting choice through regulation or legislation, or providing information to affect peoples' decision–making – with varying degrees of success.[34] However, there is a very different level at which interventions targeted at behaviour change could be developed and implemented, that of communities.

Communities can be more effective at behaviour change

Community–based initiatives can be particularly effective at behaviour change. Local agencies and community groups often have a deeper knowledge about the problems they face and the resources that are available to tackle them. Where governments might be nervous about being seen to preach to the public, communities often do not show the same reluctance because they can use different methods of engagement.

Community–led approaches to behaviour change tend to be more holistic, combining education and practical action with shared values. Studies of behaviour change have found that this is an effective way of trying to address established habits in a sustainable way.[35] The Government's Foresight programme has noted that community–based interventions are showing promising results when it comes to behaviour change and has recommended that these approaches are investigated further.[36]

A community–based approach is not about merely replacing public services – though it may mean we could replace expensive, top–down attempts at behaviour change. Rather, with a greater local focus, the state could find new ways to work in partnership with community groups or social enterprises and make use of existing networks, in order to ensure that efforts at changing behaviour generate greater trust and are more effective.

Knowsley in Merseyside is the fifth most deprived borough in the UK. Mortality rates for cardiovascular disease, respiratory disease and cancer are significantly higher than the UK average. Knowsley Council and Knowsley Primary Care Trust formed the Knowsley Health and Wellbeing partnership to develop a shared approach to improving the borough's health, working

with social services, leisure centres and cultural organisations. The partnership led a large-scale cardiovascular programme called Knowsley at Heart to bring down rates of heart disease and stroke. By working together across different local services, Knowsley at Heart offered clinical check-ups in non-medical locations such as leisure or shopping centres, pubs and bingo halls. These check-ups were also championed by local people. Knowsley has been able to increase early detection of cardiovascular disease and promote healthier living. Lung cancer morbidity rates have reduced by 28 per cent, alongside a 32 per cent increase in people quitting smoking.

Similarly, in 2004 Slough PCT commissioned the innovative research agency Dr Foster to develop a community-focused approach to tackle a problem they were facing – the increasing prevalence of diabetes amongst the local population. At the time, 4 per cent of Slough's population had been diagnosed with diabetes (a further 3 per cent were thought to have the disease but remained unaware of it). The NHS spends more money treating diabetes and its complications than it does treating any other disease – estimated at 10 per cent of the total health service budget (or £1 million an hour).[37]

After extensive qualitative research and analysis, Dr Foster developed an 'Action Diabetes' campaign tailored to the local audience. Critical to its success was the involvement of local diabetes patients who volunteered as health councillors and visited residents in identified high-risk areas. A mobile testing bus also visited workplaces, shopping and leisure centres. In the first three months of the campaign, there was a 164 per cent increase in the early detection of diabetes.[38]

These conditions, greatly exacerbated by lifestyle and behaviour, are a real target for major savings. In 2007, cardiovascular disease cost the NHS £3.9 billion (on current trends this is expected to rise to £4.7 billion by 2015 and £6.10 billion by 2050).[39] With even a 5 per cent increase in the prevention of cardiovascular disease alone – an impact exceeded by both Merseyside and Slough – greater community engagement could have the potential for saving around £200 milllion.

Community–based projects can cross traditional boundaries between policy areas to produce greater impact

Well London is a three–year project coordinated by the London Health Commission that brings together a consortium of health, environment, education and arts organisations, and invests in community projects to change behaviour.[40] Eight of its projects focus on mental wellbeing, physical activity or healthy eating. As part of Well London, Groundwork, a grassroots community organisation, is leading a project called Healthy Spaces that works with local residents and groups to transform disused areas of open space into greener and more attractive places. Eighty–five per cent of participants in the project have indicated that it has had a definable positive impact on their mental wellbeing. When mental ill health is estimated to cost the capital nearly £2.5 billion in health and social care costs, as well as £5.5 billion in lost working hours, targeting mental health issues through this kind of community approach could have a major impact in London alone.

The commitment to patient–centred services could now be at risk in the current crisis – despite representing the solution to the challenges faced by the NHS

In his 2008 review of the health service, Lord Darzi identified patient experience and creating partnerships that empower patients as fundamental to improving the quality of care and transforming services.[41] The NHS has indeed made a commitment to making its services more patient–centred.[42] Patient and Public Involvement (PPI) has become an obligatory part of the NHS delivery framework, included in the NHS Constitution published in 2009.

New targets and outcome measures for public involvement penalise hospitals where the quality of care is poor, and income is increasingly connected to patient experience as payment follows patient choice. The World Class Commissioning framework asks Primary Care Trusts to demonstrate how they are listening, understanding and responding to patient feedback. Foundation Trusts are also meant to be built on a

strong community membership base, accountable to an elected board of community governors.

Despite pockets of excellent practice, on the whole the NHS remains far from patient–centred.[43] The NHS is falling far short of achieving the full engagement of patients and the public, especially in preventative health (steadily worsening rates of obesity are just one example).[44]

Although the emphasis on patient and public engagement predates the current crisis, there is a similarity between the amounts we need to save in the NHS over the next few years and what could be saved through realising the fullest engagement with the public in health.[45]

The most optimistic scenario outlined by the King's Fund and the IFS in their analysis – in which the health service is privileged amongst other public services – allows for some level of continued, albeit more modest, increases in NHS funding from 2011–12 to 2016–17. A 'tepid' scenario would allow for annual real increases of 2 per cent for the first three years, increasing to 3 per cent for the final three years.[46] Taken with a renewed push towards public engagement, the shortfall drops to only £4 billion a year by 2016–17 – a figure that is far more achievable for a complementary agenda of cost reductions and traditional efficiency measures.

In other words, on the basis of the most authoritative and accepted analyses that are available, it is possible to save money and improve services in the context of the spending squeeze – but only through much greater engagement with the public.

With current spending levels guaranteed until 2011, we need to increase our commitment to realising the potential of these forms of public engagement. Only by doing so will we unlock the necessary resources for the NHS to achieve real savings and continue to improve quality.

But achieving patient–centred services is not straightforward. Indeed, as the next section goes on to discuss, the structure of the NHS militates against this sort of improvement.

PART 3:
TRANSFORMING INNOVATION

How the NHS needs to transform its approach to innovation to realise the benefits of patient–centred and preventative health

Patient–centred service redesign and effective prevention initiatives are difficult to develop within the existing health service, despite the significant savings and improvements in outcomes that can result. NESTA's experience of developing projects in healthcare demonstrates that radical new ways of innovating are necessary to make these approaches much more widespread, and so realise the full benefits of patient–centred and preventative health. These ways of innovating depend on giving genuine power to frontline staff, patients and the public, for example, through creating social enterprises to deliver new services and supporting community groups to drive behaviour change campaigns.

Innovation is not widespread

The NHS undeniably recognises the case for innovation. Current policy sees innovation as the link between quality and productivity.[47] Likewise, it has made a number of commitments to the concepts of patient empowerment, frontline leadership, and behaviour change.

The importance of innovation to the financial pressures facing the health service has been reiterated more recently by David Nicholson, Chief Executive of the NHS in England:

"The way in which you connect quality to productivity is innovation. Even though we have a national system, sometimes our patients don't get the best possible treatment until many years after other parts of the world. That is the issue for me:

how do we get the best possible treatment to our patients fastest and how do we make sure that we use innovation to improve and produce productivity gains."[48]

Innovation is supported through the recent implementation of a new £220 million Regional Innovation Fund, Innovation Prizes and responsibilities for leaders in Strategic Health Authorities to drive and support innovation locally.

In many respects, the NHS is leading the way in becoming a "pioneering health service" that fosters a "culture of enterprise and innovation". The NHS Institute for Innovation and Improvement and collaborative research programmes such as Health Innovation and Education Clusters build strong partnerships across care providers, universities, colleges and industry and lead and support innovation throughout the health service. Innovation is not the end in itself, but recognised as the key to improving the NHS and delivering better quality of service. In this context, developing patient–centred and preventative health depends on innovation.

However, NESTA's experience is that making innovation happen in practice in the NHS is remarkably difficult. NESTA's Innovations in Mental Health programme worked with a number of clinicians in mental health trusts around the UK. In many cases, even with the availability of outside support, valuable innovations were left undeveloped or underexploited because of the difficulty of achieving change in a conservative organisation.

The end result of this is that innovation remains patchy across the NHS – innovative ideas thrive in specific places, but a culture of innovation is not pervasive. Ironically, this unevenness of innovation, caused by a culture of over–centralised control, can in itself give rise to further centralism as the NHS tries to identify locally specific innovations as 'best practice' and ensure their widespread adoption.

Furthermore, with spending now about to enter a period of constraint, the importance that has been increasingly granted to innovation is likely to come under severe challenge. Understandably, decision–makers and managers will face huge pressures to divert attention and resources away from

more radical ways of improving outcomes (including through designing new services), preferring to protect existing services. The tendency will be to look to make savings by sticking with the same approach but to do so more 'efficiently', as indicated in Part 1.

The key to achieving widespread innovation, and the savings that it can unleash, is genuine control over services by the patients that benefit from them and by the clinicians who generally understand them best.

NESTA has been closely involved in a number of such projects, including a range of social ventures in which users and clinicians have redesigned services to deliver better, more efficient care based on an understanding of user needs (such as that exemplified by the NeuroResponse case study below) and in which behaviour change has been delivered through genuinely empowered communities (exemplified by the Big Green Challenge case study below).

User innovation: Healthcare professionals redesigning services with patients to ensure more responsive patient–centred care

'User innovation', in the context of the NHS, means innovation with and by the users of services (this includes frontline workers as well as patients and the public), rather than innovation done for or to them. The examples included here point to the importance of user innovation in developing and implementing more patient–centred services and self–care.

User innovation finds better ways to deliver services to patients

Bernadette Porter, a practising Neurological Nurse Consultant, is the pioneer behind NeuroResponse, a new model of care for people with Multiple Sclerosis (MS). Bernadette works at the National Hospital for Neurology and Neurosurgery, the leading centre for diagnosis, treatment and care for neurological conditions such as MS, Alzheimer's and epilepsy. Having experience of MS care from the frontline, Bernadette is particularly well–placed to devise a new, more responsive

approach.

NeuroResponse will enable patients to receive treatment at home rather than having to travel to a clinic or hospital. This is especially important with a condition such as MS, where movement can be difficult. NeuroResponse will use existing telecommunications technology to deliver a more patient–centred and accessible service, one that improves the effectiveness of care for patients and enhances their quality of life. It will comprise a direct telephone/triage advice line, an email advice service, and teleconferencing.

Supported by NESTA and the Young Foundation's Health Launchpad programme, NeuroResponse is being developed as a social enterprise. As well as benefiting patients, NeuroResponse will increase productivity, as a greater volume of care needs can be covered by highly qualified nursing teams. In effect, it shifts provision from the acute to community care sector, as supported by World Class Commissioning priorities.

Although NeuroResponse is still at a fairly early stage of development, the potential impact is significant. A recent study by the Multiple Sclerosis Society revealed the cost of being diagnosed with MS to be £17,000 per person. With over 85,000 people in the UK living with MS, the condition costs the NHS over £400 million (£1.4 billion for the economy as a whole).[49] Part of this cost is the high demand for hospital–based clinical appointments and inpatient stays which can range from hundreds to thousands of pounds. By conducting clinics over the telephone and facilitating increased self–management and community–based care, NeuroResponse has the potential to dramatically reduce costs per patient. If this type of service becomes widespread, the potential savings could be in the tens of millions – not to mention the benefits for the wellbeing of patients.

User innovation makes services more responsive to patient experience

Paul Hodgkin, a GP from Sheffield, wanted to make the experience and insights of patients more available to the NHS. Paul wanted to find a way to improve essentially top–down methods such as patient surveys and focus groups, and

developed the web platform Patient Opinion as an alternative model to allow patients to share experiences of services.

Patient Opinion ensures comments and online postings can be directed to the right people in a hospital, PCT or organisation. Unlike time–intensive and expensive consultation sessions, sharing feedback and experience online can take moments but offer a signpost to another user looking to use the service. For professionals, this can be a more direct and cost–effective way to interact with service users. Finding people for focus groups, surveys and other tools used to meet NHS Patient and Public Involvement (PPI) targets cost time and money. Web platforms such as Patient Opinion and the more recent NHS Choices have made loose networks of citizens more effective and patient experience cheaper to come by.

Patient Opinion has now been rolled out as the national website for mental health users to feed back their experiences of treatment and care. In addition, the team are looking at how public input could deliver new solutions. Next steps include a system that allows users and staff to take action on particular issues. 'NHS Nudge' aims to identify 'easy to fix' problems in local services and supports patients, staff, friends and families to create 'open innovation' solutions together.

User innovation creates networks of self–care

Not only does the web help to share information between service users and providers, but also between patients themselves. As people become more accustomed to finding information and making judgements about their own needs, web platforms have been developed that support patients to exchange information on managing their own conditions and care.

PatientsLikeMe is an online social network that has been developed in the US for patients to share information with others that live with similar long–term conditions. It brokers access to peer support and provides tools, latest research and user–generated information about particular conditions. PatientsLikeMe allows for people to share information about their day–to–day experiences of living with an illness that resonates with others facing a similar disease.

Like Netmums, a breakthrough UK online network for mums (and dads) to share information, PatientsLikeMe generates trusted content from peer–to–peer networks. It helps people find others with similar issues who might have found relevant solutions. Further, this generates quantative data, added by the patients themselves, which is compiled into graphs and charts by the software behind the site. This represents a rich, accessible database of patient experience, managed by patients for patients. Personal health records, controlled and owned by the patient, have been posited as an alternative to the more centralised model of patient record databases that forms part of the £12.4 billion Connecting for Health programme.

Both NeuroResponse and Patient Opinion started with insight from users about how services could be more effective, and both found support beyond the health service. Like any large institution, establishing and spreading new approaches within the NHS can be difficult. This is why we need to consider how to support user innovation more effectively, for example through supporting the creation of more social enterprises, as in the NeuroResponse example. The genuine control that Bernadette had over NeuroResponse was an important aspect of its design, allowing it to consider disruptive changes to the way its service was delivered that would have been hard to implement for a programme hosted by an acute trust or a PCT.

Open innovation: Community–led behaviour change to ensure more effective prevention initiatives

'Open innovation' as used here means ways of inviting and supporting new approaches to health challenges from different types of actors.

Typically, in the equivalent of a closed innovation model, government tries to devise a solution and then pays a public, private or third sector organisation to 'do' that solution to citizens. This is true in public behaviour change efforts as in many other areas. The problem is that this tends to limit the actions that are taken to try to change behaviour on an issue, for example, it encourages a focus on expensive, advertising–driven national campaigns. While some of these campaigns

– most famously on drink driving – can be regarded as largely successful, relying on this 'information deficit' model doesn't work for most issues.[50] For example, the ACTIVE for LIFE campaign in the 1990s failed to demonstrate any increase in levels of physical activity.[51]

As suggested in the previous section, communities can play a major role in behaviour change, and can develop new approaches to achieve prevention goals. Most obviously, this is because our behaviours are social as well as individual. Social context, socioeconomic status, routines, and relationships and behaviours in social networks can directly and indirectly influence behaviour.[52]

An open innovation approach to tackling behaviour change could generate new approaches to health challenges, especially from community groups which are better placed to affect behaviours.

One way to identify the potential of this approach is to examine its success when applied to another area that also depends on significant behaviour change, that of carbon reduction.

Open innovation in behaviour change – the Big Green Challenge

Launched in October 2007, the NESTA Big Green Challenge is a £1 million innovation prize designed to stimulate and support community–led responses to climate change. The challenge to entrants was develop and to test sustainable ideas for reducing CO_2 in their communities.[53] From over 350 entries from community–based groups from across the UK, the 100 most promising were selected and supported (through workshops and one–to–one advice) to articulate and further develop their ideas into detailed plans. Ten Finalists were selected on the basis of these plans.

Entries to the Big Green Challenge ranged from informal groups of neighbours to social enterprises, from local branches of national charities to shared interest groups. The ideas were incredibly diverse – from community–installed and owned energy distribution, to volunteer advice services. Nearly three–quarters of applicants based their plans on working closely with their communities (as opposed to working through other

organisations).[54] More than 75 per cent of applicants intended to innovate directly with their communities.[55]

The need for open innovation approaches in health challenges
It is helpful to contrast the approach taken in the Big Green Challenge to the more conventional government approach, for example in relation to obesity.

Directly and indirectly, obesity costs the NHS £4.2 billion a year. It is also linked to other conditions such as Type 2 diabetes. The NHS spends more money treating diabetes and its complications than it does treating any other disease, now more than 10 per cent of the total NHS budget (that is, more than £10 billion). Taken together, costs amount to almost £15 billion.

In January 2008, Government committed £372 million to help people "eat well, move more and live longer" through the Department of Health's *Healthy Weight, Healthy Lives* strategy. One major initiative from this strategy is the Change4Life campaign, launched in 2009 but only in England. The Government's aims for the campaign are to arrest the rise in childhood obesity by bringing it back to 2000 levels by 2020, and increase understanding of the link between obesity and cancer (the focus of the campaign will shift to 'at risk' adults in 2010). The campaign is planned to cost £75 million over three years, including an initial £9 million television campaign developed by M&C Saatchi.[56]

Change4Life is intended as a 'social marketing' campaign at a national level (social marketing is the application of marketing techniques to achieve specific behavioural goals for a social good). The Government hopes that it develops into "a society–wide movement that aims to prevent people from becoming overweight by encouraging them to eat better and move more". The rhetoric behind the campaign understands the value of working with and through communities to change behaviour.

However, such an approach could go much further – for far less cost. Under Change4Life, no funding is made available for grassroots action to take forward the initiative. Though local organisations and individuals (what the campaign calls 'local supporters') can become involved, the Department of Health

sets the terms for this engagement. In short, moving the focus of resourcing from the centre, with its expensive ad campaigns and marketing materials, to the local, with its community groups and networks that can actually change behaviours, might be more productive.

Further, when government does seek to engage with local communities in order to encourage local action, it can use models that still reflect an essentially top–down philosophy.

For example, as part of the *Healthy Weight, Healthy Lives* strategy, the Government announced the Healthy Community Challenge Fund (HCCF), giving money to localities (actually, local authorities and PCTs, who must be joint bidders) to test and evaluate ideas that make activity and healthier food choices easier. Nine areas were awarded 'Healthy Towns' prizes, sharing a £30 million investment that has to be match–funded by local partners. A further £425,000 was awarded in seed funding to 14 other towns, to support some of their proposed work.

The HCCF attracted 160 expressions of interest, despite the high level of funding available. Some of the winning proposals focus on improving conventional local infrastructure (for example, parks and cycle lanes), others on new but expensive approaches (for example, a project costing up to £15 million for a 'loyalty card' scheme to take part in healthy activities).

Because of the requirements of the application process, genuine grassroots activity from this programme seems very limited compared to the Big Green Challenge.

The total cost of the HCCF is £35.95 million – ten times the investment made in the Big Green Challenge. NESTA's experience running a community–based challenge demonstrates that for far less than £5 million – a fraction of current spending on a single advertising campaign – a prize process could be run to leverage community–level ideas that go further in effecting behaviour change.

Through such an approach, even a 10 per cent reduction in the occurrence of Type 2 diabetes and obesity would result in savings to the health service (not counting the wider economy and society) of £1.5 billion a year.

Transforming the NHS approach to innovation would save money and save lives

Across the NHS, examples of more patient–centred services and prevention initiatives are having a real impact on outcomes. Supporting patients to manage their own care, redesigning services with patients so they respond better to need, and working with communities and lay health workers to ensure better disease prevention have been proven to improve clinical performance and save money. However, such examples are still far too rare. User and open innovation are the means to finding and developing new approaches – those that realise the benefit of patient–centred and preventative care.

Adopting these approaches more widely, developed through more user and open innovation processes, could have a significant impact on NHS spending on a range of long–term conditions. This section summarises the evidence presented in the rest of the paper, and estimates the scope of the savings that could be made from the widespread adoption of these approaches.

'Long–term conditions' is the collective term for illnesses that have a limiting effect on lifestyle, but are not in themselves fatal. Both types of diabetes, Multiple Sclerosis, cardiovascular disease and mental illnesses are all examples of long–term conditions. It is estimated that the treatment and care of those with such conditions accounts for 69 per cent of the primary and acute care budget in England. Around 15.3 million people in the UK are living with a long–term condition (as the population ages, this is set to rise by 23 per cent over the next 25 years).

Diabetes is the most prevalent of all long–term conditions; its direct and indirect costs amount to almost a tenth of the NHS total budget (more than £10 billion a year). Obesity, a common determinant of Type 2 diabetes, currently costs the NHS £4.2 billion a year in spending on equipment, treatment and managing side effects. In 2007, costs of different types of cardiovascular disease amounted to £3.9 billion. If current trends continue, this will rise to £4.7 billion by 2015 and £6.10 billion by 2050. With over 85,000 in the UK living with MS, costs of responding to complex need with acute care services are rising. Mental health issues, too, are increasingly common,

and collectively cost the NHS £13 billion per year.

The majority of NHS costs come from treating complex, long-term health conditions, which require a very different kind of support than traditional healthcare. Analysis of a range of interventions suggests that the kind of approaches advocated in this paper have proven to reduce the costs of care provision and improved outcomes for patients and professionals.

Engaging patients in designing their own care packages and service provision has improved clinical performance, as well as patient adherence to treatment. Self-care training programmes have shown to improve the confidence and wellbeing of patients as well as reduce demand on care services. The Department of Health has suggested that self-care support technologies could assist 70–80 per cent of long term conditions, and a systematic review of self-care systems available has demonstrated anything from 10–15 per cent improvements in productivity of services. Some interventions reduced spending on hospital admission by as much as 80 per cent.

Remote monitoring has shown to be able to reduce the cost of service provision, not to mention to offer more comfortable and personalised services for patients. If this could have even a 10 per cent impact on how MS patients receive care, the savings could be as much as £40 million a year.

Community participation, such as lay health worker programmes as led in Merseyside and Slough, has been effective, particularly in encouraging screening or preventative health checks. Where prevention and early detection is prioritised, working with communities has demonstrated considerable reductions in demand by at least 20 per cent. To take one target for cost reduction, if more effective prevention initiatives could reduce spending on diabetes care by even 10 per cent, this would equate to nearly £1 billion a year.

Evidence suggests that community-based interventions that use coordinated widespread programmes to influence behaviour can have a significant impact, and do so more effectively than single strategies alone. NESTA's experience running the Big Green Challenge has shown that for very little

investment a prize process could be run to leverage community level ideas that go further in effecting behaviour change. To apply this specifically, by managing the costs of rising obesity trends, a 10 per cent reduction in spending could save over £420 million a year.

Even a 10 per cent reduction in the cost of long-term conditions – far less of an impact than the majority of these approaches have had – could save the NHS £6.9 billion per year, that is, £20.7 billion by 2014.

CONCLUSION

The NHS does not have to choose between saving money and saving lives, or between cutting costs and reforming itself. It is possible to develop cheaper, more effective patient–centred services and approaches to public behaviour change – but only by adopting radical new ways of innovating within the NHS.

One response to the financial pressure facing the NHS, somewhat in evidence at the moment, is to present lists of cuts and efficiencies in isolation. As we have argued, these do not in the main represent real reform, but are often only potentially cheaper ways of doing exactly what we do now. Fundamentally, the NHS needs a different way of approaching the immense and humbling challenge of saving money and saving lives.

When resources are scarce, it is doing things differently that will deliver the kind of transformation we need to ensure that our public services are fit for the 21st century. In the case of the NHS, in order to make real savings and to improve health, we must radically rethink health services and the role of the public in health.

Across the economy, new processes, tools and technologies are enabling new ways of innovating between businesses, and between businesses and the public. These ways of innovating are more effective and more efficient than traditional, closed models of innovation – and they are proving their value in the recession.

The trend towards user and open innovation should also be

increasingly reflected in our public services. This can't and shouldn't be ignored because of the financial crisis. Indeed, coupled with the crisis of public health we are experiencing, these new ways of innovating represent both a real challenge to the National Health Service and also a real opportunity.

Undoubtedly, new forms of innovation are a challenge to some existing processes and ways of thinking within the NHS. Genuine power will have to be given to frontline staff and patients in order to develop the more responsive patient-centred models of care described in this paper. Similarly, communities will have to be given genuine leadership in behaviour change initiatives in order to make them more effective.

But, as described in this paper, the opportunities that could be created by this radical shift in power and autonomy are too significant to ignore. We should use the new ways of innovating described here to spread the patient-centred and preventative approaches that can more effectively confront the conditions that are causing costs to rise.

In the last year of guaranteed investment, the NHS should spread these types of approaches, as part of a broader effort to think in new ways about effective healthcare and prioritise innovation that achieves a truly patient-centred and preventative NHS.

Government and the National Health Service should:

- protect and extend the projects that are implementing innovative new approaches and proving their effectiveness (including the NHS projects identified here);
- reform projects that are focusing on the right issues but using the 'wrong' means, for example, refashioning Change4Life into a community-led programme;
- establish locally-based, staged 'incubation' processes for social innovations, so that radical new approaches that show how to involve the public can grow and be adopted more widely within the National Health Service; and

- advance the agendas of community ownership of services exemplified in the Foundation Trust policy, giving more communities and patient groups a real stake in their services, and of clinical leadership, wherever possible giving clinicians control over budgets and management decisions.

Ultimately, the answer resides in the staff of the National Health Service, in the public they serve, and with policies that enable these ways of innovating. The investment in innovation need only be small, but the commitment to change must be great.

We call this approach to reform 'people-powered public services'. This is one of a series of papers that will show how this approach can be applied to public services and the benefits that can result – so that our public services are better placed to cope with the immediate demands of the financial crisis, and better able to respond to the long-term challenges of the future.

For the National Health Service, this means most of all that a public service that began as a social experiment should continue to experiment, now and in the future.

"This is the biggest single experiment in social service that the world has ever seen undertaken."
Aneurin Bevan, 7 October 1948

ENDNOTES

1. Economic and Social Research Council (2009) 'Recession Britain.' Swindon: ESRC.

2. Mean OECD spending on healthcare was 8.6 per cent of GDP in 1997. From 1997 to 2006, total health spending increased from 6.8 per cent to 8.4 per cent of national income; see Institute for Fiscal Studies (2005) 'Public Spending: Election Briefing.' London: IFS.

3. Institute for Fiscal Studies (2008) 'Public Finances: Two Parliaments of Pain.' London: IFS.

4. The King's Fund/Institute for Fiscal Studies (2009) 'How Cold Will It Be? Prospects for NHS Funding: 2011–17.' London: The King's Fund/IFS.

5. Government policies as summarised by The King's Fund (2009) 'Budget 2009: Key Points.' London: The King's Fund.

6. Source: Mike O'Brien, Minister of State (Health Services), in a Westminster Hall debate on 14 July 2009. Available at: http://www.theyworkforyou.com/whall/?gid=2009-07-14a.20.2

7. See Bassett, D., Bosanquet, N., Haldenby, A., Nolan, P., Parsons, L., Thraves, L. and Truss, E. (2009) 'Back to Black, Budget 2009 Paper.' London: Reform. Also Gainsbury, S. (2009) DH is told 137,000 posts must go in next five years. 'Health Service Journal.' 3 September.

8. Darzi, A. (2008) 'High Quality Care for All: NHS Next Stage Review Final Report.' London: Department of Health.

9. BBC News (2009) 'Chronically Ill Elderly 'To Rise'.' Available at: http://news.bbc.co.uk/1/hi/health/7824455.stm

10. Department of Health/Ipsos MORI (2009) 'Long Term Health Conditions 2009.' London: Department of Health/Ipsos MORI.

11. The King's Fund (2009) 'Long-term Conditions.' London: The King's Fund. Available at: http://www.kingsfund.org.uk/research/topics_longterm_conditions/

12. Beveridge, W. (1942) 'Social Insurance and Allied Services.' London: HMSO.

13. Office for National Statistics (2009) 'Ageing, Fastest Increase in the 'Oldest Old'.' Newport: ONS.

14. In 2008, life expectancy for the UK was 78.0 for men and 81.9 for women; see Office of Health Economics (2009) 'Sixty years of the NHS.' London: OHE.

15. The difference between life expectancy and health expectancy can be regarded as an estimate of the number of years a person can expect to live in poor health or with a limiting illness or disability. In 1981 the expected time men lived in poor health was 6.5 years. By 2004 this had risen to 8.6 years. From ONS and Parliamentary Office of Science and Technology data; see Department for Work and Pensions (2009) 'Building a Society for All Ages.' London: DWP.

16. Alzheimer's Research Trust (undated) 'Dementia Statistics.' Cambridge: Alzheimer's Research Trust. Available at: http://www.alzheimers-research.org.uk/info/statistics/

17. The King's Fund/Institute for Fiscal Studies (2009) 'How Cold Will It Be? Prospects for NHS Funding: 2011–17.' London: The King's Fund/IFS.

18. OECD (2009) 'The Obesity Epidemic: Analysis of Past and Projected Future Trends in Selected OECD Countries.' Health Working Papers No. 45. Paris: OECD.

19. Ibid., based on Eurostat data.

20. Foresight/Government Office for Science (2007) 'Tackling Obesities: Future Choices – Modelling Future Trends in Obesity and Their Impact on Health.' 2nd Edition. London: Foresight/Government Office for Science.

21. Nursing Times (2009) 'NHS Spending on Obesity-related Equipment Increases 700 per cent.' 9 April.

22. Data from research investigating innovation practices amongst large (FTSE 100 level) corporates, led by H–I Network for NESTA (2009).

23. For example, see Von Hippel, E. (2005) 'Democratizing Innovation.' Cambridge, MA: The MIT Press; also Flowers, S. (2009) 'The New Inventors: How Users are Changing the Rules of Innovation.' London: NESTA.

24. See for example Cabinet Office (2009) 'Power in People's Hands: World Class Public Services.' London: MHSO; also Parker, S. and Gallagher, N. (2007) 'The Collaborative State.' London: Demos.

25. Coulter, A. and Ellins, J. (2006) 'Patient-Focused Interventions: A Review of the Evidence.' London: The Health Foundation; also Coulter, A. and Ellins, J. (2007) Effectiveness of strategies for informing, educating and involving patients. 'British Medical Journal.' Vol. 335, pp.24–27; also Dixon, A. (Ed.) (2008) 'Engaging Patients in their Health.' London: The King's Fund.

26. To cite one example, the charity Diabetes UK has been looking for delivery partners for its work on user involvement in local diabetes care and received 31 applications for three pilot programmes.

27. Department of Health (2005) 'Public Views on Self-Care.' London: Department of Health.

28. The King's Fund (2009) 'Long-term Conditions.' London: The King's Fund. Available at: http://www.kingsfund.org.uk/research/topics/longterm_conditions; see also Department of Health and Technology Strategy Board (2009) 'Managing Long-term Conditions – Remote Monitoring.' London/Swindon: Department of Health and Technology Strategy Board.

29. Evaluation of the EPP demonstrates a 7 per cent reduction in GP consultations, a 10 per cent reduction in outpatient visits and a 16 per cent reduction in A&E attendances. Further, 45 per cent of participants have increased confidence that symptoms would not interfere with their lives and 38 per cent had reduced severity of symptoms 4–6 months after completing the course. See Leatherman, S. and Sutherland, K. (2007) 'The Quest for Quality in the NHS: Refining the NHS Reforms.' London: Nuffield Trust.

30. Department of Health (2007) 'Research Evidence on the Effectiveness of Self Care Support.' London: Department of Health.

31. Murray, E., Burns, J., See Tai, S., Lai, R. and Nazareth, I. (2009) 'Interactive Health Communication Applications for People with Chronic Disease.' London: The Cochrane Collaboration.

32. Birmingham East and North Primary Care Trust (2008) 'Birmingham East and North Strategic Plan 2008–11.' Birmingham: Birmingham East and North Primary Care Trust.

33. GovNet (2009) 'Defined by Quality.' ModernGov conference edition, p.244. To cite one area, early detection and prevention is recognised as the most effective response to cardiovascular disease; see for example Department of Health (2000) 'National Service Framework for Coronary Heart Disease.' London: Department of Health.

34. An alternative approach, based on policy interventions that encourage rather than mandate more sensible or responsible types of behaviour, has been presented in Thaler, R.H. and Sunstein, C.R. (2008) 'Nudge: Improving Decisions about Health, Wealth, and Happiness.' New Haven, CT: Yale University Press.

35. See for example, Darnton A. (2008) 'GSR Behaviour Change Knowledge Review, Overview of Behaviour Change Models and their Uses.' London: Government Social Research.

36. "There is also a strong case for the promising approaches of community-based interventions in other countries to be expanded to one or two regions or cities in the UK as exemplars." See Foresight/Government Office for Science (2007) 'Tackling Obesities: Future Choices – Modelling Future Trends in Obesity and Their Impact on Health.' 2nd Edition. London: Foresight/Government Office for Science.

37. Diabetes UK (2008) 'Diabetes: Beware the Silent Assassin.' London: Diabetes UK; also Improvement and Development Agency (2009) 'Diabetes and Depravation: The Facts.' London: I&DeA.

38. Lay health worker programmes have been shown to be effective in encouraging health checks and prevention; see Lewin, S., Dick, J., Pond, P., Zwarenstein, M., Aja, G.N., Van Wyk, B.E., Bosch-Capblanch, X. and Patrick, M. (2005) 'Lay Health Workers in Primary and Community Health Care.' London: The Cochrane Collaboration. Also, see evidence of programme impact at Dr Foster Intelligence, Diabetes. Available at: http://www.drfosterintelligence.co.uk/services/diabetes.asp

39. Health England (2009) 'Prevention and Preventative Spending.' Oxford: Health England.

40. The Well London Alliance consists of Arts Council London, Central YMCA, Groundwork London, London Sustainability Exchange, South London and Maudesley Foundation Trust, and The University of East London.

41. Darzi, A. (2008) 'High Quality Care for All: NHS Next Stage Review Final Report.' London: Department of Health.

42. Department of Health (2005) 'Creating a Patient-led NHS: Delivering the NHS Improvement Plan.' London: Department of Health.

43. Richards, N. and Coulter, A. (2007) 'Is the NHS becoming more patient-centred?' Oxford: Picker Institute.

44. Wanless, D. (2007) 'Our Future Health Secured? A Review of NHS Funding and Performance.' London: The King's Fund.

45. Achieving the 'fully engaged' scenario set out in the 2002 Wanless report through to 2017–18 saves 13.13 per cent of the NHS budget, broadly equivalent to the £15 billion baseline of savings that are required by 2014. See Wanless, D. (2002) 'Securing our Future Health.' London: Department of Health.

46. The King's Fund/Institute for Fiscal Studies (2009) 'How Cold Will It Be? Prospects for NHS Funding: 2011–17.' London: The King's Fund/IFS.

47. In the Darzi Review, innovation that improved the experience of patients was regarded as the driving force for quality. Furthermore, Darzi identified innovation as central to linking the quality and productivity agendas. See Darzi, A. (2008) 'High Quality Care for All: NHS Next Stage Review Final Report.' London: Department of Health.

48. As quoted in Taylor, J. (2009) Health Innovation: The Future's Bright. 'Health Service Journal.' 28 May.

49. Multiple Sclerosis Society National Centre (2008) 'The Case for Change: Why England Needs a New Care and Support System.' London: Multiple Sclerosis Society.

50. A review of the evidence for the effectiveness of behaviour change campaigns shows that a deficit model doesn't work. See Anable, J., Lane, B. and Kelay, T. (2006) 'A Review of Public Attitudes to Climate Change and Transport: Summary Report.' London: Department for Transport.

51. NHS Health Development Agency (2004) 'The Effectiveness of Public Health Campaigns.' HDA Briefing No.7. London: NHS.

52. See Dixon, A., Boyce, T. and Robertson, R. (2008) 'Commissioning and Behaviour Change: Kicking Bad Habits.' Final Report. London: The Kings Fund.

53. The ten Finalists have one year to begin implementing their plans, with the help of a £20,000 grant and further support. At the end of the year they are judged against five criteria: 1) CO2 emissions reduction; 2) innovation; 3) long-term impact; 4) potential for growth, replication and transferability; and 5) community engagement. The £1 million will be allocated to the Finalists who prove their approaches are most successful based on these criteria.

54. Appleby (2009) 'Mapping the Big Green Challenge.' London: NESTA.

55. NESTA (2009) 'People–powered responses to climate change.' London: NESTA.

56. Department of Health and Department for Children, Schools and Families (2008) 'Healthy Weight, Healthy Lives: A Cross–government Strategy for England.' London: Department of Health and Department for Children, Schools and Families.

THE LAB: INNOVATIONS IN HEALTH AND WELLBEING

Almost half the UK population has a long-term condition such as depression, back pain, asthma, diabetes or epilepsy. The majority of NHS spending goes on treating these illnesses. This is unsustainable.

The Lab provides the freedom, flexible capital and expertise to undertake radical experiments. We will find identify, test and demonstrate new ways of providing more effective healthcare, within the NHS and beyond.

Health and wellbeing affects everyone. So we want to get as many people as possible looking for solutions. By looking to users, communities, businesses and the people at the frontline of healthcare services, we believe we will discover real innovation at a price public services can afford.

Through our practical projects we will take these great ideas, and find ways to nurture them and help to make them a reality. We will work with a wide range of decision-makers and organisations to scale-up services that deliver more for less. We will also share proven methods of innovation so more organisations can find and spread the radical new ideas we so urgently need.

To date, our work in health and wellbeing has looked at how the front-line can best be supported to develop and deliver new mental healthcare services, and how incubators can accelerate the development of social enterprises tackling chronic health conditions.

THE LAB

Innovating public services

NESTA Making Innovation Flourish

NESTA

1 Plough Place London EC4A 1DE
research@nesta.org.uk

www.nesta.org.uk

Published: November 2009

ISBN 978-1-84875-063-0