User Led Innovation – The Open Door Project

Public services represent an important innovation challenge – that of dealing with multiple stakeholders and the ‘contested’ nature of innovation (Hartley 2005). Whilst it may appear that people have little choice in public services and thus the driver of competitiveness is lacking, the reality is that there is increasing pressure for change but coming from multiple and often conflicting directions. Demands for cost cutting on the funding side push providers towards more efficient solutions but at the same time advocates and lobby groups on behalf of users are driving towards non-price aspects such as service quality, flexibility and customization. The result is increasingly a search for complex solutions to complex problems – and suggests that some of the most radical innovation is actually taking place in and around the public sector (Albury 2004).

As a recent report put it, ‘current approaches to public service reform are reaching their limits..... a wide range of prominent issues, including the environment, crime, and public health concerns such as smoking and obesity, cannot be adequately addressed by traditional services. Effective responses must encourage new norms of behaviour within society, developing approaches in which those who use services become involved in their design and delivery..... we need a radical transformation and a new approach: co-created services’.
(Leadbeater)

Co-created services of this kind require mobilisation of knowledge and resources which are distributed across communities and an active engagement of members of those communities – rather than central and unilateral supply driven solutions. This raises again the issue of user-led innovation. Co-design also helps deal with the customization argument – rather than trying to design one size fits all, work with diverse users allows configurations which bring their particular set of needs and wishes into the equation.

These arguments take on particular significance in the context of public services like healthcare where the demand side is increasingly pushing for customization and tailoring of high quality services whilst the supply side is trying to deal with the economics of efficient delivery to meet the needs of these increasingly vocal stakeholders. Arguably the stage is set for radical innovation and the requirement is for new tools, such as those offered by design, to be deployed.

Open Door - an example from the UK healthcare sector

The UK, as many other countries, faces significant challenges to its healthcare system. A combination of complex drivers are coming together to create the conditions where the current systems will fail. Increasing life expectancy means more people will be requiring support for longer – and many of them will suffer from chronic diseases which are age related such as diabetes and stroke which are particularly expensive to treat. Other lifestyle –linked problems such as growing obesity levels put further pressure on a system which already consumes around 10% of GDP – yet this burden will have to be borne by a shrinking taxpayer base as the population distribution ages. Expectations have risen since the inception of the National Health Service (NHS) in 1947 but continuing to deliver a broad-based package of care free at the point of delivery without incurring crippling financial costs is likely to become impossible in the years to come. Radical innovation will be forced upon the sector.
The NHS is already a huge and complex organization – the largest employer in Europe with the biggest purchasing budget. There is a complicated web of actors within the system – clinicians, managers, associated service providers, etc. – and it interacts with a very wide range of stakeholders – patients, carers, relatives, medical suppliers, funding agencies, local and national government, etc. Innovation in this system involves both diffusion of improvement innovations and radical new treatments and approaches such as new equipment or surgical techniques. But it is likely that the fundamental shifts and rising complexity facing the NHS will mean that there is increasing pressure towards completely different models which require reframing and the emergence/co-evolution of radically different alternatives.

For example the problem of chronic disease management is not amenable to simple single point solutions like a new drug or therapy – instead it requires system-level intervention involving patients, carers, drugs and other treatment regimes across a broad therapeutic range, healthcare funding, etc. But the incidence of this problem is increasing with an ageing population and with growing concerns about childhood obesity, etc. Estimates suggest that dealing with diabetes – one of the major chronic disease challenges – now costs the UK NHS 10% of its budget and the figure is likely to rise sharply.

The need to manage such change is widely recognised – the NHS itself is in the middle of a 10 year reform programme, the ambitions of which are set out in The NHS Plan (Department of Health 2000). There is growing recognition that existing perspectives, methods and approaches (and the underlying theories that drive them) cannot be relied upon to deliver the required change in the time and on the scale required (Bate et al, 2004). A key theme in the exploration of such radical alternatives is the need to incorporate new elements and perspectives in the frame and in particular to find ways to engage users much more actively.

This mirrors the wider moves towards what Von Hippel calls ‘the democratization of innovation’ and implies much higher levels of user-engagement in design and development of customized solutions matched to local and specific needs rather than a generic ‘one size fits all’ approach. At the same time such alternatives need to reflect the economic challenges of delivering high quality care in such specific configurations – there is a risk that innovations will revert to the traditional cost/quality trade-offs common to manufacturing operations management during the last century.

Searching for such radical solutions which engage users and which also deliver workable options requires the use of new tools and techniques and a number of experiments are underway which draw on design approaches. The following example illustrates the range of such work and the role which design approaches play within them.

**The Open Door Community Hospital project**

Sometimes innovation involves different combinations of elements in a new frame – an alternative *architecture*. The low cost airline example was not about new aircraft or airports but rather about focusing on an underserved market and developing a new configuration around that. In the process a new model emerged with very different characteristics which then migrated to the mainstream and fundamentally challenged the core business model of airlines in general. In this example the needs of an underserved population in healthcare are addressed via a radically different configuration which may have considerable relevance for the ‘mainstream’ approaches currently used in the sector.

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The Open Door project was targeted at the Grimsby region in north east England – an old fishing town which has experienced a structural decline in industry and employment. Although some parts of the region are well-linked to the NHS there is a significant group with problems associated with social exclusion. For example the 2004 Indices of Multiple Deprivation show Grimsby in the worst quartile of local authorities, with 25% of the population living in the most deprived areas. The town is recognised as nationally the worst for education and skills deprivation, with 16% of young people not in education, employment or training. Over the last 2 years the town has also received a large number of economic migrants (estimates as high as 6,000). Their desire for work has put even more pressure on employability and distanced many from the sources of economic recovery. The number of 11 year olds drinking alcohol regularly is almost 4 times the national average; a quarter of Grimsby’s 11 year old boys are drinking every week. There were an estimated 1,440 problematic drug users in the Grimsby area in 2005/6, less than half were in treatment at that time. Estimates suggest that these people may be responsible for as many as 1,500 children.

A consequence is that a girl in Grimsby’s South ward aged 15-17 is 3 times more likely to get pregnant than a girl in a neighbouring ward whilst a man living in an area of high multiple deprivation will die 7 years earlier than the regional average. From the NHS perspective, there is a need to look for innovative solutions which can address the needs of this group – but again to do so in ways which ‘customize’ solutions to their specific context whilst avoiding the financial penalties normally associated with personalized medical care.

The ‘Open Door’ project, originally commissioned by North East Lincolnshire Primary Care Trust, represents an attempt in this direction. A core principle was to reframe the problem and explore potential solutions via high levels of user input in design. It focused on vulnerable people who typically do not access mainstream or traditional health services on the basis that if the needs of this group were satisfied then the resulting model would also be inclusive of ‘mainstream’ needs. The groups involved were:

- Problematic drug users
- Homeless people
- Offenders (people leaving prison and youth offender institutions)
- Sex workers
- Asylum seekers & refugees
- Economic migrants
- People excluded from General Practitioner (GP) lists

The UK Design Council has developed a model of the user-centred design process involving four stages.

- opening up a problem and investigating all issues
- focusing on what appears to be the key issue
- opening up a number of potential solutions
- focusing ,developing and delivering a preferred solution

This was used as a core template and a variety of research techniques were employed to gather views, issues and problems. These included:

- participant observation using a variety of ethnographic techniques to work with users to identify and understand their problems, issues, motivations and beliefs
- giving disposable cameras to members of target groups such as unemployed youths or asylum seekers to generate images which provide a perspective on life in the area
- creating a web page for on-line discussion
- generating press articles

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• sending out cards asking for feedback, asking potential users for “gripes” about their past experience of health care. The cards also pointed people towards the website for further comment
• workshops with service users and providers
• benchmarking visits in London, Manchester & Glasgow
• interviews and observation with service users

The research was done by independent consultants and not by the core NHS project team to ensure a measure of objectivity. This work highlighted not only the core problem of particular needs for access to the health and social welfare system but also a strong sense of disempowerment and a lack of trust in the NHS amongst members of this user community. Dealing with this became a key challenge – lack of trust in the formal health system engendered an attitude of non-involvement until emergencies developed, at which point the health care system would be required to deal in crisis mode. As one interviewee put it, the prevailing view is ‘only go when it’s bad’. So large numbers of people are disengaged from primary care and turn up at A&E in distress. They expect nothing or they expect everything right now’.

Developing the approach involved extensive use of prototyping methods to engage users in co-design of the proposed solution. Of particular importance was the use of scenario techniques and exploration of the current and potential experiences of a number of key characters – roles – of people who would be involved in service provision and consumption.

The outcome of this design-led exploration was the development of a bid to establish a radically different kind of Community Hospital in response to a national tender process. Whereas the majority of bids were along ‘conventional’ lines involving buildings and a fixed location the Open Door approach was to take the hospital to the community – specifically the excluded members identified above. Using a location in an abandoned shop front along a main street in the heart of the declining part of town the plan was to create an ‘open door’ allowing users to drop in and access a wide range of services. Staff would be drawn in based on their availability to work odd hours and with a motivation to help this community, whilst equipment would be small and portable. In other words the hospital would be designed and configured around the needs and ideas of the user community which it was designed to serve.

For more detail on this and other applications of design approaches see Martin Bontoft’s website http://www.bontoft.com/work%20images/nelpct.htm

References
