

## Open Innovation in Health Care Management in the UK – Reflecting on the Challenges and Opportunities

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### Introduction

For 67 years the National Health Service (NHS) of the United Kingdom (UK) has sought to provide medical care to its residents alongside encouraging and informing the national debate to improve health care. NHS England, for example, distributes around £116.574bn billion pounds annually and holds those entrusted with health care to account for spending this money efficiently and effectively [1]. However, the managing of a body as large as the NHS is not without its challenges in the context of a growing UK population, patients living longer with complex health care needs and an ever-increasing expectation among the general public for the NHS to engage in more preventive health care measures and achieve high standards of support for patients. In addition, government legislation such as the Health and Social Care Act 2012 introduced radical changes to the way that the NHS in England is organised and thereby managed [2].

Those working in the NHS have responded to increasing demands by utilising creativity which has resulted in the creation of new tools and more efficient and effective ways of working to meet targets and patient expectations. In Scotland, for example, Lean management has been advocated and implemented to meet challenges in reducing waste and eliminating harm [3]. But innovation in the NHS is not without its challenges, whilst the NHS may be excellent at invention per se it has been recognised that the spread of inventions within the NHS can be too slow, with even the best innovations failing to be adopted on a ubiquitous basis [4]. Such a lack of diffusion, in part, is understandable since it can often be difficult to formulate reliable business cases and calculate return on investment for potentially disruptive innovations in a context of limited resources. In particular, it is often challenging to take the decision to implement more radical innovations and adopt a learning culture, in full awareness that most innovations fail no matter how well managed. The uncertainty and risk inherently in undertaking the practice of innovation stands as a notable barrier. Likewise, access to knowledge about new and relevant externally created innovations can also be perceived as a barrier with global scientific output doubling every nine years [5]. It is clear then that just knowing what external innovations would suit what adopter within the NHS is a tremendous challenge for management. Likewise, NHS employees still struggle with who to share their internal innovations with and the processes they need

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to engage in to realise them and what support is available for their development.

### Open Innovation – The Way Forward?

‘Open innovation’ is one way of collaboratively working that is currently being harnessed by managers in the NHS, to overcome some of the inherent barriers to innovation in practice. Open innovation, outlined by Chesbrough [6] in his book “Open Innovation: The New Imperative for Creating and Profiting from Technology”, seeks to highlight how organisations have moved away from ‘closed’ innovation with a focus on internal processes, towards a more open route to achieving innovation. Open innovation can be seen as a more ‘decentralized’ approach to innovation and it arises from an appreciation that useful knowledge is widely distributed and no one organization can innovate as effectively on its own when faced with complex challenges. Chesbrough [6] maintains that ‘purposive’ inflows and ‘outflows’ of knowledge are the key to supporting effective innovation in today’s organisations.

Looking at the current NHS, it is clear that ‘open innovation’ does exist to some extent in practice. Leaders of innovation in the NHS have partnered with both academia and industry to achieve their goals and explore the viability of varying models of open innovation [7]. While each partnership entered into may vary slightly, certain key aspects are needed for open innovation to work to the benefit of all stakeholders. Firstly, an identification of what is going to be the mutually beneficial output for both parties is critical. Secondly it is clear there must be a degree of openness between partners and this necessitates ‘trust’ and willingness to share ideas and data although there is an appreciation that this will vary from partnership to partnership. This openness also translates into shared risk and reward for both parties. Each stakeholder in the partnership needs to appreciate what

they can add to the relationship and what can be achieved by their involvement. In achieving such collaborative partnerships effectively this can allow industry, academia and the NHS to tackle challenges efficiently which are beyond the scope of any one partner.

However, there are challenges in engaging in “open innovation” for the NHS. Cultural differences are one area that needs to be addressed as the partnership progresses. Steps are required to break down any barriers and misunderstandings between, for example, staff members from the NHS and those in the partnership coming from industry [8]. Also, the sheer size and level of complexity of the NHS itself may limit collaborative opportunity and the sharing of new ideas as potential collaborators may find it difficult to identify who to make contact with within the NHS. Similarly, when calculating the success of an innovation differences may surface between partners. For the NHS this may take the form of identifying the savings a new device or way of working will make to the NHS rather than the money it could make for industry. Attitudes too may differ between partners around intellectual property rights and these would be needed to be sorted at the outset or as they arise during the project. This is a real area of challenge and presents an area of much needed research. A further hurdle in fully embracing open innovation is the lack of reward for such innovations. Additional incentives may be needed to fully harness the potential of open innovation in the

NHS and encourage people to pursue their innovation ambitions.

Despite the obvious hurdles there are solutions to many of the challenges of implementing open innovation and many of these hurdles may also disappear as open innovation becomes ingrained into the very fabric of the way the NHS works. For example, adopting an approach where there is a degree of flexibility around budgets on projects and ensuring that management put in place a robust review process for all projects undertaken are two important ways to move towards supporting open innovation initiatives.

## Concluding Thoughts

Reflecting on the way forward for the NHS and other health care systems globally, there appears a growing imperative to further embrace different models of innovation, and in particular models of open innovation. The embracing of open models of innovation will help support successful change in such a complex system as the NHS. However, work does need to be done to further support these models in practice. Looking at the current situation in the NHS, reward structures need to be reconfigured and more radically additional incentivises for risk-taking and collaboration with those outside the NHS need to be put in place. One final point is that while it is clear that for open innovation to work more effectively the NHS must change, it is also apparent that external organisations also need to adapt and change their working practices when taking on a partner such as the NHS. This author hopes that all stakeholders are ‘open’ to such a challenge.

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