

UCLPartners' response to the *NHS Chief Executive Innovation Review – Call for evidence and ideas*

Summary

We support the emphasis in the *NHS Chief Executive Innovation Review* on diffusion – transforming the NHS from a system that supports 'beacon sites' to one that diffuses innovations for the benefit of all patients and for population health.

Within this response we summarise UCLPartners' experience of facilitating diffusion and our review of the existing knowledge base. Our four main recommendations are:

(i) To co-create diffusion approaches from the outset of the innovation process

The approach to diffusion in the NHS is fundamentally wrong. Staff are rarely motivated by the opportunity to copy a 'beacon site' or being the adopter of an innovation created elsewhere. To facilitate diffusion, ideas must be co-created from the outset and transparently tested with a wide range of stakeholders (e.g., a community of interest including patients, patient representatives, future adopters, commissioners, etc.), who will then feel motivated and responsible for the resulting innovation and its subsequent diffusion into mainstream practice. If the NHS persists in devising diffusion approaches only after an idea has been created and tested, innovations will continue to get locked in their site of origin.

(ii) To develop bespoke, multi-faceted solutions to transferring, spreading and scaling innovation across the NHS

The current focus on a single mechanism of diffusion in the NHS does not work. It restricts the solutions that can be generated. Diffusion is not only a process of provider 'A' *transferring* to provider 'B' who then *adopts* and *adapts* the innovation. There are other mechanisms which can be facilitated, such as *spreading* (i.e., provider 'B' *copying* innovative provider 'A') and *scaling* (i.e., provider 'A' increasing their market share by displacing organisations that are performing inadequately, or service excellence scaling through networks of care). In light of its partnership model, UCLPartners is testing the efficacy of different diffusion mechanisms through the co-creation of an integrated cancer system, involving fourteen autonomous providers and covering a population of 3 million.

Furthermore, the NHS must stop searching for the silver bullet - a single blueprint for diffusion in the NHS. The NHS is an immensely complex system. There are many different types of innovation, different types of organisations, different settings of care and different conditions to prevent and treat. Bespoke and multi-faceted solutions need to be devised which address the barriers to the diffusion of particular innovations across defined populations.

(iii) To focus on innovations for long term conditions management, with patient pull as a major element of the diffusion approach

The focus of effort must be on diffusing innovations most likely to deliver the greatest impact on population health and value for the system. As long term conditions present a major element of the NHS's work and spend,

the focus nationally and locally must be on the diffusion of innovations to prevent and manage long term conditions (e.g., approaches to self-management, telecare and telehealth, personal health budgets, etc.). We believe that investing time and resource on developing patient pull – as a major component of a multi-faceted approach - offers the greatest opportunity for health gain and value through diffusion.

(iv) To increase the number of Academic Health Science Systems diffusing innovation across defined populations through a partnership model of autonomous providers, alongside a review of investment in implementation

Academic Health Science Systems take a leading role in the application of knowledge into practice, and focus on reducing the 17 year gap from innovation to population health benefit – locally, nationally and internationally. Serious consideration should be given to replicating the AHSS model, leading to between 10 and 15 AHSSs nationally. UCLPartners would be keen to support this replication and to share our learning.

Furthermore, the current allocation of research funding across discovery and implementation in to practice may need to be reviewed. Continued investment in discovery is fundamental to generating wealth and creating a continual pipeline for innovation in health and healthcare. However, delivering what we already know is effective across the UK population will deliver significant health gain and value for the NHS system in relatively shorter time. In order to generate knowledge of the most effective diffusion approaches and to drive diffusion at pace across the NHS, the current balance of resource allocation needs to be reviewed.

Introduction

We support the emphasis in the *NHS Chief Executive Innovation Review* on diffusion – transforming the NHS from a system that supports ‘beacon sites’ to one that diffuses innovations for the benefit of all patients and for population health.

In this response we begin by sharing the lessons UCLPartners has learned, we then detail the findings from an initiative exploring system characteristics that enable diffusion, and finally, we offer UCLPartners’ perspective on the actions needed to improve the scale and pace of diffusion at a national and local level.

Our four main recommendations are: (i) *To co-create diffusion approaches from the outset of the innovation process*, (ii) *To develop bespoke, multi-faceted solutions to transferring, spreading and scaling innovation across the NHS*, (iii) *To focus on innovations aimed at long term conditions management, with patient pull as major element of the diffusion approach and*, (iv) *To increase the number of Academic Health Science Systems diffusing innovation across defined populations through a partnership model of autonomous providers, alongside a review of investment in implementation.*

Sharing the learning from UCLPartners

UCLPartners is one of five accredited academic health science systems (AHSS) in the UK. Our purpose is to translate cutting edge research, innovation and education into measurable health gain for patients and populations - in London, across the UK, and globally.

Academic Health Science Systems (AHSS) can take a lead role in driving the diffusion of innovations for the local populations they serve, and also to facilitate spread nationally and internationally. As partners in improving practice and in undertaking research, AHSSs have credibility with a range of sectors, including, NHS, universities, industry, and third-sector organisation. AHSSs are also recognised as sufficiently independent from the NHS, which affords freedom in creating the conditions that enable the diffusion for population health gain.

Across UCLPartners we are working with patients (and patient representatives), clinicians, commissioners, academics, and other partners to co-design and evaluate models of innovation that will facilitate diffusion – locally, nationally and internationally. The three most significant lessons we have learned to date are:

- *Diffusion requires a multi-faceted approach:* UCLPartners is embedding a new model of integrated stroke care across north central London through a complex combination of factors, including: regional-level approval and resource, peer pressure (executive, clinical and middle-management), patient-pull, professional factors (e.g., motivation to improve services for patients, professional pride), granular performance information and cultural factors (e.g., leadership). These factors operate on the platform of UCLP’s inclusive governance structure, wherein the partners mutually hold each other to account for delivery.

We have learned that designing the approach to diffusing a particular innovation needs to start with an understanding of the nature of the innovation to be diffused (e.g., product, pathway, service, etc.), and the target individuals (e.g., patients, clinicians, managers), organisations (provider, commissioner, etc.) and system (AHSS, commissioning cluster, region, etc.). From the knowledge of the barriers and enablers that exist for a particular innovation, it is possible to develop a bespoke, multi-faceted diffusion approach. The push and pull factors must then operate relentlessly and in alignment until the innovation has diffused.

- *Diffusion requires co-creation of innovation with substantial patient involvement:* Within UCLPartners’ cancer programme, for example, we have worked with users and Macmillan Cancer Support, GPs, trusts and commissioners to co-design an integrated cancer system across north east and north central London – a

population of 3 million. In addition to providing a network infrastructure to enable diffusion, we are also exploring with Macmillan Cancer Support how to create a patient-pull mechanism through which patients can act as potentially powerful agents of diffusion across the system.

We take a partnership approach to innovation – where participating organisations retain their independence and where solutions are not mandated. In particular, we aim to create strong, collaborative relationships between internal (NHS organisations) and external (formal and informal patient and carer networks or organisations, industry, etc.) networks. Building creative alliances can facilitate innovation (and diffusion) through a variety of mechanisms, for example, the diversity of perspectives in co-design and co-production, the depth of understanding of the users’ needs and wants, and increasing the volume of ‘allies’ and sponsors for an innovation.

- *To relentlessly focus on delivery of patient and population health gain:* All of our solutions are patient-led and population-focused. To have the greatest impact on health gain and value for our system, we focus our efforts on innovations most likely to deliver the greatest impact on population health and value for the system.

Sharing the learning from *After the Light Bulb* - a diffusion initiative

In order to better understand how to address the challenge of diffusion, UCLPartners is leading an initiative – *After the Light Bulb* - on behalf of NHS London. *After the Light Bulb* is being designed in partnership with David Albury, Laurie McMahon and Sarah Harvey from Loop2, and Paul Corrigan.

The first phase of the initiative aimed to achieve a breakthrough in ‘thinking’ about diffusion in the NHS by drawing on:

- Research traditions and conceptual theories on diffusion, for example, anthropology, psychology, sociology, communication studies, marketing, economics, complexity theory.
- Experience of ‘diffusion’ in practice within and outside of healthcare, for example, involvement of consumers; incentives; performance information and management, competition and regulation.
- Insights from renowned academics, experts and practitioners from a range of professions and sectors.

A number of insights about diffusion were generated along with the characteristics detailed within Table 1. The three main insights generated were:

- Innovation – as described by Prof. John Bessant, Prof. Steve Woolgar and Charlie Leadbeater – is a **dynamic process** within which innovations are refined, adopted, adapted and diffused in a continual process and with substantial involvement of users.
- The NHS is a complex and **heterogeneous system**, and factors, such as, the clinical condition (e.g., acute or chronic) will need to be considered when selecting a diffusion approach.
- **Different transmission mechanisms** exist – as explained by Prof. John Bessant and Charlie Leadbeater – including, *transferring* (i.e., ‘A’ *transferring* to provider ‘B’ who then *adopts* and *adapts* the innovation), *spreading* (i.e., provider ‘B’ *copying* innovative provider ‘A’) and *scaling* (i.e., provider ‘A’ increasing their market share by displacing organisations that are performing inadequately).

Table 1: Characteristics of a Healthcare system which should stimulate diffusion

Levers already in the UK healthcare system	New characteristics required in the system
<ul style="list-style-type: none"> ▪ Strengthen and exploit provider autonomy ▪ Actively decommission and disinvest ▪ Incentivise and reward scaling and spreading ▪ Encourage competition for some care/activity ▪ Focus investment and risk capital 	<ul style="list-style-type: none"> ▪ Build alliances across internal and external networks ▪ Engage and mobilise patients and carers ▪ Publish granular, accessible performance information ▪ Acknowledge necessary instability and fluidity within a complex adaptive healthcare system

The characteristics shown in Table 1 will be *tested* during a behavioural simulation on 28th September 2011. During this event insights will be generated in to the potential efficacy of each characteristic and combination of characteristics, and how these characteristics might be developed and applied to the NHS. The report from the event will be available in October 2011.

UCLPartners' perspective on the actions needed at national level

Drawing on the insights generated from work within UCLPartners (including the ***After the Light Bulb*** initiative), we suggest four actions to be driven at a national level:

(i) The NHS to adopt a more dynamic innovation process for the NHS, where the involvement of patients and the diffusion approach are considered essential from the outset of an idea

ii) To consider stimulating the creation of additional Academic Health Science Systems, to deliver 10 to 15 AHSSs nationally, focused on diffusing innovation across defined populations. The operating model we propose – based on the success of UCLPartners - is a partnership model of autonomous providers and universities.

iii) To consider reviewing the balance of research investment in order to drive evidence based implementation of effective diffusion mechanisms: A significant knowledge base from within and outside of healthcare exists for formulating approaches to diffusion. However, it is important – in light of the uniqueness of the NHS, its track record of poor diffusion and the financial constraints – to build a robust understanding of what is effective, for which invention, under what conditions. Test sites, such as AHSSs, could be identified with a commitment to align push and pull factors to ensure the opportunity, motivation and capability to embed innovations at scale across a defined population. Other requirements of the test sites could include: access to academic evaluation and an expert reference group (involving academics in relevant research traditions and experts in innovation within and outside of the NHS) to help design and oversee the work. Particular focus could be placed on new characteristics (e.g., patient pull), and on areas presenting the greatest opportunity for improvements (e.g., long term condition management in the community). Test sites could also run simulations of proposed approaches to speed the generation of knowledge about a range of approaches.

iv) To create an environment within which organisations can accept the risks of adoption, scaling and copying: Where high impact innovations already exist and have not been co-created, it will be necessary to create an environment within which organisations perceive the potential rewards of adoption as outweighing the risks. This is might involve, for example, a *risk and investment capital scheme*, and *incentives and rewards*, alongside a *failure regime*. The former levers would aid organisations in managing the risks and costs (e.g., training, capital investment, double running of services, etc.) associated with the adoption and adaptation of innovations generated and tested elsewhere and create financial incentives (including, best practice tariffs, capitation fees, and year-of-care budgets). Alongside this, a failure regime targeted at organisations who continually fail to perform may create the drive for organisations to adopt proven innovations from elsewhere and/or create the space for innovative organisations to scale up.

UCLPartners' perspective on the actions needed at a local level

The levers of diffusion shown in table 1 – identified as part of the ***After the Light Bulb*** initiative - will be *tested* during the simulation event at the end of September.

It is anticipated that many of these levers could be used in combination - as part of a multi-faceted approach – by commissioners and providers/ AHSSs . They will need careful application in light of the potential for unintended

consequences (e.g., denuding the system of innovative capacity). It is also anticipated that particular combinations will be more effective for particular innovations/ providers. For innovations in acute care (e.g., surgical techniques), for example, commissioners may decide to utilise a combination of competition, financial incentives (e.g., CQUINs), granular performance information and risk capital to create the conditions for diffusion. When patients have a long term relationship with the services they access (e.g., long term conditions), AHSSs might want to utilise patient pull and alliances to stimulate diffusion.

Concluding comments

As an Academic Health Science System focused on population health gain we very much welcome the focus on diffusion in the *Innovation Review*.

We would be delighted to share further information on the our learning, to be included in a wider community of interest and to support in the task of developing and implementing a strategic approach to innovation in the modernised NHS.

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Do you want to be kept in touch with the next steps in this process? **Yes**

Do you want to be included in a wider community of interest? **Yes**