Response to NHS Chief Executive’s Open Call for Evidence and Ideas

Respondent ID: 189

Organisation name: East of England NHS Innovation Council

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NHS Chief Executive Innovation Review Team
Department of Health
Room 2N16
Quarry House
Quarry Hill
Leeds
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Dear Sir or Madam

Re: Innovation in the NHS – Call for Evidence
Response to national review from the East of England NHS Innovation Council

This is a response on behalf of the East of England NHS Innovation Council, to the NHS Chief Executive’s review on the acceleration of adoption and diffusion of innovation across the NHS.

The Innovation Council for the east of England is unique in that it brings together senior leaders from the NHS, academia, business and the third sector to advise the Strategic Health Authority on how to discharge its statutory duty to promote innovation.

The Innovation Council fully supports this review as we too recognise the need to accelerate adoption and diffusion of proven innovations at pace and scale to improve outcomes for patients and value for money for tax payers.

The challenge set in the review document is to get the right culture and balance of incentives and levers at a national, regional and local level that can accelerate the systematic adoption and diffusion of innovation at pace and scale. Your document recognises that this problem is multi-faceted. In our response we aim to provide some suggestions which could contribute to different aspects of this challenge.
Learning from elsewhere about adoption and spread

Learning from other industries and sectors on how they achieve adoption and spread of innovation, both nationally and internationally on how they approach adoption and spread of small and large scale innovations which meet their business needs could provide important learning which is translatable to the NHS.

Lessons from the automotive service have been introduced to the NHS - for example Toyota’s LEAN methodology. However, whilst this has been embraced by some it is not yet mainstream thinking/practice in the NHS.

Major global industries manage innovation, adoption and delivery and there are likely to be many learning opportunities and solutions which could be translated to the NHS. For example, many have multiple R&D organisations, located in many places around the world which must be co-ordinated efficiently and develop products for world-wide deployment in order to achieve economies of scale. At the same time, other countries without their own local R&D activities must be able to influence R&D activities elsewhere whilst adopting new solutions developed by others. Whilst the NHS is not a global service it has similar challenges balancing the national, regional and local needs whilst avoiding excessive duplication and achieving economies of scale. Translating the management and organisational structure of a global multinational into the context of the NHS could potentially identify helpful adoption and spread strategies. For example:

- Approaches to nation-wide and local innovation and customisation of national solutions, for local needs
- Responsibilities for delivery and adoption of innovation at individual and organisational levels
- Processes which foster generation of bottom-up innovative solutions in the context of top down imperatives, available investment and avoidance of excessive duplication
- Processes which stop certain innovation activities when superior solutions are developed

Innovation can offer for adoption innovations which provide low cost patient centred solutions that drive co-production and self-care. Adoption of low cost scalable patient centred solutions will all contribute to creation of affordable and innovative services. At the other end of the spectrum are more ‘disruptive’ innovations which could bring about significant change in practice and/or pathways. For example, the challenge around long term conditions to move from an acute to a primary-centric health system requires some disruptive innovation at pace and scale. There is literature on ‘ambidextrous organisations’ and organisations that achieve disruptive change whilst continuing to deliver business as usual during the change period. The NHS can learn much from these organisations on how they have succeeded in nurturing disruptive innovation, giving it licence to flourish and protecting it from a multitude of barriers. This would include learning how the private sector aligns incentives and drivers/levers that enable disruptive innovation to take traction such as incentives, objectives and accountabilities. National support for large scale disruptive innovations in the NHS would be needed to incentivise the disruption to take traction locally.
In addition, ‘frugal’ or ‘constraint based’ innovation is about mindset and innovating under conditions of lack of resources or innovating for clients with lack of resources. This is about redesigning existing innovations, which often involves rethinking entire production process and business models. (See for example http://www.economist.com/node/15879359)

**Actions at national level in the NHS**

We welcome the duty to be placed on the NHS Commissioning Board to promote innovation, and the similar responsibility to be placed on commissioning consortia.

*There is a need to build innovation into the architecture of the NHS Commissioning Board at design stage.* Creating and emulating a culture for innovation will be critical in influencing and forming mind sets and behaviours which promote innovation.

*The innovation landscape can be complex. We would urge that the single operating framework is used to streamline this landscape to enable the provision of sharper focused support to innovators.*

*The case for proven innovations needs to be well articulated and demonstrated to convince both clinical and managerial audiences of the benefits of adopting particular innovations.* There is a communications and marketing challenge in supporting adoption and spread. There is a question about how the NHS Commissioning Board will get its innovation information – it needs a mechanism to get information on which to make decisions to encourage and stimulate adoption and spread of innovations and to understand where the big impact innovations are which could be applied across the country. National promotion of recommended adoptable innovations would be supportive along with support for the implementation of the 150 NICE quality standards. There are many existing formal and informal networks that can be used as a communications mechanism to support the adoption and spread of innovation. The new national communications network arrangements may provide opportunities for supporting the spread and diffusion of innovation.

*We can see potential benefits of the NHS Commissioning Board issuing challenges nationally to stimulate the ‘pull’ of innovations.* For example, setting out a challenge the NHS needs answers to and inviting local bodies to put in bids for the solutions and funding of innovation adoption trials. The Small Business Research Initiative (SBRI) has been successful in the east of England in stimulating innovation which responds to local needs and engaging innovating small and medium sized enterprises.

*Alignment of incentives is important to incentivise both organisations and individuals and along care pathways and whole systems.* Levers such as tariff and CQUINS are important mechanisms for supporting and promoting the adoption and spread of innovation with a tariff based on leading edge practice.

*There may be a role for a national strategy for scaling up innovations and best practice.* A broad framework which is not prescriptive, to recognise the differences in culture and that innovation is bottom up, could be helpful. In the east of England there is a
record of quickly implementing improvement initiatives across organisations with major benefits to patients for example our VTE and HCAI initiatives.

**Actions at local level in the NHS**

We have taken ‘local level’ to mean SHA cluster or sub national level.

*The East of England NHS Innovation Council is a unique collaboration of senior leaders from a diversity of sectors. We would like to see this local approach continue into the future to enable on-going dialogue and collaborative development.* This forum has led to sharing of learning, knowledge and perspectives, stimulating ideas and approaches to the innovation agenda in NHS East of England, and improved the understanding between sectors on innovation and potential opportunities for collaboration. This model could be examined with a view to application in other areas of the NHS.

*Regional Innovation Funds (RIF) have provided the opportunity to support front line innovation and adoption of proven innovations. A continuation of local funding which can be responsive to local priorities for local determination is an important lever to incentivise and support adoption and spread and enable the ‘localism’ agenda to progress in the new operating environment.* In the east of England we have used round two of RIF to explicitly fund adoption of proven innovations from outside respective health systems. We have aimed to stimulate both the ‘pull’ and ‘push’ dynamics by funding adoption proposals which include an element of funding for the originating organisation/innovator to contribute towards appropriate costs for supporting the adoption of their innovation elsewhere.

It will be important to incentivise the development of innovation champions to assist effective promotion of innovation on the front line.

Clinical engagement early on in adoption and spread initiatives is vital to achieving success.

*Financial incentives are needed at organisational level and within the organisation individuals need to be stimulated through appropriate incentives – this might be receiving funding and/or recognition of their work.* The Innovation Council has explored the idea of “skunk works” as an incentive in itself: this is where individuals are taken out of their day-to-day job to focus on a specific problem/innovation. The incentive of space and time to focus on an innovation gives recognition of the value of the work, legitimises and recognises the time and resources committed to experimentation. Much could be done by facilitating cross disciplinary conversation that is backed up by budgets for implementation.

*‘Back office’ skills to assist the development of evidenced innovation business cases to support wider adoption and spread are very important.* There is a need to focus on increasing the skills within the NHS or access to the skills needed to build the business cases/proof of concepts which demonstrate return on investment, metrics and measurement and the economic impact of innovations.
**Risk tolerance and the approach to risk management in innovation is another area of skills development.** It is widely recognised that not all innovations will succeed and your document identifies the need to experiment more and be less risk adverse. Risk management and mitigation approaches in relation to innovation are important aspects of leadership and innovation mindset development.

NHS East of England has detailed the achievements and progress in implementing the SHA’s innovation duty in its Annual Innovation Reports for 2009/10 and 2010/11. In particular, achievements at the regional level have included:

- **Small Business Research Initiative (SBRI East):** Launched in 2009 by NHS East of England and partners, SBRI East is an award winning regional project run by Health Enterprise East which brings together partners in business, health, technology and government to find solutions for healthcare challenges in the NHS.

  SBRI East 2009 secured £3 million in funding, and invited small to medium sized companies to submit ideas that could be developed into final products to improve healthcare for patients. £1 million of this funding was from Regional Innovation Funds, with the remaining contributed by the SBRI East partners – the European Regional Development Fund, East of England Development Agency and the Technology Strategy Board.

  Eleven successful companies were awarded funding for the development of their product in three priority areas: managing long-term conditions, patient safety and keeping children active. In each case the challenge was to produce practical solutions which will make a substantial difference to the effective management of patients and improve healthcare outcomes.

  Four of the companies progressed through to a Phase 2 round of funding. Projects being supported include a new humidifier to reduce the incidence of ventilator associated pneumonia for patients in intensive care (Cambridge Design Partnership Llp.), a 3D imaging camera for the clinical monitoring of wounds and bedsores (Eykona Technologies Ltd.), a unique integrated system for continuous non-invasive assessment of a patient’s five vital signs (OBS Medical Ltd.) and a novel ultrasonic device enabling patients suffering from osteoarthritis to be treated at home (Sonovia Ltd.).

  A short case study highlighting the four companies in Phase 2 of the original competition is now available on YouTube: [http://www.youtube.com/watch?v=hZUkJcDj7g](http://www.youtube.com/watch?v=hZUkJcDj7g)

  A second Small Business Research Initiative (SBRI) commenced in February 2011. NHS East of England and partners including the Technology Strategy Board and the European Regional Development Fund launched a new round of SBRI East funding which was focused on technologies that enable care closer to home with an emphasis on self-empowerment and personalisation for people living with a long term condition. The new programme has a budget of circa £1 million, of which £400,000 is a contribution from NHS East of England’s Regional Innovation Fund. Eight new awards were made to small and medium sized enterprises (SME’s) in July 2011

- Supporting Health Enterprise East (the region’s NHS Innovation hub) to expand their successful Innovation Scout scheme to train 40 scouts from NHS organisations across
the east of England. The role of the Scouts is a very important initiative in promoting the identification, adoption and dissemination of innovation throughout the NHS in the East of England. The Scout training programme provides individuals taking on the role with the information and skills needed to put innovation higher up the agenda at their own Trust and encourage their colleagues to come forward with their ideas for new products and services.

- **QIPP East**, an interactive web based resource to share good practice, innovation and improvement from within the region, was launched in March 2011. The resource aims to support the transfer of knowledge and information with the aim of supporting adoption and spread of what is proven to work elsewhere. QIPP East already has over 100 case studies submitted and in the first four months of operation received almost 6,000 visits. The resource is interactive with a comments facility and an online submission process to capture additional case studies.

**Action by NHS partners**

Collaboration between public, independent and third sector health care providers could prove beneficial in terms of sharing learning and identifying opportunities for adoption and innovation in the provision of innovative approaches to the delivery of care and improved outcomes for patients. This would help to inform commissioning approaches at a local level.

**Other comments**

*There are many examples of innovations which are slow to progress because a test environment within the NHS cannot be quickly identified to trial and establish the business case. There might be merit in establishing an international innovation hub which could be run by NHS Global to work jointly with an NHS organisation which has an international perspective and agenda to test out new technologies abroad. It may be that some innovations could be more quickly tested in an international environment where the innovation can gain traction in other global markets and the international case study and innovation business case developed to support adoption back in the NHS.*

I hope that our response to this important review helps to inform the future approach to the acceleration of adoption and diffusion of innovation in the NHS.

Yours faithfully

Professor Alan Barrell  
Chairman of the East of England NHS Innovation Council