



# The feasibility and practicality of recommendations from the interim report of the Accelerated Access Review

## Appendix A

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# Outline

- Overview of the project
- Limitations and caveats
- Stakeholder perspectives on the recommendations
  - A new earmarked fund for system redesign
  - Mobilising clinical leadership
  - Innovation champions
- Implications of the findings
- Cross-cutting themes
- Reflections across stakeholders
- Conclusions





# Project overview

- A focused engagement with key stakeholders about the practicality of measures and incentives proposed as part of the Accelerated Access Review (AAR) – December 2015 to January 2016.
- The objective was to explore the feasibility of selected AAR propositions and the specific roles that could be played by Academic Health Science Networks (AHSNs) and other key actors in the implementation of the propositions.
- This slide set provides details and analysis on participant views on the feasibility of these recommendations and the associated enabling factors. A high-level summary report related to these findings is provided in the supporting document: *'Galvanising the NHS to adopt innovation: The feasibility and practicality of AAR propositions'*.





# Recommendations in focus

- The Accelerated Access Review aims to speed up access to high-impact, cost-effective innovative drugs, devices, diagnostics and digital products for people using NHS services.
- AAR interim report puts forth five propositions for improving current pathways for the development, assessment and adoption of innovative medicines and medical technology in the NHS. Specifically, the project investigates three recommendations relating to proposition four: *galvanising the NHS*.



A new earmarked fund to encourage AHSNs and other key innovation actors to lead system redesign



Mobilising the influence of clinical system leaders to champion change



Encouraging secondary care organisations to take on 'innovation champion' roles



# Methodology

Our approach involved a focused engagement exercise on the Accelerated Access Review (AAR) interim report with key actors across the healthcare pathway:

- A document review to refine and elaborate the research questions.
- A workshop with AHSN CEOs/Commercial Directors in December 2015 to explore the implications of the propositions in the interim AAR report with senior AHSN leadership.
- 23 interviews with senior NHS staff in three regions (South West, UCL Partners, and North East and North Cumbria), to provide national coverage of perceptions on the AAR propositions and explore how the roles assigned to NHS providers in the interim review are understood and viewed by the stakeholders.





## Document review

- A document review was conducted to highlight existing research relevant to the specific recommendations in focus and the background to the AAR more generally.
- Despite the potential of innovation to contribute to the productivity, quality of care and cost-effectiveness of the NHS, there are a range of widely perceived challenges that need to be overcome.
- The key barriers to establishing an NHS that 'wants and rewards' innovation and consequently – if addressed – key drivers of innovation revolve around four core categories of issues:



Incentives and  
accountabilities



Exchange of  
information,  
evidence and  
good practice



Capacities,  
skills and  
leadership

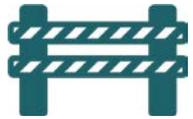


Policy,  
environment,  
process and  
pathway



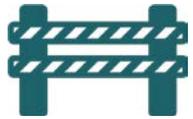
## Document review

- The National Health Service (NHS), in common with most other healthcare systems in high-income countries, is under pressure to meet the growing demand for healthcare services with limited resources.
- NHS England anticipates that the population's need for healthcare services will continue to grow faster than the funding available for those services. The Department of Health has identified improving the uptake and diffusion of innovation within the NHS as an important way of responding to this challenge. Although the NHS has a history of pioneering health innovations, it has traditionally been better at their development than at their diffusion and adoption (HM Treasury 2011; Department of Health 2011).
- It is recognised that innovations in healthcare are complex. Successful pilots of innovations often fail to be replicated in sustainable services, and various explanations are offered for this – often reflecting the methodologies used to explore them. These often suffer, among other things, from not generating pragmatic lessons.
- Despite the potential of innovation to contribute to the productivity, quality of care and cost-effectiveness of the NHS, there are a range of recognised challenges that need to be overcome.
- Key obstacles to establishing an NHS that 'wants and rewards' innovation revolve around four key issues (e.g. Bienkowska-Gibbs et al. 2015; Marjanovic et al. 2015; Quilter-Pinner & Muir 2015; Wooding et al. 2015): (i) incentives and accountabilities; (ii) network-related bottlenecks to the exchange of information, evidence and good practice; (iii) capacities, skills and leadership; and (iv) policy, environment, process and pathway (*see next slide*).



# Barriers to innovation in the NHS

<b>Key obstacles to innovation in the NHS</b>	<b>Examples of related bottlenecks to the adoption and diffusion of innovation</b>
<b>Incentives and accountabilities</b>	<ul style="list-style-type: none"><li>• Pressures to meet immediate short-term needs</li><li>• Inertia and the absence of consequences for organisations who do not adopt NICE guidelines</li><li>• The absence of clear lines of accountability for innovation</li><li>• Upfront costs of innovation in an environment of austerity and the tension between initial investment and disinvestment needs and prospects for longer-term gain</li><li>• Misalignment of individual and organisational performance measures and incentives for innovation</li><li>• Risk aversion and other cultural issues</li></ul>
<b>Network-related bottlenecks to the exchange of information, evidence and good practice</b>	<ul style="list-style-type: none"><li>• Different appraisal processes and outcomes between national and local bodies, the absence of clear evidence and metrics</li><li>• Challenges to connecting those developing innovations and those making procurement and commissioning decisions</li></ul>



# Barriers to innovation in the NHS

<b>Key obstacles to innovation in the NHS</b>	<b>Examples of related bottlenecks to the adoption and diffusion of innovation</b>
<b>Capacities, skills and leadership</b>	<ul style="list-style-type: none"><li>• The lack of leadership skills for innovation adoption and diffusion</li><li>• The need for training and education curricula to support the development of innovation-related skills</li></ul>
<b>Policy, environment, process and pathway</b>	<ul style="list-style-type: none"><li>• Silo and short-term budgeting as a barrier to investing in innovation</li><li>• Pricing and reimbursement challenges</li><li>• The prioritisation of affordability and safety in commissioning processes (i.e. risk-reduction), over quality of care and patient outcomes</li><li>• Lack of clarity on decisionmaking pathways and processes</li><li>• Challenges to ensuring that national direction aligns with the local demand-driven innovation needs of frontline staff and populations</li><li>• Data-related challenges</li><li>• System complexity</li><li>• Resourcing challenges</li></ul>



# Workshop

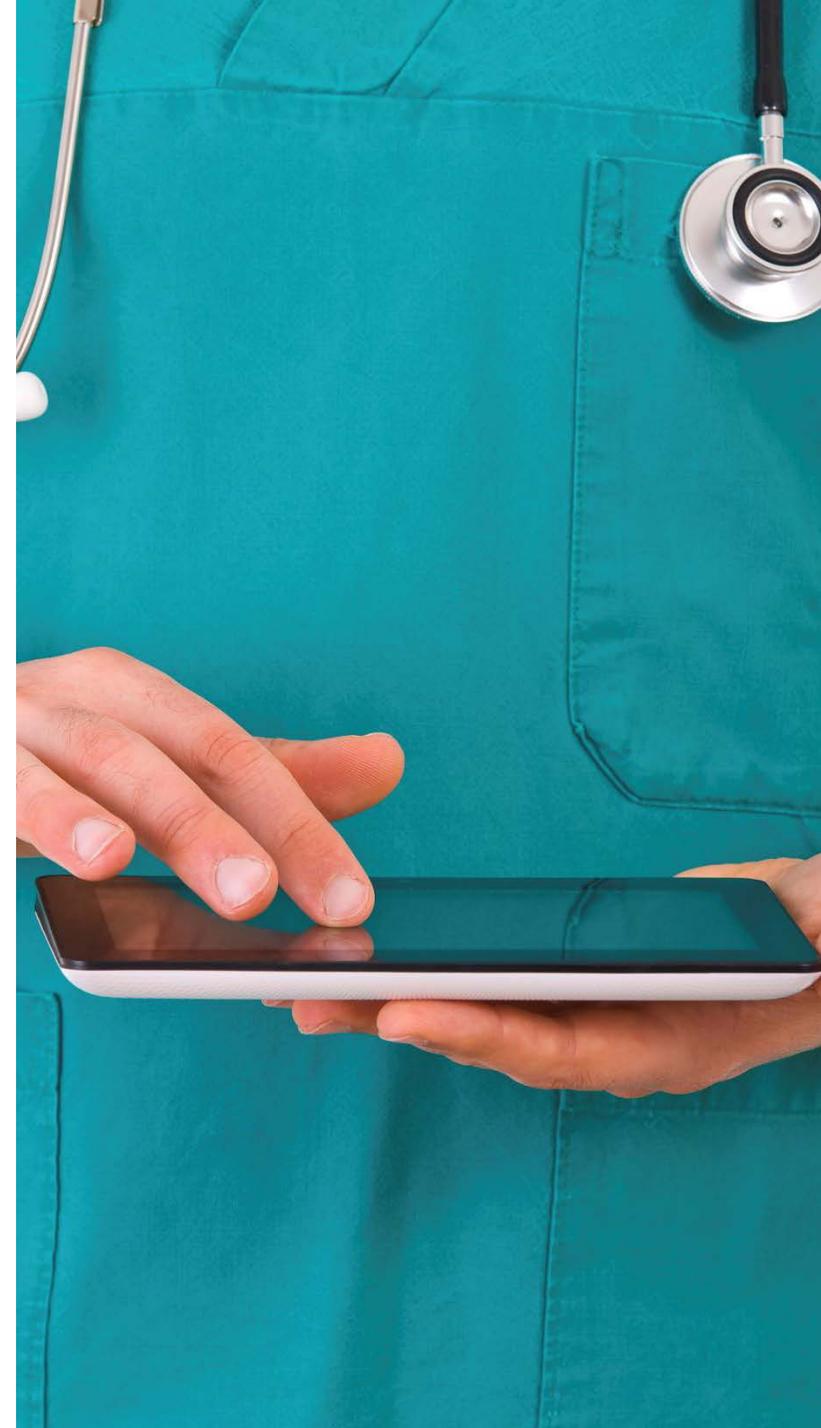
- The workshop was facilitated by RAND Europe, with organisation and planning assisted by the Office of Life Sciences. Held in December 2015 at the Wellcome Trust, the workshop explored the implications for Sir Hugh Taylor's propositions in the interim AAR report with senior AHSN leadership. A workshop was held with AHSNs specifically as they were identified as a key organisation to support innovation adoption and diffusion in the interim AAR report.
- The workshop was organised for AHSNs to contribute and discuss the following questions:
  - Could you implement the suggestions set out in the AAR interim report?
  - What would your stakeholders need to do to enable successful implementation?
  - What are your dependencies on others and how could they influence implementation?
  - What would be required to encourage implementation – including additional direction, freedom or resourcing?
  - What information would you need to (i) make decisions on the feasibility of implementation and (ii) to enable implementation?
  - What capacities are needed for implementation? Are these in place or do they need to be built?
- The workshop focused on AHSN activities in relation to the NHS, rather than on the private sector as these aspects of the AAR interim report are to be covered by other projects.



# Interviews

23 interviews included senior representatives from:

- Different providers: Specialist hospital trusts; teaching hospitals; district general hospitals; general practice; social care
- Academia including academic clinicians and researchers, and university/medical school board members
- Clinical commissioning groups
- Other NHS organisations (such as CLAHRCs, Clinical Senates, Vanguard)
- Many of those interviewed had multiple affiliations providing additional coverage of NHS providers and organisations and also insights into perspectives from outside the NHS.
- Interviews were conducted within AHSN regions including South West, UCL Partners, and North East and North Cumbria providing perspectives from stakeholders working in different English geographies and contexts.





# Interview protocol

- Over 50 invitations to interview were sent out directly by RAND Europe and a total of 23 interviews were conducted across three preselected AHSN regions including the South West, UCL Partners, and North East and North Cumbria. Potential participants were contacted via email and interviews conducted from late December 2015 through to January 2016.
- Of those that did not take part, the main reason was the lack of availability during the interview period. A small number of those contacted declined to be interviewed because of a lack of familiarity regarding innovation in the NHS. In these cases alternative contacts were approached.
- Consent was requested to record interviews on the basis that quotes would be used anonymously. All interviews were transcribed against the interview protocol and data from interviews were coded thematically against the three recommendations in terms of feasibility and the related critical challenges and success factors for implementation. Finally, material from interviews was also coded against the cross-cutting barriers identified earlier to include any broader issues related to innovation adoption and diffusion.
- Interviews were used to explore how the role assigned to NHS providers in the interim review is understood and viewed by the stakeholders. We also asked interviewees to think about what challenges and enabling factors would need to be considered if the interim report propositions were implemented.



# Interview protocol

- For the recommendation on earmarked funding, interviewees were asked whether there was an organisation with capacity and expertise to take on the role of channelling funds.
- For the recommendation on organisational champions, interviewees were asked to identify organisation(s) with capacity and expertise to take on this role in their local region.
- The protocol also included questions on the type of information and evidence needed to facilitate the adoption of innovation in the NHS, as well to identify best practice for accelerating the adoption and diffusion of innovation.





## Limitations and caveats

This study reflects a perceptions audit of stakeholder responses to the propositions highlighted above, and as such our findings need to be interpreted with the following caveats in mind:

- The project scope/duration means the sample of interviews should be seen as a proxy for the views investigated, rather than as a fully representative sample. For example, it was not possible within project timescales to capture views from all English regions.
- We engaged with stakeholders in three different English regions to provide a range of geographical contexts, but it is possible additional views would have emerged from other regions.
- The interim report recommendations were intentionally set at a high level in order to engage with providers and community and, as such, participants had different interpretations of them. We have captured the diversity of opinion in this report and supporting notes.
- The relatively focused nature of this work means a full assessment of the potential interactions of recommendations, or a complete assessment of the wider system implications was out of scope.



# Recommendations in focus



A new earmarked fund to encourage AHSNs and other key innovation actors to lead system redesign



Mobilising the influence of clinical system leaders to champion change



Encouraging secondary care organisations to take on 'innovation champion' roles



# A new earmarked fund for system redesign: Overall feasibility

- The feedback on the earmarked fund for system redesign to support innovation adoption was generally positive. Additional funding for innovation was identified as an important incentive for changing behaviour, system redesign and reorganisation of processes.
  - *'There is nothing like finances to change culture' (Teaching Hospital: 7)*
  - *'The model has potential and is what a lot of people hoped the payment by results scheme would have been able to do' (CCG: 3)*
- An earmarked fund was expected to be able to:
  - Help promote local initiatives to bring together the necessary actors to help support the adoption of innovation, and potentially their wider diffusion.
    - *'As a principle it [the earmarked fund] is very sound. The links between AHSNs and clinical research networks are highly variable, so one of the things you could do in this system is galvanise that link and force them to work together' (Academia: 17)*
    - *'One of the things the AHSN can't do, because of the funding, is create wealth and bring the commercial sector to work with the NHS. There is opportunity for small grants to pay out to the system from the AHSN for lots of different areas' (CCG: 16)*
  - Support take-up of projects that are currently challenged by budget silos.
    - *'It's very hard to make the money flow around the system' (CCG: 3)*



# A new earmarked fund for system redesign: Overall feasibility

- Provide ‘headroom’ for innovation and risk-taking. This is particularly important in regions with budget deficits, where only limited resources can be dedicated towards innovation because the risk of innovation projects to deliver anticipated efficiencies has real implications on the budgeted spending on frontline services.
  - *‘When you are in deficit you can’t afford to invest in something that doesn’t have a pay back. This runs counter to innovation, where the point is it doesn’t have any evidence’ (CCG: 5)*

The comment above is less relevant for treatments covered by NICE TA guidance, but highlights the difficulties of finding evidence for new or fast moving technologies such as new apps.
- Some concerns were noted about the recommendation for an earmarked fund and its aims:
  - Participants felt funding may be better used to better support existing processes and target service delivery.
    - *‘You don’t get very far if you expect the clinician innovator to do some interesting additional work on top of a really busy clinical service. There is a need for some ring-fenced funding’ (DGH: 10)*
    - *‘For every pound spent by government, only a proportion finds its way to the frontline, where professionals treat patients’ (Teaching Hospital: 6)*
    - *‘There’s quite a lot of simple innovations going on in the NHS at the moment which don’t seem to reach people because they are not commercial. Nobody makes money out of it so you don’t have the resources to go around making sure that it’s adopted’ (Specialist Trust: 12)*



# A new earmarked fund for system redesign: Overall feasibility

- *'What you really want to do is to support an infrastructure that has the necessary leadership and workforce at its fingertips. You can then focus on getting the processes right' (Academia: 17)*
- Another concern was whether an additional earmarked fund would increase inefficiencies by either supporting too many innovation projects, or contributing to increased fragmentation in funding and search cost.
  - *'The danger is that you create multi-funds, all of these different pots and that becomes then a bit confusing' (CCG: 11)*
  - *'One of the difficulties is there is a plethora of initiatives and funds that it is very easy to overloaded by the number of primary care initiatives, the number of vanguards' (CCG: 5)*
  - *'A lot of money is allocated from the centre; by the time it gets down to us at the front line it is disseminated among numerous organisations for purposes that are often not terribly well thought through' (Teaching Hospital: 13)*
- Another concern was whether the scale and scope of funding would match the scale of challenge to deliver system redesign.
  - *'The worry is it funds what is already in place, I'm not entirely clear how one AHSN can cover an enormous area and fundamentally rewrite how innovation is adopted across the area because it will be spread too thinly, the funds will be spread too thinly, or it will go to the usual suspects' (Specialist Trust: 18)*



# A new earmarked fund for system redesign: Enabling factors

- Interviewees and workshop participants felt that the earmarked fund would need a clear, open and transparent governance process to set clear objectives for the fund, demonstrate how the fund would be managed, identify priorities and monitor progress.
  - *‘Good governance, clear, open and transparent bidding processes so there isn’t suspicion that the teaching hospital gets all the goodies’ (DGH: 10)*
  - *‘If there were funds made available to a region you would have to be cognisant of that, but there would need to be a good governance process to make sure it was open and transparent, and the appropriate bids were being resourced’ (CCG: 11)*
  - *‘Want to see how this money is being spent and what the return on investment is’ (Specialist Trust: 18)*
- Likewise, participants felt the fund would require clear guidance on the key ‘innovation’ priorities to maximise impact.
  - *‘In terms of the earmarked fund [...] you need to define what you mean by innovation’ (Academia: 4)*
  - *‘Prioritise on the basis of a combination of patient and cash releasing benefits’ (CCG: 3)*
  - *‘If you took a small amount of that funding to identify people early and provide social models of care, that would actually improve many more people’s outcomes than the few that might benefit from a very cutting edge drug’ (CCG: 9)*



# A new earmarked fund for system redesign: Enabling factors

- Different perspectives were collected on need for the aim of the fund to align with existing NHS national priorities and initiatives.
  - *‘Giving the system an opportunity to identify the key things that it wants to have a look at taking forward, and opportunity for some resource to make that happen that is not mainstream research’ (CCG: 16)*
  - *‘There are quick wins and anything funded by central government is going to want quick wins’ (Teaching Hospital: 13)*
  - *‘For us locally, we would like access to a generic pot of money, with some evidence about interventions that work, with freedom to invest in local priorities’ (CCG: 5)*
  - *‘The fund in practice could be a Challenge Grant [...] centres/networks have to decide how to spend the money and the AHSNs could provide metrics for defining success’ (Teaching Hospital: 7)*
- Participants suggested alternative financial models for the fund to achieve successful outcomes in their local health economy, including buy-out time for clinicians or innovation fellows on innovation projects, pump-priming and seedcorn funding, as well as challenge grants.
  - *‘Pump priming is helpful to be able to draw on some funds either to cover the cost to trips to places where they have got really good practice in place, or to back fill for clinical leaders so it leads across to nurturing clinical leadership’ (DGH: 10)*
  - *‘It should be possible to capitalise on the fund, so there should be a gain share. Could the AHSN keep half of the savings, they could reuse’ (CCG: 3)*



# A new earmarked fund for system redesign: Enabling factors

- Many participants interpreted the recommendation as a local source of funding, although different perspectives were discussed on the issue of competitive dynamics of how the fund should operate.
  - *'Funding should be competitive and not just provided as a pot to avoid wastage on "good ideas" from the centre' (Teaching Hospital: 6)*
  - *'What I wouldn't want to see is that systems/regions in difficulty wouldn't get a look in' (Teaching Hospital: 1)*
- Many viewed the AHSNs as having a key role to support adoption and diffusion, and were the most frequently identified organisation to lead the fund. Clinical research networks and CCGs were also recognised as other important leaders and concerns were noted about whether AHSNs had existing capacity to manage a fund for system redesign.
  - *'The AHSN is in a good position to act as a regional broker and run the earmarked fund. The process must be clear to establish what the priorities are and not be driven by publicity and media' (CCG: 3)*
  - *'Good idea and appropriate for the fund to be channelled through the AHSN – AHSNs a useful additional player as an honest broker – structure of the AHSN (e.g. including different representatives on the board)' (Teaching Hospital: 1)*
  - *'I don't necessarily think the AHSNs have the resources to help support the role out of innovation at the moment' (Specialist Trust: 14)*
  - *'The AHSN has no role in system redesign [...] it is not where the expertise is' (Specialist Trust: 2)*



# Mobilising clinical leadership: Overall feasibility

- Most interviewees felt that clinical leadership was a crucial component of innovation – to drive change and foster a culture of innovation across the system.
  - *‘Enormous potential for clinical leadership. At the end of the day it’s clinicians leading a case for change that makes things happen – no one else can do that’ (CCG: 9)*
- And that mobilising clinical leadership was necessary and feasible with careful governance and management.
  - *‘Clinical leadership is most important of three recommendations, but needs governance structure to ensure they maintain links to real world application, and take account of situation and activity already happening in primary and secondary care’ (Primary Care: 15)*
  - *‘To infuse clinicians with what their roles and responsibilities are not just in relation to the population, but in terms of the resources that they use. Then it is about providing management support – the practical process programming aspects [clinicians] may not be good at. Then it’s about finding a balance between clinical work and clinical leadership role – as it is incredibly difficult’ (CCG: 9)*



# Mobilising clinical leadership: Overall feasibility

- To be effective, clinical leaders need to be equipped with the right mix of skills and supported by resources, time and streamlined management and governance processes.
  - *‘If you are going to make the best of [innovation], you need a cohort of clinicians that properly trained in that space’ (Teaching Hospital: 19)*
  - *‘The key barrier or challenge to mobilising clinical system leaders for specific adoption and diffusion is time, which is always the challenge’ (Academia: 17)*
- There was a lack of consensus on whether the right mix of leadership skills was in place already to support innovation.
  - Particularly on skills for leadership and championing generally
    - *‘The leadership is there, it’s how you can harness it and give direction and self-confidence’ (Teaching Hospital: 21)*
    - *‘Traditionally a lot of leadership is from academic/specialist backgrounds – that’s great and we need it – but we also need something on generalisability and applicability on the ground – need multi-layered leadership rather than specialist training for academic leaders’ (Vanguard: 20)*
    - *‘Mix of developing the skills to think differently and be a champion – you need some sort of training to do that’ (CCG: 16)*



# Mobilising clinical leadership: Overall feasibility

- ... although more consensus on the lack of clinicians' skills for innovation and technology
  - *'There is an absolute dearth of people have been "trained" properly in what innovation means from the inside' (Teaching Hospital: 19)*
  - *'Perception might be that you are an innovator by virtue of being a clinician, but never perceived as requiring unique skills. Possibly require skills to take your innovation that next step. The diffusion, dissemination step. They have the knowledge transfer mobilisation fellowships through NIHR, but actually the people that apply are few and far between' (Teaching Hospital: 13)*
  - *'We have a generation of leaders that don't really understand necessarily what technology has got to offer' (CCG: 5)*
  - *'I don't think clinical leaders have a clue about innovation. You will get a few entrepreneurial amateurs. If there are any clinical leaders with an interest [innovation] they will have learned their interest by having a trade outside the NHS' (Teaching Hospital: 19)*



# Mobilising clinical leadership: Enabling factors

- Expanding the current approaches for mobilising leadership two models were found to be used by AHSNs: Innovation Scouts and credible high profile clinical champions.
  - The Innovation Scouts model received positive support from local stakeholders in the two regions where it was being used.
  - High profile clinical champions were also recognised across regions as necessary to support innovation and provide credibility to help champion innovation.
  - *‘Innovation hubs and innovation scouts are a spectacularly good idea. Funding some people to look at innovations and assess them and see if there is any IP is a good thing’ (Specialist Trust: 18)*
- Innovation related training was identified as an opportunity to help address the recommendation, although other forms of support were also identified, such as mentoring and coaching.
  - *‘No opportunities for people to be trained to become an innovator. This could be missing’ (Teaching Hospital: 13)*
  - *‘Traditional leadership programmes focused just on the NHS, don’t really allow for innovation’ (Vanguard: 20)*
  - *‘Question of whether leaders can be trained, or whether people are natural leaders. Time is bought out for research, but don’t buy people’s time for developing or disseminating good ideas. Senior leaders at NIHR are high quality and for service improvement’ (Teaching Hospital: 13)*
  - *‘Sending people on a course may not be the correct approach; coaching is helpful’ (Teaching Hospital: 13)*



# Mobilising clinical leadership: Enabling factors

- A need was identified by both interviewees and workshop participants to create a clear career pathway for innovation leaders in the NHS, and to include innovation in job plans.
  - *'Career pathways don't reward clinicians to take on innovation' (Teaching Hospital: 6)*
  - *'Sometimes there are a few levers to encourage clinical leaders – so if it was part of their job plan it would be part of what was expected of them to get ahead' (CCG: 16)*
- Creating time for innovation activity was found to be related to funding, but also to identifying the right system processes and reducing bureaucracy.
  - *'Funding is undoubtedly the key to get people's time to be able to look at the evidence to be convinced and then to work with their colleagues to get them convinced and so on' (Academia: 4)*
  - *'We don't lack the people to implement innovative activity. The difficulty we've got is which innovation. We have very bright people who are all looking to innovate, it's how do you synthesise which innovations fit with your strategy and then how do you get those innovations systematically innovated' (Specialist Trust: 2)*



# Mobilising clinical leadership: Enabling factors

- There was also a need to understand the variety in clinical leadership and how to support it throughout the system.
  - In terms of the type of leadership required:
    - Depending on the disease areas and type of technology, there are considerably different pathways and clinical systems, so leadership will need to vary accordingly (AHSN Workshop)
    - *‘Clearly what you need to combine that with is good management support to be able to organise the ideas and make sure they are managed out’ (CCG: 11)*
  - In terms of the nature and organisation of clinical leadership – for example whether through individual ‘star’ clinicians, or clinical networks:
    - *‘Clinical leadership is important; there’s something about the credibility of having a clinical champion for innovation which is important – clinical networks are really effective and often not as explicit, but the way they can spread innovation is important’ (Primary Care: 8)*
    - *‘You have to think about the network of clinicians who are in some senses the decisionmakers’ (Academia: 4)*
    - *‘Clinical networks are really effective and often not as explicit, but the way they can spread innovation is important’ (Primary Care: 8)*
  - And in terms of the need to include all system leaders to achieve effective change – innovation is not just about clinical leaders (AHSN workshop).



# Innovation champions: Overall feasibility

- Many interviewees did not agree with an individual secondary care organisation being selected to become a regional innovation champion. Many interviewees highlighted the importance of collaboration and the need to focus on champions for specific technologies.
- The feedback from the AHSN workshop also highlighted different views both for and against the recommendation.
- A small number of participants, however, supported the idea of secondary care organisations taking on an innovation champion role in their region.
  - *‘I like the idea of secondary care organisation taking this role only because they are reasonably high profile people as the public knows who we are’ (Teaching Hospital: 1)*
  - *‘Bigger hospitals probably have the critical mass in IT and infrastructure, more than maybe a community service provider, or GP federation’ (DGH: 10)*
  - *‘Implementation feasible for specialist hospitals to take a leading role’ (Teaching Hospital: 13)*
- Specialist Hospitals were identified as natural champions for specialist treatments and ‘game changing’ drugs.
  - *‘There are niches that you would want a specialist hospital to lead on’ (Specialist Trust: 2)*
  - *‘If you are looking at cutting edge cancer or oncology treatments, and better ways to manage people when they are in hospital, such as things that reduce damage from surgery – then secondary can lead’ (CCG: 9)*



# Innovation champions: Overall feasibility

- Teaching hospitals lacked the support of other types of providers to champion change.
  - *‘Teaching hospitals not the right leader for innovation – they might do lots of innovation, but lack the governance structure to work within the commissioner’s budgets’ (Primary Care: 15)*
  - *‘There is the ivory tower perception [...] there is an assumption that the teaching trust gets it [championing role]’ (Specialist Trust: 18)*
- The majority of participants felt that a single organisation/provider may not be best placed to champion innovation in their region to increase population health.
  - *‘Secondary care leaders are not in a position currently to champion innovation’ (Teaching Hospital: 6)*
  - *‘From a population perspective the vast majority of care is not linked to secondary or specialist hospitals’ (Specialist Trust: 2)*
  - *‘I worry about secondary care’s full understanding the entire system – normally they are forerunners in academic/R&D – at the detriment to innovation needed outside of the hospital setting – e.g. care and implications from changing demographics’ (Vanguard: 20)*



# Innovation champions: Overall feasibility

- Many participants challenged whether secondary champions would be best placed to decide innovations to prioritise to deliver maximum benefit for the population health. This was due to several factors:
  - The presence of perverse financial incentives that present a barrier to adopting innovation that may financially disadvantage either primary or secondary care providers.
    - *'Working on a system of reimbursement from commissioners that pay you based on outpatients' visits so the last thing the chief exec wants is for you to find a way of decreasing the number of outpatients' (Academia: 22)*
    - *'Specialists will be encouraged to try out new types of medicines and this will be quite expensive for primary care prescription' (CCG: 16)*
  - Ability of secondary care providers to identify and deliver innovation towards the health and care system priorities.
    - *'Can we have innovation on the high volume experience of where thousands of patients go through every day?' (CCG: 5)*
    - *'Plenty of innovation happens out there in the community that is often largely ignored (e.g. changing models of care, helping patients self manage)' (CCG: 9)*
    - *'If you look at things like diabetes research, it's died in secondary care, it's happening in primary care. Cardiology research is going to do the same thing. That is where the innovations have to happen' (Specialist Trust: 18)*



# Innovation champions: Enabling factors

- A common concern with the principle of ‘championing’ activity was to ensure clear channels of communication and decisionmaking with commissioners.
  - The expertise of CCG was expected to ensure that appropriate trade-offs between the experience and outcomes of the targeted patient group would be weighed against those of the wider population.
- The role of championing as an activity was regarded as crucial for the innovation process, to act as a driver of innovation to overcome challenges and obstacles in the NHS system, particularly including local champions.
  - *‘Having champions which can focus on particular points of the pathway’ (Teaching Hospital: 7)*
  - *‘A local champion is needed to get buy in, a network of clinical champions that sign up to do the same type of thing or approach is important – variation can create problems – and move away from good practice. To have local champions is important’ (CCG: 3)*
  - *‘The less local you are the harder it becomes to get buy in. A local champion is needed to get buy in’ (CCG: 3)*



# Innovation champions: Enabling factors

- A collaborative approach is essential to ensure uptake of innovation across the health and care pathway and avoid 'the not invented here' syndrome.
  - *'Culturally there is still a "not invented here" culture across the NHS' (Specialist Trust: 2)*
  - *'Innovation champion has to be somebody who has already demonstrated an interest/leadership in innovation. Need then to understand how they can develop the infrastructure within their organisation to deliver and how they engage others in the innovation agenda and link that to service impact and sustainability' (Teaching Hospital: 1)*
  - *'Confident that pretty much all of the organisations on our patch have got innovation good for patients – so wouldn't want to single anyone out' (DGH: 10)*



# Innovation champions: Implications for primary and community care

- Championing may involve a variety of different actors including AHSNs, GPs, nurses and pharmacists in addition to clinicians and commissioners.
  - *'AHSNs much better placed to champion change than individual organisations. The way in which they are set up, they have population healthcare focus that makes them a far less contentious place to put additional funding if you want it to fund the whole care pathway or innovation to support whole pathways of care'* (CCG: 9)
  - *'If you want innovation delivered at scale reliably, you would deliver through a nursing workforce'* (Specialist Trust: 2)
  - *'GPs will buy [low cost technology] to help with clinical decisionmaking, improve patient outcomes, and improve the function of the health system'* (Primary Care: 15)



# Innovation champions: Implications for primary and community care

- Financial enablers were viewed as an important way to support innovation championing activity, particularly those that created shared incentives to collaborate to adopt and diffuse innovation. This included shared funding models across providers and, in the future, accountable care organisations.
  - *‘The other problem is the funding arrangement. There is little incentive for organisations to work across their boundaries’ (CCG: 9)*
  - *‘There’s a strategic question about what failure you’d accept. Some innovation took 20 years before they were produced’ (Primary Care: 8)*
  - *‘If talking about big population health gains the accountable care organisation is much better placed to do that’ (Specialist Trust: 2)*
- Alternative approaches to championing innovation can also be used to reduce the need for direct funding.
  - *‘[Innovation] scouts do it because they are interested not because of any finances’ (Specialist Trust: 14)*



# Implications of the findings



A new earmarked fund to encourage AHSNs and other key innovation actors to lead system redesign

AHSNs are generally trusted by participants to play a leading role in channelling an earmarked fund, provided they are appropriately resourced, have clear governance structures in place for such a dedicated innovation fund, and can ensure appropriate relationships with commissioning groups. Aligning the earmarked fund with existing funding mechanisms may help improve system level take up and minimise bureaucracy.



Mobilising the influence of clinical system leaders to champion change

The different models in use by AHSNs (such as innovation scouts and innovation champions) represent examples of the types of innovation roles needed from clinicians to facilitate the adoption and diffusion of innovation in the NHS. They highlight the need for both individual and network leadership through a connected community of scouts and champions.



Encouraging secondary care organisations to take on 'innovation champion' roles

For any given region it is likely that a number of innovation champions will be required to satisfy innovation needs and realise benefits across full healthcare pathway. Decisions about the organisation of innovation champions will need to be made on a collaborative basis to ensure the widest possible buy in, and therefore diffusion of subsequent innovation produced.



# Cross-cutting themes: Incentives and accountabilities

- Collaboration and stakeholder engagement are key to avoiding the ‘not invented here’ culture, which can have a significant impact on diffusion.
  - *‘It’s about co-creation/design/production, so about recognising the spread of innovation is a social activity that is based on the dynamics of good relationship/understanding on the ability to communicate complex ideas to people’ (Primary Care: 8)*
  - *‘Diffusion comes down to the greater good versus the individual good. Because we are very organisationally focused, clearly moving towards a system focus, it is very easy for individual organisations to block diffusion on the grounds it is not in their individual organisational interests’ (CCG: 5)*
- Individuals should be rewarded for innovation and, critically, innovation activities should be recognised in their job plans/career pathways.
  - *‘What needs to go with the money is recognition of the role and then performance management to set expectations – this may require efforts to get buy in from NHS Trusts (e.g. recognise role in job plans)’ (Specialist Trust: 14)*
- Incentives and priorities for drugs, devices and tech need to be considered separately.
  - *‘Recommendations don’t work as well for devices and other technologies – as still need to think about measures of success for these’ (Teaching Hospital: 7)*



# Cross-cutting themes: Exchange of information, evidence and good practice

- Methods for clinicians to share evidence and best practice in innovation adoption are required at the regional, local and national level.
  - *‘Platforms for national learning not there – AHSNs may be a good vehicle but they are not the prime storyteller’ (Teaching Hospital: 1)*
  - *‘The biggest single barrier [to adoption] is lack of evidence of better outcomes or cost effectiveness’ (Academia: 4)*
  - *‘How to demonstrate the measurable impact of patients in outcomes or experience’ (DGH: 10)*
- There is still a lack of knowledge around how to fund innovation in the NHS as it is still relatively nascent.
  - *‘There is a lack of investment in innovation in the NHS. I think healthcare innovation will always require clinicians, but I don’t think they have a scooby about innovation because they are not properly trained in it’ (Teaching Hospital: 19)*



# Cross-cutting themes: Exchange of information, evidence and good practice

- There is a great need for people to share data to make big national studies possible.
  - *‘Enabling clinicians to understand what data is available and use it [...] interrogate systems to draw out the information that you need to really baseline a service, that enables the innovation to demonstrate that it works’ (DGH: 10)*
- The evidence base to support the uptake of devices & tech needs to be improved.
  - *‘Different levels of evidence for different technologies. Drugs have the highest level nearly always. The process with NICE is all in place, but lacks the equivalent for devices and IT tech in such a robust fashion and perhaps should be developed’ (CCG: 3)*



# Cross-cutting themes: Capacities, skills and leadership

- There is a lack of implementation expertise in the NHS and the skillset required for promoting adoption was different from that needed for promoting diffusion.
  - *‘General implementation science is not well understood within the NHS [...] The barriers seem the same whether sitting on the NIC board or in the CCG’ (CCG: 3)*
  - *‘With diffusion it’s a slightly different skillset. Clearly the innovators take the ideas and translate them into a product, then translating that into a viable commercial solution, whether that be in the private or public sector, requires a slightly different skillset so that requires real leadership of people, real management process and real attention to detail around some of the commercials/finances’ (CCG: 11)*
- The resources needed to improve the adoption of innovation in the NHS require time for clinicians to engage and for there to be reductions in the bureaucracy associated with financial incentives.
  - *‘There is a limitation in financial incentives in that they often require a lot of input (e.g. time to prepare proposals, time to report on performance/justify spend)’ (Specialist Trust: 14)*



# Cross-cutting themes: Policy, environment, process and pathway

- Clear and transparent criteria are needed for awarding funds, both cash saving and patient benefit criteria.
  - *‘If there were funds made available to a region [...] there would need to be a good governance process to make sure it was open and transparent, and the appropriate bids were being resourced’ (CCG: 11)*
- Do the proposed incentives target the critical stakeholders (e.g. those holding the purse strings, commissioners)?
  - *‘The critical path is the person in the NHS with the purse strings. These are the commissioners. If you don’t tackle this, the innovation will fail. Unless the innovation can tick boxes, such as cost, ease of use and availability’ (Primary Care: 15)*
- Economic assessment of benefits of an innovation for the full pathway to reflect a real business case.
  - *‘Health economics is useful – it gives national numbers and QALYs to work from. But a business case would be good too – if you invest £X it will do this, and as a result will save you money over x period of time’ (CCG: 3)*
  - *‘Referring to information about the innovation itself, where it fits in and its potential value and its effectiveness, which is important, and its unintended consequences, probably about its cost saving, which is a big issue in the primary care sector’ (Primary Care: 8)*
- Attention on diffusion to deliver the greatest benefit from innovation.
  - *‘The big difference is that you can adopt independent of commissioning’ (Academia: 17)*



# Reflections across stakeholders

## Variation across regions

- North East and North Cumbria (NENC) and South West (SW) AHSNs have a different structure of providers from UCL Partners (UCLP). UCLP has a concentration of hospitals within in close proximity that may help ensure close collaboration.
- NENC participants highlighted the central role of Newcastle hospitals and the natural tendency to focus innovation activity there.
- NENC and SW highlighted the role of local innovation priority on telehealth to offset the expected concentration of services into fewer, but larger hospitals and to reduce the volume of patient miles.

## Variation across providers/organisations

- Highlighted the barrier between primary and secondary care – although this can be overcome by adopting a partnering or collaborative perspective.
- Divergence in views on clinicians' ability to take leadership on innovation. The feedback from interviews with clinicians showed large variation in terms of perceptions of clinicians' level of experience with innovation projects, knowledge of pathways and ability to lead innovation projects.



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