

## NHS ENGLAND – BOARD PAPER

**Title:**

Developing our Academic Health Science Networks

**Lead Director:**

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**Purpose of Paper:**

We sponsor England's 15 Academic Health Science Networks (AHSNs). In March 2018 they reach the end of their first five year cycle. This paper sets out the principles underpinning how we propose to sustain and enhance their collective impact over the next five years.

AHSNs serve as vital “connective tissue” between industry, universities, and the NHS. From research and invention, through to adoption and widespread diffusion. As the centrepiece in our NHS innovation architecture, we propose to back AHSNs to play an ever more influential and impactful role.

For their work stimulating innovation, we are aiming for clearer, more consistent and standardised articulation of objectives, metrics, and value generation - for both the NHS and the UK economy. Their local NHS service improvement and transformation activities will in future be shaped and commissioned by their local Sustainability and Transformation Partnership (STP) leaders.

We have constructed a developmental process for relicensing, based on iterative planning. The 15 will submit their initial proposals, setting out the benefits they will generate. The AHSNs will work with us to examine the patterns that emerge across all 15 plans. Together we will tease out the most promising methods, avenues and projects to maximise value - some of which will then be crystallised into all AHSNs taking a common approach. We will also assess the comparative value promised by each AHSN, and provide feedback and challenge. AHSNs will then be invited to submit their final plan for approval, as the basis of their refreshed license from 2018.

**The Board invited to:**

- Consider and agree the approach we are taking to backing AHSNs, and maximising the value they can generate;
- Consider and agree that the Executive commence and run this “relicensing” process; and
- Agree that the Board will consider the fruits of the process at one of its subsequent meetings, in order to seek sufficient assurance to enable the formal signing of revised licenses that will take effect from April 2018.

## Developing our Academic Health Science Networks

### Background and context

1. As part of the portfolio adjustments announced in June 2017, NHS England is strengthening its focus on supporting the life sciences, innovation and research. The work of the previous Commissioning Strategy Directorate becomes more oriented towards this agenda. At the centre of this activity lies the way we sponsor and support the 15 Academic Health Science Networks. Together they form a comprehensive, England-wide architecture for cultivating the innovation ecosystem in the NHS. They bring together industry, academia and the NHS, and provide critical connective tissue between research, adoption and spread. They are our local delivery agents for discharging NHS England's role in supporting scientific development and innovation, whilst also serving NHS Improvement and their own local systems.
2. Established in 2013, they reach the end of their first five year cycle in March 2018.
3. At birth, AHSNs were given four very high level goals in their DH-migrating-to-NHSE license: (i) support the needs of local populations, through a place-based approach; (ii) foster a culture of partnership and collaboration; (iii) generate wealth through working with industry; and (iv) speed the adoption of innovations. They also host the Patient Safety Collaborative on behalf of NHS Improvement.
4. During this first phase, our relationship with the Networks could be characterised as fairly light touch and hands-off. We made a conscious decision to give the fledging bodies space to ascertain and develop their own best approaches to unlocking value, within their differing local contexts – their local NHS; their local populations and communities; and highly variable size of research and industry bases. At the same time, NHS England's Regional Medical Directors have provided formal oversight of the license by helping to ensure that there is adequate purpose (eg through clear annual business plans), governance and leadership, and impact.
5. The focus of the AHSNs on whole systems and place, and on collaborative behaviours, prefigured much of the *Five Year Forward View's* emphasis on integration. In many parts of the country, AHSNs have become a trusted space that supports better join up between the different component parts of the NHS; for example, the work of the UCL Partners AHSN in supporting the Essex Success Regime. They now form a natural, if modestly scaled, delivery agent for STPs, with their own local networks and expertise in quality improvement, clinical engagement and pathway redesign. They are essential to delivering a number of national programmes including genomics, medicines optimisation, mental health, diabetes and stroke prevention.
6. The opportunity for unlocking greater synergies between the UK's outstanding science and research base, its life sciences industries and the NHS becomes ever more apparent. Advances in digital and genomic technology will become integral parts of care delivery and transform the way we conduct research. The Accelerated

Access Review, the forthcoming Life Sciences Strategy, and the *Next Steps on the NHS Forward View* reinforce the critical role of AHSNs to serve as “innovation exchanges”. AHSNs will have a sharper focus on supporting economic growth and ensuring it goes hand in hand with NHS sustainability.

7. A longstanding challenge for both the NHS and industry is achieving faster diffusion of proven innovations. Whilst each AHSN has a responsibility to its own population, together the 15 share the responsibility for working together, with national bodies, to achieve spread that is England-wide. As AHSNs have matured, they are increasingly working as one - to agree the areas where it makes sense to develop and adopt a common approach by all 15, eg by rolling out the innovation and technology tariff. The AHSNs all now pool a small proportion of their funding to support a national office.

## Existing performance and configuration

8. Before kicking off the “relicensing” process for the next five year cycle, we have taken stock of performance to date, and AHSN configuration.
9. A new Senior Oversight Group with NHS Improvement (Kathy MacLean and Adam Sewell-Jones), the Office of Life Sciences, Professor Sir Bruce Keogh, Ian Dodge (chair), and the Regional Medical Directors now meets. The NHS England executive group has also considered this. We drew on data such as independent AHSN Stakeholder Survey undertaken by YouGov, as well as assessments by Regional Medical Directors on the progress each has been making.
10. This group initiated a number of actions and reached a number of conclusions.
11. Overall, we were pleased to see widespread and increasingly strong support for what the AHSNs are doing. 87% of stakeholder survey respondents believed that their AHSN had provided support with identification, adoption and spread of innovation. 80% believe that AHSNs are providing leadership to their local health economy. 86% stated that AHSN staff are helpful.
12. Another measure of their success is the amount of additional business AHSNs are now generating from their local systems: over £120m across the 15.
13. A succession of annual reports set out the positive impacts AHSNs have achieved most recently: [http://www.ahsnnetwork.com/wp-content/uploads/2017/06/AHSN-Network-Impact-Report-2017\\_Web\\_spreads.pdf](http://www.ahsnnetwork.com/wp-content/uploads/2017/06/AHSN-Network-Impact-Report-2017_Web_spreads.pdf). The annex lists the 15 AHSN websites, which provide supplementary information about past and current projects and impact.
14. To illustrate with examples. AHSNs have worked closely with National Clinical Directors to improve patient safety, cancer, diabetes, stroke services (the Don't Wait to Anticoagulate programme grew out of the West of England), mental health (eg early intervention in psychosis in Oxfordshire), and medicines optimisation (eg the

polypharmacy collaborative in Wessex). Imperial has improved neuro-rehabilitation in North West London. Kent, Surrey and Sussex redesigned the emergency laparotomy surgical pathway. South London (the Health Innovation Network) set up the Catheter Collaborative. Together the AHSNs support delivery of the 100,000 genome project, working with the 13 Genomics Medicines Centres. They have delivered and supported national and local innovation programmes including test beds; the Connected Cities programme in the north of England; digital transformation (eg across London); incubating small and medium-sized enterprises (SMEs), including through the Small Business Research Initiative; supporting the clinical entrepreneur programme and national innovation accelerator. They have been instrumental in supporting 226 different innovations be adopted in the NHS.

15. A second conclusion of the Senior Oversight Group is that, although there is variation in impact, it is not possible to calibrate this with a very high level of precision, given the heterogeneity of their activities and current absence of common metrics for measuring similar activities. We can however clearly see the outputs and often outcomes from their many individual projects and programmes; and this has been balanced with regional insight and judgement. The relicensing process and the new “value framework” is intended to help provide a clear common framework for demonstrating impact from 2018/19.
16. Third, in certain geographies, the group concluded that we should be seeing better links between AHSNs and their most local major research and life sciences base. Following this feedback, we are now seeing much stronger collaboration intended between Eastern AHSN with Cambridge University Health Partners, and a new partnership forged between Kent Surrey and Sussex AHSN and the Health innovation Network, the AHSN for South London. Dr Steve Feast at Eastern AHSN, Malcolm Lowe-Lauri at Cambridge University Health Partners, Guy Boersma in Kent, Surrey and Sussex AHSN, and Tara Donnelly in Health Innovation Network have helped us with this
17. Fourth, we concluded that the existing AHSN configurations remained the right ones, albeit with some marginal adjustments required, better to reflect STP boundaries, eg in Lancashire.
18. Fifth, we have sought the views of STP leaders where their support had been less obvious – and have received clear assurance on this point. This is subject, of course, to STPs being content with the outcome of the forthcoming process by which they more explicitly orientate and commission their AHSN to provide the support they most want and need (as opposed to this being seen as primarily supply-driven: a function of the capabilities and interests of the AHSN).
19. And finally, the AHSNs inevitably vary in maturity, some having seen fairly recent changes in senior leadership. At its last meeting, following the actions identified above, the Senior Oversight Group reflected that none are now in a position where a leadership change is a pre-requisite to commencing the relicensing process.

## Resources

20. We are seeking to provide stability for the network through a further five year relicence period. The view from the AHSNs is that it would become increasingly hard to maintain minimum viable size were their core funding to reduce further. The scale of our collective ambition for impact needs to be tempered by the reality of the resources available.
21. Wider pressure on NHS England central budgets means that core funding for all the 15 AHSNs will have seen a reduction from a total of around £50m initially, to 30m from 2018/19 (ie a mean of £2m per AHSN). This income is supplemented by income generated from local partners, and by certain specific national programme activities. £7m is provided by NHS Improvement for patient safety and quality improvement work. We are seeing initial investment from Government to support their role as innovation exchanges.
22. AHSNs are planning on the basis of a five year period under proposed relicensing. However, in the absence of a long-term funding settlement for the NHS, we cannot provide a multi-year, minimum income guarantee to AHSNs right now; future funding will be subject to affordability alongside other central spend in line with NHS England business planning processes. As AHSNs demonstrate a clear increase in the real-world value they generate, they make a stronger investment proposition for national and local funders.
23. NHS England is currently reviewing the allocation method, in order to ensure the approach is fair whilst recognising minimum fixed costs. We are also reviewing the general conditions of the current license to simplify and strengthen in line with best practice. AHSNs that currently operate as Companies Limited by Guarantee – as opposed to being hosted by a local NHS body - currently have to pay an additional, relatively small amount of VAT. Should they wish to become NHS hosted, NHS England will support this. But it is entirely a matter for each AHSN to consider.
24. Last week the Government backed AHSNs to enhance their role as innovation exchanges, through announcing a commitment to £39m of aggregate investment during the period 2017 to 2020. The funding will be equally split over the 3 year period and is additional to the NHS England and NHS Improvement funding; it will be made available to AHSNs via the Office for Life Sciences.

## Future objectives and the new Value Framework

25. In future AHSNs will have two primary functions: innovation, and service transformation. We envisage around 50% of the NHS England core national funding being notionally allocated to support each. Although distinct, the two functions clearly overlap and are mutually reinforcing.
26. On innovation and growth. AHSNs will cultivate their local innovation ecosystem, and manage a more planned NHS innovation pathway from research and invention

through to adoption and spread of proven innovations. A more innovative NHS will support the UK's aim to be a global hub for the life sciences sector, and stronger economic growth. Patients benefit from quicker access to innovative, affordable and cost-effective devices, diagnostics and drugs – and the NHS benefit from replacement of legacy interventions of lower value.

27. On service transformation. AHSNs will serve local STPs and the Regions by being commissioned to drive specific service improvements that dock within and are accountable to local programmes. As a result local populations will benefit from significantly improved health outcomes and transformation in NHS leadership, and quality of care.
28. The approach to the innovation objective will be much more standardised than now. Through an iterative relicensing process, we will finalise a new Innovation Value Framework. This will comprise a balanced array of innovation subjects. One of the ways in which AHSNs can more easily demonstrate impact will be to drive improvement against these objectives and metrics. We expect to co-create common currencies to be used by all, wherever practicable (eg all AHSNs to use the same method for calculating wider economic impact, or NHS return on investment).
29. The value framework will include specific common goals and metrics in the following areas: (1) their role in supporting the innovation ecosystem, eg by building capability, capacity, and acting as an effective broker; (2) supporting research - working with the National Institute for Health Research (NIHR), Allied Health Science Centres (AHSCs), and Collaborations for Leadership in Applied Health Research and Care (CLAHRCs); (3) stimulating economic growth, eg through expanding the life sciences sector - jobs generated, investment; (4) medtech optimisation; (5) digital uptake; (6) medicines optimisation; and (7) genomics and personalised medicine.
30. The NHS service transformation tasks will involve a small number of national elements, covering (1) safety, eg driving sepsis and Acute Kidney Injury best practice in line with the national CQUIN; (2) quality improvement in line with NHS Improvement's framework; and (3) tackling unwarranted variation, through a join up with Rightcare.
31. For the most part the service transformation goals will be highly localised and bespoke. Rather than being purely supply-led, they will for the first time be explicitly commissioned by the STPs with the Regions, bearing in mind the AHSN activities they currently value and wish to continue.

## **Relicensing process**

32. We have constructed a developmental process for relicensing, based on iterative planning.
33. Subject to Board agreement of this paper, we will issue the draft value framework shortly, and invite all 15 to will submit their initial proposals, setting out the clear

benefits they will generate. We will also write to all STP leads to ensure they are fully engaged in leading the commissioning process for AHSN local work on service transformation.

34. During the autumn, the AHSNs will work with us to examine the patterns that emerge across all 15 initial plans. Together we will tease out the most promising methods, avenues and projects to maximise value - some of which will then be further crystallised into all AHSNs taking a common approach.
35. We will also assess the comparative value promised by each AHSN, and provide feedback and challenge.
36. AHSNs will then be invited to submit their final plan for approval, as the basis of their refreshed license from 2018.
37. The process will continue to be overseen by the Senior Oversight Group, working with the network of AHSNs.
38. We propose that the Board considers the fruits of the process at one of its subsequent meetings, in Q4 of 2017/18, in order to seek sufficient assurance to enable the formal signing of revised licenses that will take effect from April 2018. This should follow Investment Committee consideration of value.

## Ongoing assurance

39. As we move into the new arrangements, we intend to bake in stronger responsibility for AHSN support and performance at local, regional and national level, and to connect the main commissioning organisations with the AHSNs to enable a deeper understanding of their work, barriers and enablers. With three commissioning organisations (NHS England, NHS Improvement and Office for Life Sciences), we want to do this once, not three times. We've already started this: the three commissioners and AHSNs all met together for the first time in May.
40. Nationally, the Senior Oversight group will continue to enable consistency and alignment of reporting, whilst seeking to reduce the burden on AHSNs. Regional Medical Director Teams will work closely with the AHSNs, NHS Improvement and Office for Life Science colleagues to support delivery and will feed through to the Senior Oversight Group.

## Recommendation

37. The Board is invited to
  - Consider and agree the approach we are taking to backing AHSNs, and maximising the value they can generate;
  - Consider and agree that the Executive commence and run this "relicensing" process; and

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- Agree that the Board will consider the fruits of the process at one of its subsequent meetings, probably in Q4, following on from Investment Committee consideration, in order to seek sufficient assurance to enable the formal signing of revised licenses that will take effect from April 2018.



## APPENDIX

**Eastern** (East of England, excepting west Bedfordshire, south Essex, west and south Hertfordshire)  
[www.eahsn.org.uk](http://www.eahsn.org.uk)

**East Midlands**  
[www.emahsn.org.uk](http://www.emahsn.org.uk)

**Greater Manchester** (including East Lancs)  
[www.gmahsn.org](http://www.gmahsn.org)

**Imperial College Health Partners** (north west London)  
[www.imperialcollegehealthpartners.com](http://www.imperialcollegehealthpartners.com)

**Kent Surrey Sussex**  
[www.kssahsn.net](http://www.kssahsn.net)

**North East & North Cumbria**  
[www.ahsn-nenc.org.uk](http://www.ahsn-nenc.org.uk)

**Innovation Agency** (Cheshire, Merseyside, South Cumbria and Lancashire)  
[www.innovationagencyncw.nhs.uk](http://www.innovationagencyncw.nhs.uk)

**Oxford**  
[www.oxfordahsn.org](http://www.oxfordahsn.org)

**Health Innovation Network** (south London)  
[www.hin-southlondon.org](http://www.hin-southlondon.org)

**South West** (Somerset, Devon, Cornwall and Isles of Scilly)  
[www.swahsn.com](http://www.swahsn.com)

**UCLPartners** (north east and north central London, south and west Hertfordshire, south Bedfordshire and south west and mid Essex)  
[www.uclpartners.com](http://www.uclpartners.com)

**Wessex**  
[www.wessexahsn.org](http://www.wessexahsn.org)

**West Midlands**  
[www.wmahsn.org](http://www.wmahsn.org)

**West of England**  
[www.weahsn.net](http://www.weahsn.net)

**Yorkshire & Humber**  
[www.yhahsn.org.uk](http://www.yhahsn.org.uk)

