ACCELERATED ACCESS COLLABORATIVE (AAC) BOARD

Meeting date: 21 June 2023

Paper Title: NHS as an innovation partner: Actions arising from the Life Sciences Council

Agenda item: 3

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Paper type: For discussion

AAC Priority Area:

Research	☐	Building innovation capacity	☒
Demand signalling and horizon scanning	☐	Innovator support	☒
Uptake of proven innovation	☒	Cross-cutting (Health Inequalities,	☒
Other (statutory, governance)	☐	Net Zero, Life Sciences Vision)	

Ask of the AAC Board:

- Note and provide feedback on the progress made following initiation of the Innovation Ecosystem programme in March 2023.
- Provide further input into the structure and next steps for the review and associated workstreams.
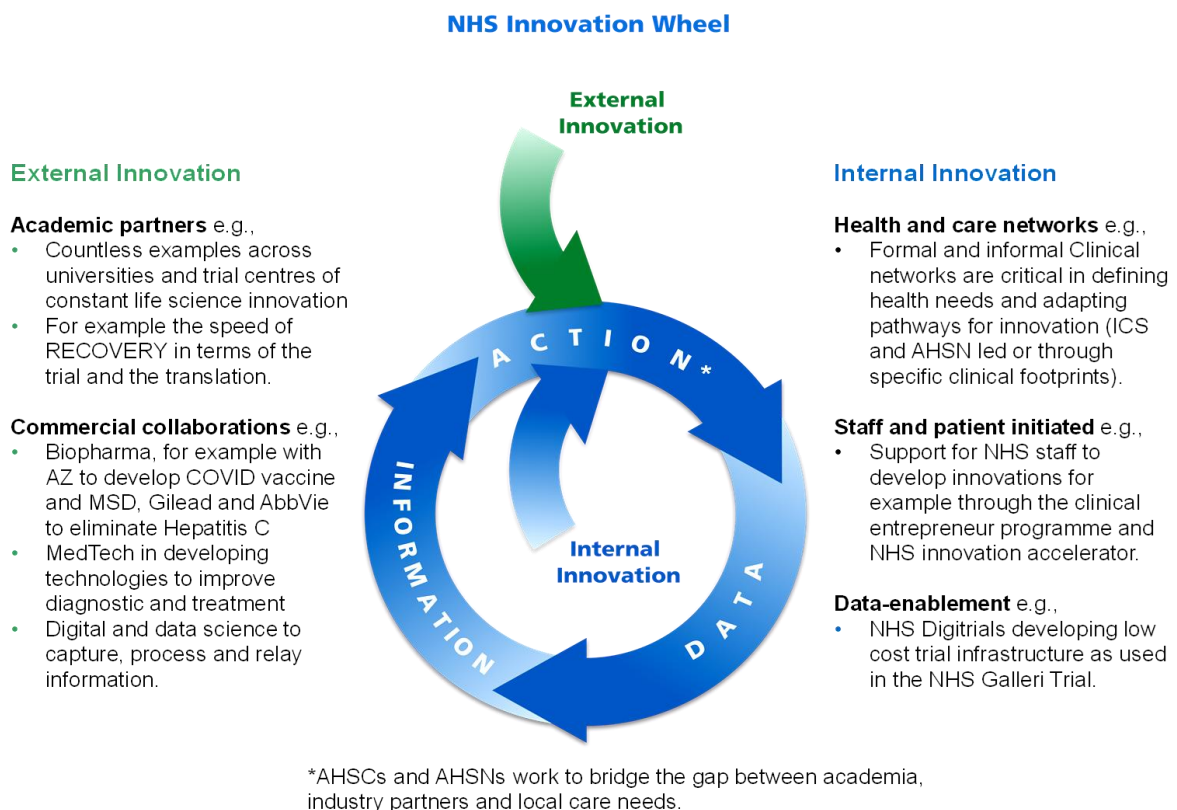
Background:

1. At the last AAC board meeting (March 2023), we updated the board on the plans to initiate a programme of action-focussed work, led by the National Director for Innovation, Research and Life Sciences, with the aim of supporting the NHS to be an outstanding partner within the life sciences innovation ecosystem – to identify how best to enable the NHS to become a learning health system able to transform clinical pathways to take advantage of new technologies, enable earlier detection of disease, and support citizen empowerment.

2. This paper updates on progress of the work. Much of the content will be familiar to the Board from papers and discussion in other groups and in 1:1 engagement. We have been taking stock since the programme's first Advisory Group held in May and the discussion at the National Life Sciences Council. The work is now accelerating and focusing on engaging people in delivery. For this to be successful, we are aware of the need to be focused and not attempt to "boil the ocean" – we would welcome views from the AAC on where this focus should lie and commitment of support for delivery.

Context:

3. The paper to the March 2022 NHSE board set out the importance of the NHS adopting a learning health system approach to innovation. A learning approach

is a virtuous circle of action which generates data which informs decision-making and implementation, generating further data for insights and so on (see Figure 1). It requires collaboration not just within the health system but across the ecosystem with the life sciences industry, research institutes, medical charities and importantly patients – enabling the NHS to take advantage of both internal and external innovation.

4. The NHSE board paper set out a list of enablers required to support the learning system approach, including:
   a. A clear entry point for innovators to engage with system irrespective of origin – NHS, academic, life sciences and the voluntary sector.
   b. An aligned approach to managing the development pathway for innovations from idea to adoption – with clear understanding of the enablers and decision points at each stage.
   c. Establishing a shared collective view of priorities within a system –whether at national, local, or place level.
   d. Integrating the pipeline for identified innovations into Integrated Care System (ICS) transformation programmes.
   e. Using a learning system approach – creating more consistent approaches for evidence synthesis, project evaluation, assessment of benefits realisation and capturing/sharing learning and evidence.
   f. Build system capability to support research and innovation on an ongoing self-sustaining basis.

NHS Innovation Wheel

External Innovation

External Innovation

Academic partners e.g.,
- Countless examples across universities and trial centres of constant life science innovation
- For example the speed of RECOVERY in terms of the trial and the translation.

Commercial collaborations e.g.,
- Biopharma, for example with AZ to develop COVID vaccine and MSD, Gilead and AbbVie to eliminate Hepatitis C
- MedTech in developing technologies to improve diagnostic and treatment
- Digital and data science to capture, process and relay information.

Internal Innovation

Health and care networks e.g.,
- Formal and informal Clinical networks are critical in defining health needs and adapting pathways for innovation (ICS and AHSN led or through specific clinical footprints).

Staff and patient initiated e.g.,
- Support for NHS staff to develop innovations for example through the clinical entrepreneur programme and NHS innovation accelerator.

Data-enablement e.g.,
- NHS Digitrials developing low cost trial infrastructure as used in the NHS Galleri Trial.

ACTION*

INFORMATION

DATA

Internal Innovation

*AHSCs and AHSNs work to bridge the gap between academia, industry partners and local care needs.

Figure 1: NHS as a Learning Health System from NHSE Board Paper

5. There is a huge range of work across the system to implement programmes which deliver these enablers. It is not the intention of this work to revisit or duplicate these workstreams. Instead, it aims to a) show how the system can use these enablers to mobilise effectively, demonstrating this through a learning by doing approach in a few key clinical areas and in mature NHS innovation centres b) help align and bring attention to the huge amount of work ongoing to improve the system and c) bring the learning from ongoing work into the development of a clear blueprint for NHS research and innovation.

Programme structure, progress so far, and asks of the board:

6. Since the AAC Board's last meeting, solid progress has been made in scoping the programme workstreams and undertaking a detailed period of engagement. We want to thank many members of the AAC for their valuable input, including from the National Institute for Health and Care Excellence (NICE), the Medicines and Healthcare products Regulatory Agency (MHRA), the Department of Health and Social Care (DHSC), and various industry and clinical leadership groups. There has been strong buy-in into the objectives and overall approach.

7. A paper setting out the structure of the work in detail was taken to the National Life Sciences Council at the end of May. This is attached for information at Annex A (and paper AAC003a). We would welcome comments from the board on the structure and focus of the programme, which is designed around four interrelated workstreams:

   Workstream One (WS1): Learning by doing – *focused on working with health innovation leaders in local systems to refine strategies for improving research mobilisation, adoption, and spread of innovation.*

8. If successful, we will have effectively demonstrated how we can better align local and national priorities and mobilise local activity in these areas – understanding the unique nature of localities within a consistent set of functions and capabilities required to support innovation.

9. We are in the process of identifying a long list of c.20 pathways aligned with the life sciences missions and priority areas agreed by the AAC board, along with 5-10 interested localities. These are being collated from recommendations by the programme's Advisory Group members, National Clinical Directors, and from regional life sciences ecosystems.

10. Once identified, we will work with the local systems to understand how the pathway could be transformed – identifying internal and external innovations that may support, begin implementation planning and engaging with national partners to accelerate promising products through regulatory, evaluation and commercial processes.

11. We have received very strong contributions and buy-in to this approach from different parts of the system, including the leads of the Life Sciences Vision Missions, National Clinical Directors, and leading health systems in e.g., aligning on a vision for testing dementia in NW London; building on the strong existing progress in cancer and how approach could be applied in other clinical areas; the opportunity to test how we transforming obesity care in e.g. Manchester or the East of England.

Workstream Two (WS2): Immediate national actions – *reviewing existing work and identifying medium-term actions to enhance the innovation ecosystem.*

12. We have compiled an initial long list of recommendations, actions, commitments, and suggestions from all parties involved. Prioritisation of these items will be carried out to determine short-term deliverables, the things we must do now, potential future actions – and given wider pressure – the areas we do not think will provide sufficient benefit to pursue.

13. These actions will be aligned with and feed into the emerging blueprint for NHS innovation and research set out in workstream 3. There are a few key areas of focus:
    a. The relicensing of the AHNS as Health Innovation Networks and the ongoing review and reform programme over the next 18 months to ensure they can best align with the rest of the NHS innovation infrastructure.
    b. Commercial work – understanding the clear commercial pathway for innovation with decision points and how commercial could enable innovation at each stage. This sits alongside similar work across pathways to understand how other support could be leveraged at each stage.
    c. Digital health therapeutics – developing the necessary regulations, guidance, incentives, and frameworks necessary to support the deployment of digital health therapeutics in the NHS.
    d. Learning from previous projects – particularly around the deployment of innovation outside of specialised centres – in primary care or crossing boundaries into patient led or consumer led care.

14. The list of immediate actions to deliver will need continual refinement over the course of the programme and some rapid task and finish groups either within our work; or tracked in other parts of the system in order to deliver – we do not want, or intend, to oversee existing work through the structure of the programme.

Workstream Three (WS3): developing an NHS Research and Innovation Blueprint – *taking the learning from WS1 and the actions in WS2.*

15. Developing a conceptual operating model for the health innovation landscape. This workstream involves mapping the current ecosystem and identifying the roles and responsibilities of the ecosystem architecture in promoting research and innovation.

Accelerated
Access
Collaborative

16. We have set out a skeleton outline of the contents of the NHS Research and Innovation Blueprint and commenced mapping of the existing system and enablers. Further development and concrete version of the blueprint will take place over the next few months with a more complete version expected to be presented to the November LSC and AAC boards.

17. Strong themes are emerging building from the challenges we've had historically on e.g., how to support national rollout of new treatments or screening and diagnostic tools, the complexity of the innovation support system, and the learning from the vanguards that point to the detailed steps needed to get the right pull. We need to move beyond high level recommendations and into specific enablers, including for example, detailed contracting, local leader identification, allocation of funding, position of formularies.

Workstream Four (WS4): Preparing for the NHS of tomorrow – *conducting targeted thought leadership work to understand how the NHS can adapt and prepare for future challenges.*

18. This workstream examines emerging trends, such as citizen empowerment, Artificial Intelligence (AI), and genomics. We are now beginning to scope this workstream up in detail and will be commissioning three to four think pieces to support future thinking. These will likely be commissioned from a variety of sources and viewpoints, including health think tanks, industry, government bodies, funders and the health system itself.

Engagement and Governance

19. Significant engagement has taken place across the programme and governance for the programme is in development, including:
    a. Undertaken 20-30 1:1 interviews with key leaders from across the ecosystem.
    b. Established an Advisory Group with meetings held every 4-6 weeks, comprising CEOs or equivalents from ABHI, ABPI, BIA, MHRA, NICE, OLS, AHSN network, Shelford Group, NIHR, and AHSCs. We will be including more clinical and academic leadership within the Advisory Group moving forward.
    c. We are in the process of establishing round table sessions with patient groups, industry members and research organisations to gain wider input.
    d. We will be identifying chairs (or co-chairs) for each of the workstreams and will be seeking support and resources from partners to support delivery.

Board members are asked to:

1. Note and provide feedback on the progress made following initiation of the Innovation Ecosystem programme in March 2023.

2. Provide further input into the structure and next steps for the programme and associated workstreams.

Annex A

See paper AAC003a