



WHAT NEXT FOR THE NHS ADOPTION LANDSCAPE?

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ABHI AND THE HEALTHTECH INDUSTRY

The Association of British HealthTech Industries (ABHI) is the leading health technology (HealthTech) industry association in the UK. We are a community of over 400 members, from small UK businesses to large multi-national companies.

We champion the use of safe and effective medical devices, diagnostics and digital health technologies. The work of our members improves the health of the nation and the efficiency of the NHS.

The HealthTech industry makes a vital contribution to economic growth in our country. The industry employs over 145,700 people across 4,300 companies, mostly small and medium sized enterprises (SMEs). The industry is generating a turnover of over £30 billion and has achieved employment growth of greater than 5% in recent years.

ABHI's members account for approximately 80% of the value of the sector as measured by sales to the NHS. As the most highly regarded universal healthcare system in the world, the NHS in turn is dependent on technology produced by the industry to enhance the efficiency of services and to drive continuous improvement in their delivery.

HealthTech is accordingly an engineering-based industry, characterised by rapid, often incremental product design and development. It is one of two distinct sub-sectors of the broader Life Sciences, with evidence, regulatory and adoption needs that differ significantly from those of the other, biopharmaceuticals.



EXECUTIVE SUMMARY

This paper sets out ten defined barriers to the effective and efficient adoption and spread of technology by the NHS, along with the impact of these barriers to the system and patients, and provides suggested solutions. Industry would like to work collaboratively with those stakeholders identified as having the ability to make the suggested changes.

We believe that this approach will make a sustainable difference to the pace and scale of the adoption of technology in the NHS. The identified barriers and solutions are summarised in Appendix 1.



INTRODUCTION

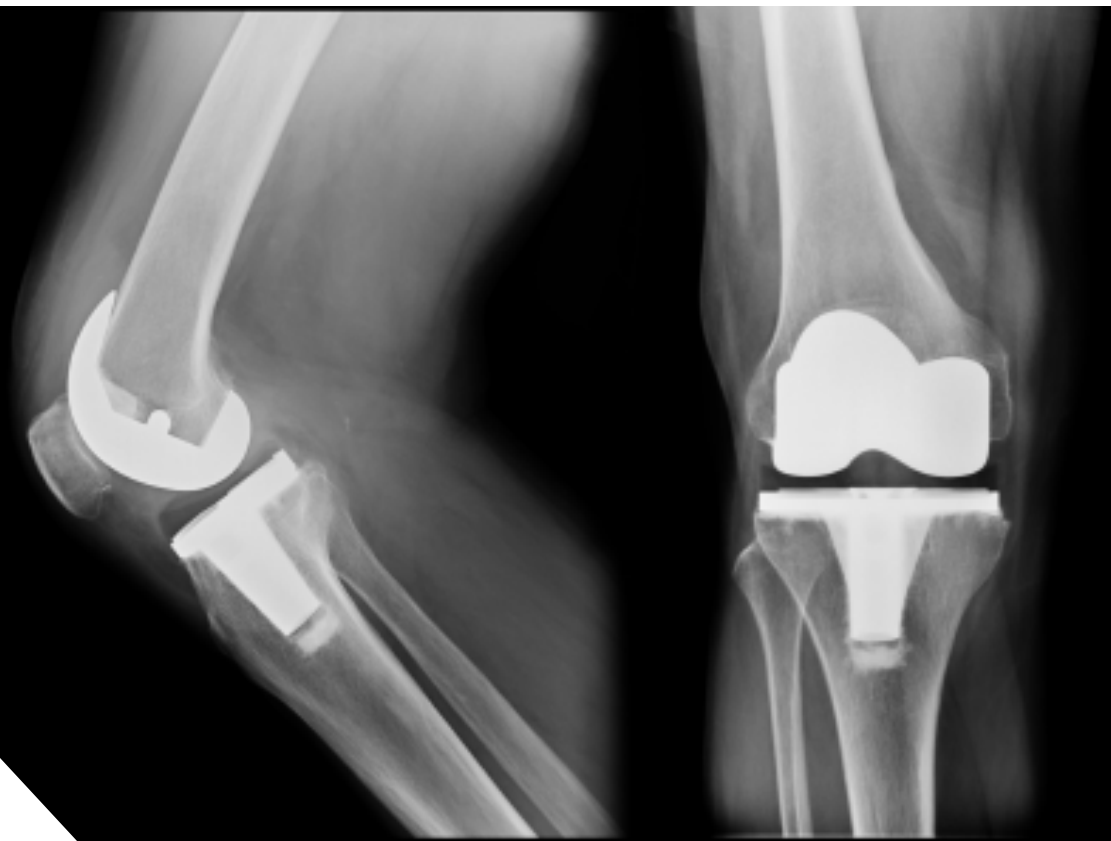
Starting with the banking crisis in 2008, the last 15 years have been an era of unprecedented challenge and change in the UK. The vote to leave the EU in 2016, COVID striking our shores in 2020, and the war in Ukraine in 2022, all having notable impacts on our lives.

An NHS, already under pressure from a reduction in spending growth from 2010 onwards has been trying to weather these subsequent storms simultaneously. Despite funding increases above those given to other public services, the growth in demand for NHS services still outpaces the capacity and capability within the service to meet it.

Workforce challenges and growing elective backlogs, as well as patients presenting later and with more serious illness as a result of COVID pressures, all point to the need to do things differently. More of the same will not work; we need to innovate.

The recent move to Integrated Care Systems offers the NHS the opportunity to take a fresh look at the delivery of health and care in our country. A more holistic consideration of the wider determinants of health, along with the joining up of previously siloed services across patient pathways present the chance to deliver care more effectively and efficiently.

The [Department of Health and Social Care \(DHSC\)'s Medical Technology Strategy](#), published in February 2023, sets out an ambition for an end-to-end pathway for the adoption and spread of innovation to meet NHS needs. Roland Sinker, Chief Executive of Cambridge University Hospitals, is also currently leading an Innovation Ecosystem Review, to address ongoing challenges and drive improvements in the health innovation ecosystem. ABHI welcomes the Review and hopes it will inform our work in this area.



INNOVATION

Innovation means different things to different people and that in itself can be a barrier to innovation.

The WHO defines innovation thus:

"A new or improved solution with the transformative ability to accelerate positive health impact."

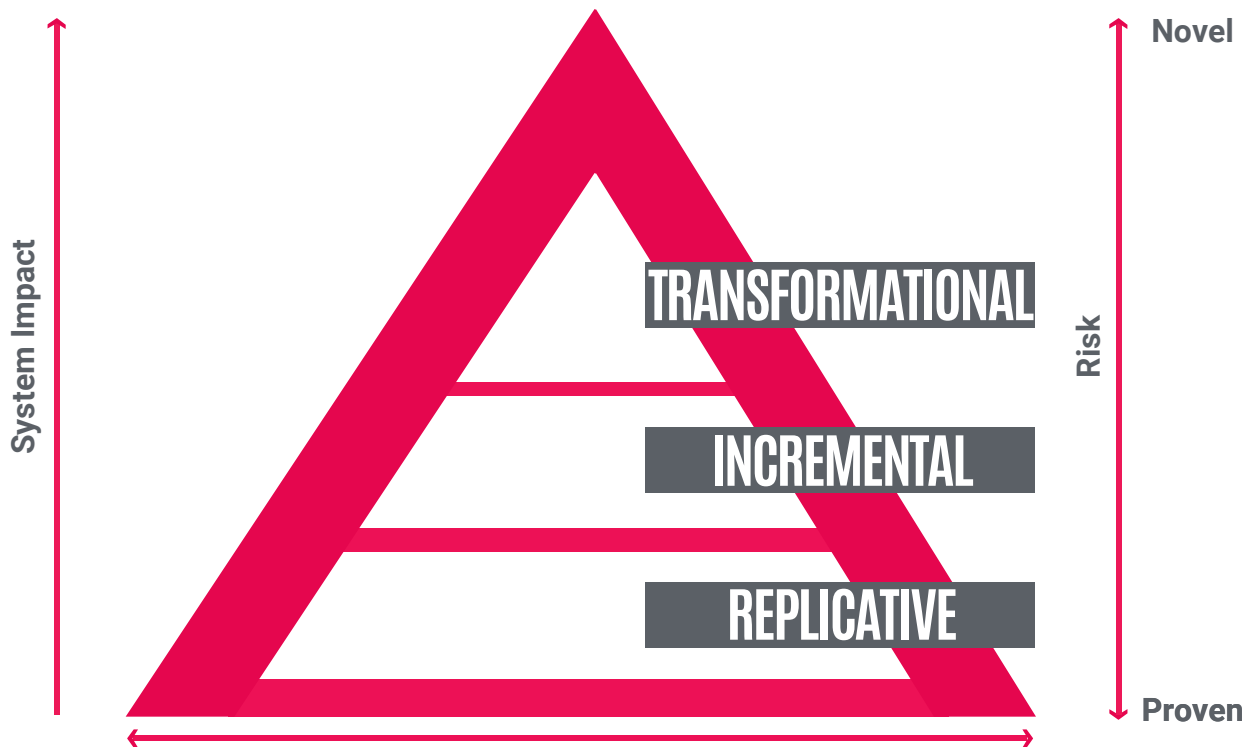
The Institute for Healthcare Improvement use this description:

"Both innovation and improvement are change, and both are trying to make something better.

Improvement is iterative and typically incremental. Each cycle builds on the next. At the Institute for Healthcare Improvement (IHI), we talk about small tests of change and going incrementally forward – building confidence and removing the systematic defects to slowly shift the performance of the system. The mental model in improvement focuses on optimising existing systems and eliminating defects. Innovation requires a different mental model – creation of something fundamentally new and different from what we've experienced before. A different process or end-result that can then be further optimised using improvement."



ABHI defines innovation in the following way:



Transformational

The most impactful innovations are those that deliver transformation.

Incremental

Incremental innovation includes changes that deliver operational improvements in performance or clinical outcomes.

Replicative

At the simplest level, innovation is a copy of an existing technology that may deliver cost improvements.

Transformational, incremental and replicative innovation all have a role to play in healthcare. **Transformational** innovation allows us to do things in a way we have never been able to do before. Historical transformational innovations include approaches such as laparoscopic surgery, limiting the need for open surgery and improving recovery times and patient experience. **Incremental** innovation delivers continuous improvement of care delivery and **replicative** versions of existing technologies can drive cost improvements. Recognising the different types of innovation, and the separate approaches needed for their adoption is critical for success of any initiatives.

HealthTech holds many of the solutions necessary to deliver improved patient outcomes, facilitate transformation to more sustainable models of health and care delivery, and drive economic growth.

PROBLEM: 1

Transformational technologies are the only ones that are seen as being valuable.

This leads to the continued use of older versions of technologies and improved outcomes being withheld from the system and patients.

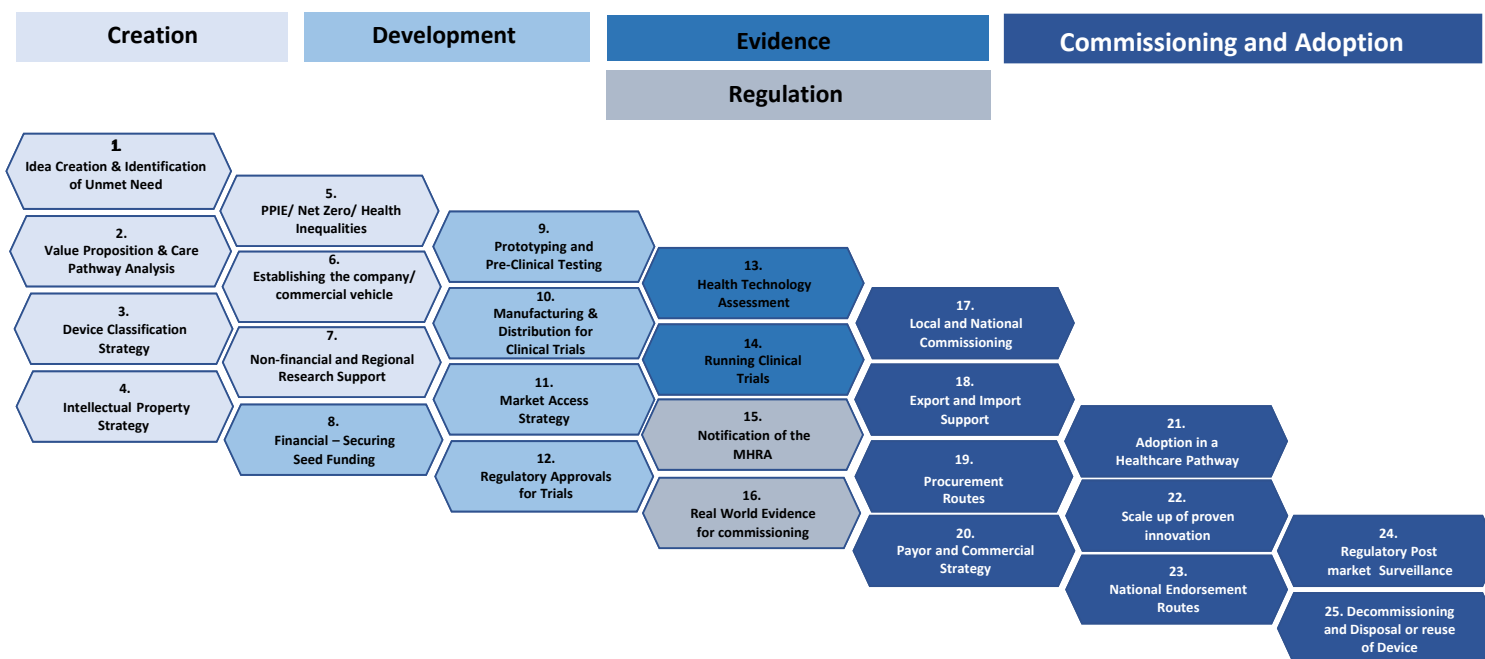
SOLUTION

The Department of Health & Social Care (DHSC) should set out processes for adopting each of the three types of innovation.

ADOPTING HEALTHTECH IN THE NHS

Whether we are talking about transformational innovation, incremental innovation or replicative innovation, the NHS has a poor track record of adoption (interestingly even when a replicative innovation has financial benefits). There have been numerous reports and recommendations over the years, but a demonstrable shift has yet still to be seen.

The purpose of this paper is not to re-hash what has been well articulated in the past through reports such as [Innovation Health and Wealth](#), the [Accelerated Access Review](#), the [AHSN MedTech Landscape Review](#), the [Medical Technologies Group Deja Review](#) and recently the comprehensive review by the Accelerated Access Collaborative (AAC) on the end-to-end MedTech Pathway Mapping (see below).



Source: Accelerated Access Collaborative's end-to-end MedTech Pathway Mapping.

Whilst it is not the intention to repeat the conclusions of these reports, this paper will shine a light on the recommended actions that have not yet been delivered and offer practical suggestions to address some of the more persistent barriers. Barriers are systematic and operational as well as relating to capability and culture. Some have been demonstrated through the various programmes of the Accelerated Access Collaborative (AAC).

For example, innovations made available through centrally funded mechanisms such as the Innovation and Technology Tariff (ITT) and Innovative Tariff Payment (ITP) were adopted, up to a point, but only until the central funding stopped.

The Rapid Uptake Programme (RUP) also highlighted that it is often the funding and resource to change the patient pathway that were key, and the barrier was not limited to payment for the technology. But, again, even centrally funded technologies with a successful pathway transformation implemented did not always continue to be adopted once central funding was removed.

A fragmented system without clear and agreed transitions between each of the stages of adoption (as described in the AAC pathway above) is a core theme in the reasons for the current state, and improving those transitions will be key to improvement.

PROBLEM: 2

As an overarching problem for the NHS, innovation is considered to be everyone's job, and in doing so, it becomes nobody's job. *This means that resource and support is not available to deliver changes that lead to improved outcomes.*

SOLUTION

The NHS should appoint a Chief Innovation Officer to the Board of every NHS organisation. The CQC well led framework has eight key lines of enquiry, one of which is 'are there robust systems and processes for learning, continuous improvement and innovation?'. Innovation metrics should be reported at Board level.

PROBLEM: 3

The AAC MedTech Pathway sets out a process but there is no clear transitions between the steps in the process. *This means that transitions are not always happening or optimised.*

SOLUTION

The DHSC should establish a clear framework for technologies to move from demand signalling and horizon scanning through to assessment, procurement and adoption.

HEALTH TECHNOLOGY ASSESSMENTS

NICE is making improvements in the way that HealthTech Guidance is developed. However, even when the changes are implemented there will remain a gap between the level of adoption implicit in NICE guidance and what is actually seen in the NHS.

Whilst there may be an increase in non pharmaceutical technologies going through the Technology Appraisal route as a result of some of these improvements, there remains no recognised mechanism for commercial arrangements for HealthTech.

PROBLEM: 4

There is no policy and process for NICE to consider commercial arrangements to ensure cost effectiveness, nor is there a clear pathway for funding HealthTech with positive NICE guidance.

This means that the opportunity to negotiate cost effective commercial terms is not available, leading to less access to innovative technologies compared to medicines.

SOLUTION

NHS England Central Commercial Function (NHS E CCF) should publish a policy and process for commercial arrangements for HealthTech under a NICE Technology Appraisal. NHS E CCF should also publish a pathway for funding technologies that have positive NICE guidance, and that is consistently applied across the NHS.



REAL WORLD EVIDENCE & EVALUATION

NICE has produced a [Real World Evidence \(RWE\) Framework](#) that outlines what good RWE looks like and the AHSNs have developed a complimentary [Real World Evaluation Guide](#) to support adoption.

Despite the increasing interest in this area, dogma over a traditional hierarchy of evidence continues to discriminate against data derived from sources other than randomised, controlled trials (RCTs).

As well as being heavily caveated, RCTs are not always the best source of evidence for HealthTech where rapid iterations are best investigated by real world analysis.

PROBLEM: 5

RWE is often overlooked in favour of RCT evidence.

This leads to a reliance on controlled clinical trial data at the detriment of analysis of good RWE.

SOLUTION

NICE to develop and deploy training programmes to ensure the appropriate balance between data sources.

LOCAL ADOPTION

To the uninitiated the NHS appears to be a single national health system, but is, in fact, a multitude of autonomous organisations that tend to act individually when it comes to their approach to the adoption of technology. 'Not invented here' syndrome is well recognised in the NHS.

There have been some attempts to address this, such as the NHS Clinical Entrepreneurs InSites programme that facilitates collaboration and sharing processes and procedures for adopting technology across organisations. It is intended to sit alongside existing Trust processes, allowing a fast-track innovation pathway to testing, trialling, adopting, and scaling innovation, and is limited to NHS derived innovations. A more consistent and inclusive approach would be welcomed.

PROBLEM: 6

Despite evidence and adoption of technologies by one part of the NHS, suppliers have to go through a different process, including piloting and providing the same evidence for another part of the NHS to consider adoption.

This leads to low and slow access to new technologies in the NHS.

SOLUTION

NHS E CCF should publish a standard approach to be followed for documentation on business cases, dynamic procurement frameworks for innovation, R&D processes and data sharing agreements for all new products being considered by an NHS organisation.



CAPITAL FUNDING

Innovative HealthTech, unlike innovative medicines, often requires capital funding. Examples of large capital HealthTech equipment include robotics, MRI scanners and pathology equipment. Even when funds are available to spend on capital equipment, the capital departmental expenditure limit (CDEL) can prevent it happening. Over time, procurement agreements have moved to an approach that has allowed NHS organisations to acquire capital equipment through revenue spend. The capability to do this in future may be restricted through the [IFRS 16](#) rules for leasing equipment.

CDEL policy reforms could offer a clear opportunity to meet the Life Science Vision ambition of 'aligning and simplifying funding streams' for the benefit of supporting adoption and care pathway transformation. Reform would allow an increase in the number of Trusts who can benefit from innovative technologies, without an increase in overall funding.

PROBLEM: 7

CDEL rules are preventing investment in HealthTech capital solutions even when there is money available.

The potential to improve uptake of innovation and patient outcomes is prevented.

SOLUTION

DHSC should implement a more flexible approach to allow Trusts to spend capital money that they have available to them without compromising NHS financial undertakings.

There is agreement across the health system that this would be helpful.

For example, in 2021, an NHS Providers survey revealed that 67% of Trusts "agreed" or "strongly agreed" that they had funds to invest in capital projects, but national/system capital limits restricted their ability to do so. NHS Providers do call for more funding, but also request system changes: "Reform the system for accessing and allocating capital, in consultation with those planning and delivering services. This mechanism must enable all Trusts to invest to improve, expand and transform NHS services. The capital system should be based on the principle of subsidiarity and align accountability for services with the ability to make necessary investments." Many of these points have been reiterated in the March 2023 report '[No More Sticking Plasters](#)'.

Informing capital policy reform is equally a key focus within [The Shelford Group's 2021-2025 strategy](#).

The Healthcare Financial Management Association (HFMA) have also [provided an opinion](#) on fixing the capital regime.

ADOPTION AND SPREAD OF INNOVATION FUNDING

The imbalance between spending on Research & Development (R&D) and that on translation, adoption and spread, is often described as a penny-farthing, with R&D being represented by the big wheel (see the [King's Fund graphic](#) below). Furthermore, R&D funding is well protected from budgetary pressures, whereas that for adoption is often one of the first cuts to be made. The National Institute for Health Research (NIHR) received £1.324 billion in 21/22 for research focussed R&D in the UK, which included an approx. 8% uplift from 20/21. In contrast, the AHSN network will receive this year (23/24) £33.9 million from NHS England plus £17.5 million from the Office for Life Sciences which represents c. £50 million for adoption and spread and an 8% cut of central funding.

ABHI welcomes the announcement of the relicensing of the AHSNs, renamed the Health Innovation Networks (HINs), and regards them as an important part of the adoption and spread system. The Networks, designed as an innovation adoption mechanism for the NHS, now need to be adequately resourced to allow them to deliver on their original intent.

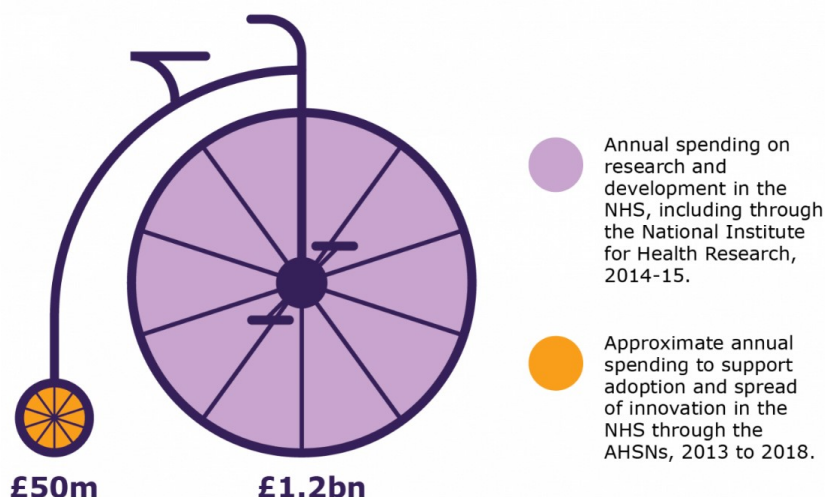
An example of where the funding for R&D leads to a cliff edge for NHS adoption is the Small Business Research Initiative healthcare programme. The funding challenges are usually well thought through and based on unmet NHS need. However, the reality is that ideas are funding to a point of readiness and then the funding stops, and many innovations never make it to use within the NHS.

PROBLEM:8

Funding for R&D is significantly higher than funding for adoption and spread and is protected. *This leads to slow and sometimes even reversed access to innovation.*

SOLUTION

Government to re-allocate a % of R&D funding from [NIHR /Innovate UK]. Adoption funding should be protected in the same way as R&D funding is.



Source: The King's Fund, 2018. Adoption and spread of innovation in the NHS. Author: Ben Collins.

NHS PROCUREMENT

The prevailing message over the past decade, accompanied by a policy of Zero Inflation, has led to procurement behaviours that are, albeit with some small exceptions, focussed on cash savings and buying the cheapest products available. There are many fine words spoken about value and outcomes, but this does not play out in practice. The emphasis remains on the unit cost of what is being bought, not the value and lifetime cost to the NHS. This has been further exacerbated with extraordinary inflationary pressures and NHS financial difficulties.

The fact that HealthTech could improve the overall cost base of the NHS is overlooked in the quest for meeting day-to-day budgets. This mindset needs to change at all levels within the NHS.

The need to deliver value for money for the taxpayer is well understood, but there needs to be a much better understanding about how procurement decisions can have unintended cost consequences. For example, buying a cheaper dressing that 'saves money' but means that the community nurse needs to visit the patient's home every day rather than once or twice a week.

PROBLEM: 9

Procurement in the NHS is overly focussed on acquisition cost rather than value.

Technologies that demonstrably improve prevention, earlier intervention, productivity and efficiencies are lost to the NHS and patients as a result of being more expensive than the current technology.

SOLUTION

DHSC should invest in trialling and developing strategic methodologies for value based procurement. Value should be considered beyond simple acquisition cost, looking at both patient and system outcomes. Impact assessments should be required to consider non-cash releasing benefits.

As referenced in the previous section, the AAC has committed to developing a new commercial strategy across NHSE to better support innovative products. This was set out in a paper presented to the AAC Board in November 2022 'Commercial Innovation: The Opportunity'. The paper sets out the size of NHS spend that flows through NHS England, and suggests that this is not being optimised. The paper describes some of the recognised barriers including siloed activity, the gap between NICE assessment and NHS England business models, reliance on framework agreements and continued demands for local pilots.

The paper then goes on to make a number of recommendations. The focus however is very much in 'intra-NHS' commercial activity and innovation, IP, testing (pilots) and exporting NHS innovations abroad rather than the wider commercial engagement with industry.

There remains a gap in how the NHS works with industry on strategic commercial arrangements that the paper did not seem to fully address. It makes some reference to tracking adoption, but this there needs to be more detail about how this will work in practice.

PROBLEM:10

The 'Commercial Innovation: The Opportunity' proposals set out by NHS England do not include opportunities for industry.

The focus on NHS derived innovations only makes the UK a less attractive place for external investment.

SOLUTION

The 'Commercial Innovation: The Opportunity' proposal set out by NHS England needs to be expanded to include commercial opportunities to bring the outcome benefits to NHS patients from innovations brought to the NHS, not just those generated by the NHS.

APPENDIX 1:

SUMMARY OF PROBLEM AND SOLUTION STATEMENTS ARRANGED BY STAKEHOLDER

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NHS England

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SOLUTION

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National Institute of Health & Care Excellence

PROBLEM

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SOLUTION

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