





FOREWORD

The health system has faced unprecedented challenges over the past few years with little end in sight. Workforce shortages, outdated buildings and equipment and a population with ever growing health needs squeeze the limited finances and as a result we are seeing ever-growing waiting lists and significant problems in the delivery of urgent and chronic care. These issues were by no means caused by the pandemic, but have been exacerbated by it, alongside the inevitable pressures on a tax-funded system in times of economic austerity. Health and care are clearly at a crossroads, with the vital decisions ahead shaping the future of patient outcomes and the delivery of care.

Members of the Health Tech Alliance offer a range of efficient and effective solutions to support the NHS in dealing with these challenges. Access to digital infrastructure and medical devices can help transform patient care, improving quality for individuals and saving money for the system:

- Remote monitoring can save clinician time, allowing them to stay in contact with patients and monitor the impact of interventions more closely thus avoiding unnecessary admissions or appointments and facilitating earlier discharge.
- Robotic surgery offers patients faster recovery from treatment, decreasing length of stay in hospital and freeing up bed capacity.
- Innovative detection and diagnostic tools can reduce the time taken to make a diagnosis. Connectivity and new ways of managing and using information have opened new ways of managing health and healthcare.

Despite our members ability to support the NHS in building a resilient health care system, there are significant barriers facing the adoption of innovative technologies. NHSE&I estimate that it takes 17 years on average for a new product or device to go from clinical trial stage to mainstream adoption. For innovation to develop across the NHS, this, alongside the level of investment in medical devices, needs to change.

The Health Tech Alliance has drawn on the experiences and knowledge of its industry and health system members together to compile this report. Throughout this report we examine the positive steps that have already been taken within the evolving landscape, the current adoption challenges our members are facing and our recommendations to improve access to innovation, patient outcomes and build a resilient health system. It is imperative that this progress is built upon to truly transform the landscape of both HealthTech and the NHS and, most important of all, so that patients can benefit from a plethora of new and existing products and services the sector can offer.



DAME BARBARA HAKIN
CHAIR OF THE HEALTH TECH ALLIANCE



EXECUTIVE SUMMARY

Innovation and technology have played a vital role in our health system, not least during the pandemic. Whilst we have seen a variety of positive changes and reforms, such as the MedTech Funding Mandate and new data plans, the new administration still has a lot to address. Not forgetting the positive lessons we learnt from the pandemic is key – we saw that a more rapid uptake is possible and barriers to adoption can be overcome.

Addressing these barriers to adoption is still essential if the UK wants to be the global hub for technology and innovation – adopting technological driven innovative solutions will be more important than ever for the NHS in order to continue improving patient outcomes whilst maintaining economic discipline. This report examines the adoption challenge in greater detail, setting out a number of policy recommendations that will transform the HealthTech landscape. The recommendations will centre on:

- Fast-tracking technology adoption, which we saw is possible during the pandemic.
- Creating sustainable and long-term funding models for technologies with proven results, rather than patchy "pots" of funding across the system.
- Improving demand-signalling across the NHS arm-length bodies. Private HealthTech industries are keen to help the public health system, but they need clearer demand-signalling as of what do they need, when and how much, to prevent issues such as supply chain problems during the pandemic.

WHO WE ARE

The Health Tech Alliance is a coalition of health technology companies and stakeholders from across the NHS and wider health system. These partnerships are integral to the Alliance's overarching objective of industry and the NHS working collaboratively to ensure that vital HealthTech innovation reaches patients.

Founded 6 years ago, and chaired by Dame Barbara Hakin, the Health Tech Alliance has consistently worked with its membership and the wider health system to engage with key stakeholders and ensure regular communication across the entire health system – helping to properly understand upcoming challenges and the most suitable solutions.

AN EVOLVING LANDSCAPE

The HealthTech landscape has seen several positive initiatives in the past years. These include:

- The publishing of the NHS Long Term Plan in 2019, which was welcomed by industry and health sector at the time as an ambitious plan. It committed to accelerate the uptake of selected innovative medical devices, diagnostics, and digital products to patients faster. The plan is currently being reviewed by NHS England CEO Amanda Pritchard, and we hope the review will commit the plan to further innovation adoption beyond the MedTech Funding Mandate, as well as review the time taken for innovative products to be adopted.
- The Accelerated Access Collaborative, which was created as a "front" door for innovators and efforts
 to provide greater signposting and demand signalling in collaboration with AHSNs. Within the last year
 they provided over 575,000 patients with access to innovations. It is encouraging to see this number
 growing by over 200,000 compared to the previous year but the Health Tech Alliance believes there is
 room for improvement.



- HealthTech Connect, established in 2019 and operated by NICE. The service provides horizon-scanning
 capabilities and advice to companies to connect them to right organisations to help with product
 development, assessment, and adoption. Now that HealthTech Connect is well established, Health Tech
 Alliance feels it would be beneficial to assess the service from the point of view of devices, diagnostics
 and digital health companies and provide data on the efficiency of this service.
- MedTech Funding Mandate policy launched in April 2021 after receiving strong support from NHS, academics, consultants, industry, and the health sector. The Mandate supports NHS organisations to implement existing innovations funded by commissioners from their existing allocations. The Mandate expects hospitals and commissioning organisations to comply with policy guidance. The Health Tech Alliance and its members are disappointed at the decision to not add any new technologies to the 23/24 Mandate and feel it undermines the need to improve innovation within the health system and harms patient outcomes.
- Though not officially published yet, Health Tech Alliance is optimistic about the **MedTech Strategy**, that would drive better outcomes and value from the spend of around £10bn per annum on MedTech. The strategy is expected to include accelerating adoption of innovative products where they improve clinical outcomes and offer value for money. The Health Tech Alliance is also optimistic about the new Director of the MedTech Directorate, David Lawson, who is known to appreciate the importance of MedTech within the health system through this procurement role at Guy's and St Thomas' Hospital.
- National Institute for Health and Care Excellence's (NICE), health technology review, that reviewed their
 process for health technology evaluation. The change to the evaluation aims to streamline and improve
 the way health technology evaluations are carried out by freeing up capacity to carry out these
 evaluations, and to align NICE's methods and processes to ensure health technologies are pragmatic,
 agile, robust and adaptable.
- The **National Institute for Health Research** (NIHR) continues to fund, enable, and deliver world-leading health and social care research. The economic impact of NIHR continues to be significant, with every £1 invested in NIHR research, society receives £19 of benefits, including in new treatments, devices, and profits to UK firms undertaking research.
- The Academic Health Science Networks (AHSN) which regionally offer a "pull" and act as a connective tissue across the system bringing together industry with central bodies overseeing innovation and adoption policy. AHSNs can also support HealthTech companies to "scale up" their real-world evidence base. The Health Tech Alliance would urge the Network to work further on their role as a "connective tissue" and ensure more productive uptake of innovative technologies across the whole of England.
- The **overhaul of NHS Supply Chain**, that will see the management of significant areas of NHS spend brought in-house on a permanent basis. Bringing the organisation under NHSE, bringing complex medical devices in-house, and reducing the 11-category tower structure to four were welcomed by the Health Tech Alliance and industry. The Chief Executive's approach to engaging with industry to find workable solutions is refreshing, and appreciated by the Alliance.
- The final version of the data strategy, **Data saves lives: reshaping health and social care with data**, that set out a vision for how data will be used to improve health and care in a safe and transparent way. It also marks the next steps of the discussion on how we can best utilise data for the benefit of patients. The latest version is the third version of a data strategy in the past few years, so Health Tech Alliance now hopes the strategy would be implemented urgently to improve our health and care of patients.



- A **plan for digital health and social care** that sets out a vision for a digitally enabled health and social care system and how it can be achieved. It was welcomed by the industry that this plan, published in June 2022, collated all existing digital strategies, plans, and guidance into one action plan, making it easier for industry and health sector to follow developments.
- The launch of the **multi-agency advisory service (MAAS)** for Al and data-driven technologies, that aims to support the development of and adoption of Al and data-driven technologies in health. In association with CQC, HRA, and MHRA, NICE is developing an advisory service that maps out the regulatory pathway for data-driven technologies that helps to navigate the system and provide guidance on each stage of the pathway. The service is especially welcomed by the Health Tech Alliance after the growing concern over the complexity of the regulatory system.
- The Patient Safety Incident Response Framework, that sets out the NHS's approach to developing
 and maintaining effective systems and processes for responding to patient safety incidents. Devices,
 diagnostics and HealthTech have a role to play in patient safety so wider engagement on the framework
 would be welcomed.
- The publication of the UK's first **Women's Health Strategy** that details the Government's 10-year ambitions and actions to improve the health of women in England. Government's ambition of "closer working and collaboration between with the digital health technology sector especially FemTech to deliver collaborative innovation within the NHS" was especially welcomed by the industry.

THE ADOPTION CHALLENGE

In consultation with our membership, the following challenges in the systemic uptake of medical devices have been reported:

A fragmented system with national priorities differing to local realities – whilst NHSE & I and NICE set policy on the use of innovation, the ICS system has not yet achieved significant progress in reducing fragmentation so progress on the ground still requires a significant amount of time and effort. Currently, companies typically have to engage and convince several layers of decision-makers within providers and each ICS to get products adopted.

The challenge of collecting sufficient evidence to demonstrate the efficacy of a product. Whilst any product that is rolled out must rightly meet safety and efficacy requirements, as well as recognising any potential to exacerbate inequalities, it is challenging for HealthTech companies to gather evidence, particularly real-world evidence. The health system should consider how it could better support the evidence-gathering needed for fast-paced innovation adoption.

A focus on short-term affordability over long-term benefits to patient outcomes and care — HealthTech products tend to require an initial upfront investment and deliver a return on investment beyond the first year of adoption. Despite saving costs over the long-term, investment in such products may not be deemed a 'wise' investment — an issue compounded by three-year funding cycles. The requirement for in-year savings acts as a significant barrier to innovative investment decisions which yield significant returns in the medium to long-term.

A lack of signposting especially for smaller innovators – the system is complex with numerous decision-making bodies, sometimes with overlapping remits, resulting in an unclear pathway for innovation to access the frontline.



A postcode lottery – the decision to adopt a product in one trust does not necessarily lead other trusts to do the same. Currently companies engage on a trust-by-trust basis in a time-consuming process, benefitting patients in one area over another.

The need for clinical time and resource – even if products are accompanied by robust evidence demonstrating their positive impacts, they may face difficulties in their adoption as they require upfront clinical time and training, something particularly in demand in the current climate.

A lack of incentivisation – mandating alone does not lead to the uptake of innovation. Previous schemes to support adoption, including the Innovation and Technology Payment (ITP), have come to an end. A lack of accompanying and further incentivisation inhibits uptake of innovation across the system.

Regulatory uncertainty within the post-Brexit environment has been prevalent for our membership, particularly relating to complexities surrounding UKCA markings, e-labelling and digital passports. Consequently, the process to adoption for innovation is elongated, with wider implications of companies avoiding investment of innovations in the NHS.

Access to R&D funding- ongoing reduction and discontinuation of R&D funding is having detrimental effects on the trials, progress and later uptake, of HealthTech innovation across the NHS. Threatening the UK's position as the global lead for R&D funding, innovators are struggling to access vital funding for the development of life-saving medical devices. Equally, reductions in funding to the Data for Research and Development programme threaten vital research and innovation, vital to ensuring greater public confidence in data. It seems that the pharmaceutical industry receives priority R&D funding, subsequently holding back the innovation available from HealthTech.

Unclear vision from the Government for the sector- despite the high amount of Government strategies and plans discussing innovation, the vision for the sector remains unclear and complex due to regular changing of posts over the past three years. In combination with a lack of continuity due to differing Ministerial agendas, members remain unclear on the Government's objectives for innovation, and how they can be achieved.

Funding problems with AI award – although this award is an ongoing valuable resource across membership; its limited funding fails to provide HealthTech innovators with the needed long-term investment to support them during lengthy and complex pathway to market. Additionally, the awards short-term tenure fails to support innovators for essential additional time.

RECOMMENDATIONS

FAST-TRACK TECHNOLOGY ADOPTION

The production and development of the Covid-19 vaccine demonstrated that innovation can be scaled and adopted at pace within the UK. Key learnings need to be taken from this process to ensure that transforming technologies and products are able to be adopted swiftly and without significant disruption to the patient pathway.

SUSTAINABLE LONG-TERM FUNDING SOLUTION

Funding for adoption of medical devices should be considered over the life of the product and with the longer-term cost savings in mind, rather than solely on the upfront cost.

Additionally, whilst the Health Tech Alliance welcomes funding projects such as the Al Award and MedTech Funding Mandate, there needs to be more consideration about what happens to the adoption of the products



once the funding period ends. The outcome of these funding programmes should be to fully integrate devices into trusts, as opposed to a short-term integration.

IMPROVE DEMAND SIGNALLING ACROSS ARMS-LENGTH BODIES

Measures should be taken to ensure that NHS organisations, Government and regulators are continually communicating with each other around stakeholder engagement, ongoing projects and future prospects that allow for the adoption of technology throughout the health system. This will make sure that all opportunities are seized upon, in the most efficient way, to help solve the current challenges.

Additionally, there should also be clarity from arms-length bodies to industry about what level of innovation the health system wants and needs, preventing industry spending resources on things that do not meet the end goal or current need.

COMBAT THE POSTCODE LOTTERY

Trust by trust adoption naturally results in devices benefitting some parts of the patient population over the others. Steps should be taken to ensure that devices reach all parts of the population – with a particular focus in reaching areas of high patient prevalence.

COMBAT HEALTH INEQUALITIES

DHSC and NHSE should work with industry to review the data and design capabilities available to find workable solutions to tackling health inequalities. Health innovation and technologies have a variety of opportunities to solve these issues and improve the quality of care offered to patients – these elements should be further utilised by the Government and NHS.

SUSTAINABILITY

Industry, Government and the health system should work together to ensure that sustainability targets are being met and reflected across the entire patient journey.

REGULATORY CLARITY

The Government should provide timely post-Brexit regulatory clarity for the HealthTech industry, particularly around the UKCA marking, e-labelling and digital passports.

LEARNING FROM INTERNATIONAL MODELS

Whilst the Health Tech Alliance recognises that it would not be possible nor effective to directly transplant structures from other international systems, we would recommend that the Government and NHS consistently review and monitor successes and failures in global health systems – reviewing what was effective or unsuccessful, pinpointing the reasoning for it and whether this can be replicated in the UK.

An example of a positive learning is that the adoption of technology in health systems has been smoother and more successful in countries that have a strong tradition of using digital across multiple services not just healthcare. This has helped to build a culture of confidence and trust in the use of digital and data, something that is still lacking amongst the public and some healthcare professionals in the UK today.