TRANSFORMING THE MEDTECH LANDSCAPE: COVID & BEYOND

HEALTH TECH ALLIANCE

FOREWORD

The NHS has shown remarkable resilience at a time of great national need. The COVID-19 pandemic has brought along unfamiliar challenges and yet the solutions remain the same: a resilient workforce, the need for sufficient capacity and innovation that allows clinical staff to focus on what they do best – delivering care to patients.

Innovation has been at the heart of the fight against the pandemic and it's clear that many of the changes brought about due to COVID-19 are here to stay. But as we enter a second and possible further peaks, we need to draw upon the lessons learnt during the first peak.

Medical technologies, or MedTech as its more commonly known, have a clear role to play in addressing many of the problems, especially the patient backlog that has inevitably emerged. And yet, there continues to be limited understanding of the role MedTech could play in the near future and for decades to come.

The Health Tech Alliance has drawn on the experiences and knowledge of its members together with the learnings from the first peak to compile this report. The last few years have seen a number of positive policy changes not only for MedTech but for innovation more broadly. It's imperative that this progress is built upon to truly transform the landscape for MedTech and, most important of all, for the patients that can benefit from a whole plethora of new and existing products and services the sector can offer.

Dame Barbara Hakin
Chair of the Health Tech Alliance

INTRODUCTION

The COVID-19 pandemic has demonstrated the important role of innovation in supporting health services to make significant decisions around capacity and priorities, allowing the workforce to communicate effectively, and ensuring patients can be monitored and seen remotely.

Moreover, it is clear that MedTech has a crucial role to play in alleviating the non-COVID care backlog that has inevitably emerged - whether that is through:

- delivering early diagnosis and screening;
- ensuring patients continue to be seen and remotely monitored in an era of social distancing;
- implanting the devices and technologies that allow patients to live healthier lives; or
- moving to procedures that reduce the length of hospital stay or remove the need to stay in Intensive Care Units.

The Health Tech Alliance convened a working group of its membership to explore how the health system could act as a 'pull' for innovation – not only in the 'short-term' but to ensure the UK life sciences sector is world-leading for years to come.

ABOUT THE HEALTH TECH ALLIANCE

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

Find out more about us by visiting healthtechalliance.uk or by contacting secretariat@healthtechalliance.uk. Follow us on LinkedIn and Twitter.

EXECUTIVE SUMMARY

Innovation has played an undeniable role in the first peak of the COVID-19 pandemic and now as we face a second peak and mounting patient backlog of care, MedTech has a key role to play in addressing the challenges the NHS faces.

Whilst the last few years have seen a number of positive changes, companies within the MedTech sector continue to face a number of barriers to adoption. This report examines these in greater detail as well as setting out a number of policy recommendations to truly transform the MedTech landscape. These fifteen recommendations centre on:

- Taking forward best practice that has emerged though the adoption of innovation at pace during the first peak of COVID-19.
- Identifying the 'true' patient backlog and communicating priority areas of care.
- Ensuring that trusts and Integrated Care Systems have the necessary tools to drive care quality and improvements to patient outcomes.
- Harnessing the UK's leading position in R&D.
- Fast-tracking the work of the Accelerated Access Collaborative.
- Delivering long-term and stable funding to key institutions, including the NIHR and AHSNs.
- Learning from international best practice.

Addressing the 'adoption challenge' is essential if the UK is to continue to be considered a global hub for the sector – not only will it benefit the UK economy but it will also deliver a major boost to patient outcomes ensuring that patients live healthier, more productive lives.

MEDTECH INNOVATION – WHAT DO WE MEAN?

Medical technologies are ubiquitous in the health and social care system and our everyday lives. And yet we forget the positive impact they have had in modernising the way that individuals are treated and cared for.

The MedTech sector encompasses technologies ranging from single-use consumables to complex hospital equipment and services including digital health and diagnostic products. MedTech provides solutions across the entire patient pathway – from prevention to cure and everything in between. However, arguably one of the major failings of thinking around innovation in the NHS is that all innovation is seemingly considered in the same breath and treated with a blanket approach.

The sector forms a central pillar of the broader life sciences sector which itself underpins the UK economy. The MedTech sector employs an estimated 131,800 people with a combined turnover of £25.6 billion. The success of the UK economy, therefore, relies on a burgeoning and vibrant MedTech sector.

Similarly the word "innovation" is used universally but is often poorly defined. For the purposes of this report, we categorise innovation in two ways:

- Innovation which is 'standard of care' in other healthcare systems and is supported by strong evidence but has struggled to be adopted by the NHS.

- Innovation which is 'new' technology for any kind of healthcare system globally, but which currently may have insufficient evidence – mainly because it is new or because users continue to learn whilst refining the technology.

INNOVATION IN THE NHS: AN EVOLVING LANDSCAPE

The last few years have seen a number of positive initiatives on top of those pre-existing initiatives all of which will help to act as a 'pull' for innovation. These include but are not limited to:

- The **NHS Long Term Plan** which sets out a vision for more joined-up care, the NHS's priorities for care quality and outcomes improvements and recognition of the critical role of research and innovation in driving future medical advances.

- The establishment of the **Accelerated Access Collaborative (AAC)** as a single 'front' door for innovators and efforts to provide greater signposting and demand signalling in collaboration with the Academic Health Science Networks (AHSNs). The AAC has overseen impressive initial results in the growing uptake of Rapid Uptake products[1]. The AAC's programmes also address both early-stage and more mature products.

- The development of **HealthTech Connect**, funded by NHS England and operated by NICE to provide greater horizon-scanning capabilities and advice to companies of all sizes to connect them to the right organisations to help with product development, assessment and adoption.

- The **MedTech Funding Mandate** which for the first time will introduce a contractual obligation to make selected technologies available as treatment options for patients. Whilst the Mandate has been delayed as a result of COVID-19, it is a first step in alleviating the historic disparity for MedTech products. We hope that when the Mandate is finally launched, it is with refreshed criteria and removes the need for applicable products to deliver in-year cost savings.

- The **National Institute for Health Research (NIHR)** which continues to espouse a world-leading approach to speeding the translation of breakthroughs into benefits for patients. For example, in 2018/19 the NIHR's Local Clinical Research Networks supported NHS organisations in engaging 840,000+ patients in NIHR-affiliated studies – an 18% increase on the previous year despite real-terms reductions to provider allocations. Similarly, the NIHR Biomedical Research Centre have leveraged approximately £3.7bn external investment and generated 66 new spin-out companies between 2014-15 to 2018/19.

- **The Academic Health Science Networks (AHSNs)** which, regionally, offer a 'system pull' and act as a connective tissue across the system bringing together industry with central bodies overseeing innovation and adoption policy, arms-length and funding bodies, industry, and the third sector. AHSNs are also able to support MedTech companies to 'scale up' their real-world evidence base which is becoming increasingly important to demonstrate value to the system.

- **The principles established by the Commissioning through Evaluation (CtE) programme** which help selected companies breach the real-world evidence gap enabling an agreed number of patients to be recruited to access treatments that show promise but are not funded by the NHS.

- The development of **Integrated Care Systems** which by April 2021 should establish greater collaboration and partnership working within the system and mark a move away from competition. The Health Tech Alliance welcomes the Health and Social Care Secretary's recent acknowledgement[1] that the Health and Social Care Act 2012 has unfortunately led to a siloed approach.

THE ADOPTION CHALLENGE

Nevertheless the systemic challenges for MedTech innovators and companies remain entrenched. NHS Improvement estimate that it takes 17 years on average for a new product or device to go from clinical trial stage to mainstream adoption. Even those companies whose products do get adopted face patchy adoption across a system which is famously difficult to navigate.

Is this at all surprising? In reality, no. At a very basic level, there is a clear disparity in the spending dedicated towards research and development compared to adoption. Anecdotal evidence suggests that the English NHS finds it particularly challenging to adopt innovation of any kind. Indeed, our members reported the following adoption challenges:

- **A fragmented system with national priorities differing to local realities** – whilst NHS England & Improvement and NICE set policy on the use of innovation, the fragmented system as introduced by the 2012 Health and Social Care Act means that these policies cannot always be delivered on the ground or require a significant amount of time to do so. Moreover, companies typically have to engage and convince several layers of decision-makers 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 requires, it is challenging for MedTech companies to gather evidence, particularly real-world evidence, and the system has a duty of finding the best way of doing this.

- **A focus on short-term affordability over long-term benefits to patient outcomes and care** – MedTech 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 one-year funding cycles. The requirement for in-year savings acts as a significant barrier to 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 a number of decision-making bodies, sometimes with overlapping remits, and an unclear pathway for innovation to reach the frontline.

- **A postcode lottery** – the decision to adopt a product in one trust does not necessarily lead nearby trusts to do the same. Companies currently have to engage on a trust-by-trust basis. Additionally, within each trust, the adoption of a product triggers a series of changes in diagnosis, treatment and the roles of the workforce and patients, a lengthy process of refinement.

- **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.

- **A lack of incentivisation** – mandating alone does not lead to uptake. Despite being NHS England funded, products supported by the Innovation and Technology Payment (ITP) still face challenges around adoption. A lack of accompanying incentivisation inhibits uptake.

TRANSFORMING THE LANDSCAPE FOR MEDTECH

We call on the Government, the NHS and stakeholders across the healthcare system to consider tangible ways to enhance the innovation landscape and maintain the UK's position as a global hub for MedTech. Set out below are recommendations which we believe, if implemented, will transform the landscape for the MedTech sector to ensure that this vital innovation reaches patients quicker, and in so doing saves lives.

1. **Encourage the learning and sharing of best practice, at a system-level, as to how trusts adopted innovation at pace in the run up to the first peak** of the COVID-19 pandemic so that these lessons are embedded and taken forward for the adoption of innovation going forwards.

2. Building on the learnings of the COVID-19 response, **the Government and NHS leaders should develop mechanisms to involve industry, patient groups and charities in work to support the transformation of health and social care services.** The sector should work with stakeholders across the healthcare system to retain positive changes in the adoption of innovative solutions, embed new ways of working, ensure the better use of data, and help patients to be diagnosed and treated quicker but also avoid a return to top-down initiatives which unintentionally stifle innovation and collaboration.

3. **NHS England and Improvement and its regional offices should work with providers, charities and royal colleges to identify the true patient backlog and current regional postcode lotteries.** Doing so will help NHS England and Improvement and local health services to identify priorities for patient care and potential solutions to tangibly reduce waiting lists. Official figures risk undermining public trust as they appear only to provide a partial picture of the patient backlog due to COVID-19. This should of course go beyond the elective care backlog to include the huge range of chronic care that has been delayed due to COVID-19.

4. Using the above data gathered on the 'true' patient backlog, **NHS England and Improvement should communicate their priority areas of focus for patient care.** This should be accompanied by a series of challenges designed to attract the best innovation and ideas to alleviate the current pressures on healthcare services, keeping people out of hospital settings and ensuring that patients are diagnosed and treated much more quickly.

5. **Ensure that trusts and Integrated Care Systems have the appropriate expertise and are incentivised to drive care quality and improvements to patient outcomes.** This includes understanding that adoption is not a passive activity; it requires expertise in service transformation and bandwidth within clinical services to engage in an adoption agenda. The COVID-19 pandemic has demonstrated that an unhealthy focus on unit price and reducing manufacturing costs, over patient outcomes, has led to unnecessary expenditure on poor-quality or in some cases malfunctioning PPE to the detriment of healthcare professionals and patients.

6. **NHS England and Improvement should implement in full the recommendations of the Independent Review of Diagnostic Services for NHS England by Professor Sir Mike Richards CBE.** Amongst other things, the review proposes the development of new service delivery models including new pathways to diagnosis via virtual consultations and community diagnostics, the rapid creation of community diagnostic hubs to provide care in COVID-free centres, and the rapid evaluation of new diagnostics.

7. **Transform the UK's clinical research processes to enable the rapid approval, set up, recruitment and delivery of research across the NHS.** Doing so will ensure that NHS patients are the first to benefit from clinical breakthroughs and medical technologies. The Government should commission independent research on the performance of the NHS internationally on clinical research, trials and evidence generation pre-COVID, and how well the system harnesses partners and collaborates with industry when required to do so.

8. **Provide long-term and stable funding to AHSNs so that they can deliver on their role of real-world evidence generation and validation.** The AHSNs are already working with one another to build consensus on what real-world evaluation means in practice to provide companies with greater certainty and robust advice.

9. **Fast-track the Accelerated Access Collaborative's (AAC) work in becoming the 'front door' for innovators through a multi-year funding settlement**, ensuring that the AAC delivers continued support to Rapid Uptake products and a scaling up of horizon-scanning mechanisms through the AHSNs, amongst other things.

10. **Work with industry to provide clearer signposting** so that innovators and companies of all sizes are better able to navigate the requirements of delivering innovation to the NHS through best practice guidance.

11. **Launch the MedTech Funding Mandate in spring 2021 with refreshed criteria, removing the unnecessarily restrictive requirement of mandated funding only for products that deliver in-year cost savings.** There are very few MedTech products which deliver in-year savings given the nature of their implementation. Unfortunately the criteria, as written, will hold back a whole swathe of innovative products which will save the NHS time, resources and money in years to come but which are not eligible for the Mandate.

12. **Ensure that all bodies working to drive the uptake of innovation** to the NHS, including NHSX, NHS Digital, the AAC and the AHSNs, amongst others, **have clear and unequivocal remits to remove unnecessary duplication.**

13. As part of the NICE Methods Review, **consider expanding the use of NICE rapid guidelines and rapid evidence summaries** to provide companies with timelier analyses of their treatments and healthcare professionals with information about the latest products prior to their possible adoption.

14. **Deliver long-term and stable funding to the National Institute for Health Research (NIHR)** which has proven its ability to deliver world-leading approach to speeding the translation of breakthrough treatments into benefits. Moreover, the NIHR Biomedical Research Centre's model of collaboration between world-leading universities and NHS organisations should be used to help translate scientific breakthroughs in the fields of digital health and HealthTech into frontline technologies.

15. **Examine and learn from international models of adoption** to ensure that the UK does not lose its status as a global leader in R&D and for life sciences generally. For example, the German NUB Reimbursement Pathway supports the uptake of circa 70 new and innovative products, aims to shorten the time it takes to get a product to market and provides payment on top of hospital budgets. Additionally, the DVG (Digital Supply Act) in Germany has successfully acted as a 'pull' factor for the adoption of technologies ensuring the continuity of care during COVID-19.

ACKNOWLEDGEMENTS

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We would like to thank our members, large and small, all of whom have shared their experiences of the adoption challenges they face and the changes they believe will deliver a tangible impact for the industry as a whole. We are also very thankful to the Shelford Group and AHSN Network for helping to positively shape this report and for sharing their thinking despite being under considerable pressure themselves.

The Health Tech Alliance would also like to pay tribute to the NHS and its workforce for pulling together at a very challenging time for the nation.

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