The Future Direction for Digital Health:
Analysing Recent Government and NHS Plans

Introduction

There has been a flurry of recent events and publications from the UK Government, all of which have the potential to further drive the digitisation of our health system and support digital health companies to grow. The activity demonstrates ongoing support for the Life Science sector, and explicitly recognises the significant opportunity that digital tools present to improve the health of the nation, the efficiency of the NHS, and the potential role the UK can play globally across technology and AI.

The Industrial Strategy, lays out a 10-year plan for economic growth with a strong focus on high-potential sectors, including Life Sciences, which has its own sector plan. Alongside this, the Digital and Technologies Sector Plan and the Technology Adoption Review have also been released, outlining how government will support the discovery, development and adoption of technologies impacting the future shape of the UK economy. Last, but certainly not least, we had the Spending Review, with up to £10 billion allocated towards technology and digital transformation in the NHS. Across these publications, there is a wealth of information relevant to Life Sciences.

The life sciences sector benefits from a dedicated plan, unlike many other industries, with a series of targeted initiatives planned throughout this Parliament, rather than a single major announcement. The government is committed to making the UK the most attractive place in the world to develop and deploy new technologies, particularly recognising the growth potential of HealthTech. Ambition as ever is welcome, but needs to come with a dose of realism to ensure that actions are grounded in measures that will make a tangible difference rather than chasing unachievable goals. The plan aligns with NHS priorities, aiming to use innovation to drive key system shifts, and addresses persistent barriers to adoption. The Office for Life Sciences (OLS) has committed to close collaboration with industry throughout the plan's delivery.

In this paper for ABHI members, we focus mainly on the digital health aspects of the NHS 10 Year Health Plan for England and Life Science Sector Plan, while also highlighting relevant sections from other reports. This document will be updated as we get further announcements and, hopefully, a delivery document for the NHS 10 Year Health Plan.

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Key Programmes

> Ambient voice technology framework for hospitals and GPs in 2026 and 2027.

> New legislation for a Single Patient Record (SPR), with a duty on every health and care provider to make the information they record about a patient "available to that patient". Patients will be able to add their own data from "validated wearables".

> The NHS App will be a "full front door to the entire NHS" by 2028. It will "help direct patients to well evidenced consumer healthcare products".

> A new 'HealthStore' will enable patients to access approved health Apps which will be centrally procured and funded.

> A national platform for remote management, centrally procured, and linked into the NHS App and Single Patient Record, thus enabling proactive management of patients.

> Improved access to health data and expansion of Secure Data Environments, with up to £600 million to be invested in the Health Data Research Service to create a secure, AI-ready platform uniting genomic, diagnostic, and clinical data at scale.

> The Spending Review allocated up to £10 billion towards technology and digital transformation

> Faster Clinical Trials - implementing the O'Shaughnessy reforms to cut approval times to under 150 days and double commercial trial participation by 2029.

> Low-friction Procurement - Supporting a Rules-Based Pathway (RBP) and NHS 'Innovator Passport' to reduce bureaucracy and speed up patient access to new HealthTech.

> NICE's technology appraisal process will be expanded to cover digital tools, wearables, and diagnostics with mandated NHS funding for approved tools.

> Strategic Industry Partnerships - Securing at least one major partnership annually, with tailored support for 10–20 high-potential UK companies to scale and stay headquartered in the UK.

> The Digital and Technologies Sector Plan includes a range of measures related to the Life Sciences sector, including:

  o A new Sandbox Fund and Innovation Network to enable responsible adoption and commercialisation.

  o Establishment of a Sovereign AI Unit, with £500 million to expand UK capabilities in data, compute, and talent.

  o Expansion of the AI Airlock regulatory sandbox for AI-driven medical devices.

  o £22.6 billion annual R&D investment by 2029–30, maintaining life sciences research as a core focus.

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The NHS 10-Year Plan: High Digital Ambitions, Unclear Delivery

The July 2025 publication *Fit for the Future: 10-Year Health Plan for England* (10YP) sets out a vision for a more digitally enabled NHS. It promises transformation through a single patient record, AI integration, and a stronger role for patients in managing their care. However, behind the political rhetoric and visionary language lies, in the most part, a significant lack of detail about how, and when, this transformation will be delivered. The ambition for all hospitals to be fully AI-enabled within the lifetime of the Plan sounds great, but is in reality, is somewhat meaningless. as there is no clarity on what a fully AI enabled hospital means, and no clear round map to get to it....and of course, shouldn't all be about the hospitals.

One of the most conspicuous absences in the document is a delivery chapter. A section detailing near-term steps, budgets and accountabilities was expected, but did not appear in the final publication. This means there is still no published plan explaining how the NHS will move from aspiration to execution.

For members, this creates an ambiguous environment: the demand signals are strong, but the route to adoption remains opaque. **However, it is absolutely clear that the future NHS is a Digital NHS and this plan, without saying it explicitly, is laying the foundations for a "Digital-First" health service.** The Life Science Sector Plan, succinctly lays out the barriers to deployment and uptake of innovation in the NHS. These market access barriers are addressed, at high level, within the 10YP.

Digital will be the default mode of access for most patients, AI assisting clinicians in documentation, triage, and diagnosis and back-office tools, such as ambient voice technology ("AI scribes") and intelligent task automation will reduce admin and clerical burdens. The "5 Big Bets" (Data, AI, Genomics, Wearables, Robotics) to power transformation are focused on the innovative use of digital tools and big data, with the plan specifically highlighting the triple win: for patients, health system and economy.

The 10 Year Health Plan, builds on the ambitions of previous governments, in fact in some instances it proposes ideas that have previously been tried before, unsuccessfully. To try again may seem foolish, but there is a reason for coming back to them, they are, in essence the right ideas. Previous projects may have failed, but we are in different times technologically and, I hope, experience from previously failed IT initiatives can be incorporated into the execution of these new proposals. Delivery is going to be key for the future of the NHS and for this government.

Single Patient Record And The Ownership Question

Among the plan's most touted features is the Single Patient Record (SPR), intended to bring together all of a patient's data, across GP, hospital, social care, and community settings, into one secure, accessible source. Patients would supposedly gain "real control" of their health data, with the record feeding into the NHS App and becoming the foundation for more proactive care. They will also be able to add their own data from clinically validated wearables and home devices. However, the wording of the plan subtly steps back from earlier statements by Health Secretary Wes Streeting, who said the SPR would be "owned by the patient."

True patient ownership would represent a radical shift in data governance, empowering individuals to control how their data is shared, including for research. But this promise is now blurred by vague language and a distant implementation timeline. Legislation to enforce patient access to data is planned for 2028, "subject to parliamentary time." I suspect that parliamentary scheduling will not be the main limiting factor, however. Far more significant is the scale of work required to enable interoperability across fragmented systems, coupled with a lack of clarity on who will fund the

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necessary infrastructure or on what terms. It is also notable that there is no mention of the Federated Data Platform in relation to this interoperability question, or indeed barely any reference to it in the plan at all.

NHS App: The Front Door, Eventually

The NHS App is central to many of the plan's digital ambitions, including acting as the interface for virtual care, diagnostics, wearables, and medicines management. Yet despite significant investment (but also recent budget cuts), the app remains underdeveloped. It is therefore good to see this plan recognising the centrality of the App in a digital-first NHS.

The app will supposedly deliver a wide array of new services, including a virtual 111 system, outcomes transparency, and direct booking capabilities. But with these functions promised only "by 2028," progress seems slow.

One Virtual Ward To Rule Them All

The plan does, however, clarify one key structural issue: who will provide the technology for remote monitoring and virtual wards. With integrated care boards increasingly hollowed out, the answer is national procurement. A single platform will be commissioned to support virtual care at home, with data flowing directly into the SPR and NHS App. This centralised approach could improve consistency, but also raises questions about vendor selection, implementation timelines, and local adaptability.

While the 10 Year Health Plan sets a goal for wearable integration into the SPR across the NHS by 2035, the scale of this task is enormous. If it succeeds, it may genuinely shift the NHS's centre of gravity away from hospital-centric care. But that remains a big "if," especially in the absence of concrete milestones or operational guidance.

HealthStore and NICE Expansion

Another potentially transformative initiative is the creation of HealthStore, a digital marketplace for clinically validated apps and tools. These will be centrally procured and made freely available to patients. HealthStore is framed as the digital equivalent of the NHS medicines model: high-quality products, centrally funded, equitably distributed. But the plan does not clarify how apps will be selected, who will maintain the store, or what standards will be enforced. I would anticipate that the route will almost certainly be through NICE who see their technology appraisal process expanded to cover digital tools, wearables, and diagnostics, starting in 2026.

This is a significant development, as mandated NHS funding for approved tools could create real commercial opportunities. Questions do, however, remain about the scale and speed of this expanded appraisal pipeline, as well as the budget available to support mandated uptake.

The Doctor (and AI Sidekick) Will See You Now

Unsurprisingly, AI features heavily in government plans. It is identified as one of six frontier technologies critical to the UK's Industrial Strategy, alongside Advanced Connectivity Technologies (ACT), Artificial Intelligence, Engineering Biology, Quantum Technologies, and Semiconductors. The government has pledged up to £2 billion to implement all 50 recommendations outlined in the AI Opportunities Action Plan as part of a multi-faceted strategy. This approach combines regional hubs, adoption funds, assurance frameworks, and new regulations, as well as sector champions, including for Life Sciences.

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The establishment of a sovereign compute/data infrastructure is perhaps the lead item, with £500 million to expand UK capabilities in data, compute, and talent. Whilst funding is welcome, the amount is well under the estimates that it cost to develop and run ChatGPT, or even DeepSeek. The government will support the use of AI in the life science industry by leveraging the actions in the [AI Opportunities Plan](#), including the appointment of a national AI champion for Life Sciences and with access to cross-sector infrastructure, such as national compute assets like Dawn and Isambard. A new Sovereign AI Unit will pursue additional targeted measures to secure access to cutting-edge AI, build strategic UK-controlled assets, and capture economic value by supporting frontier AI firms.

The key specific for the NHS and AI is the introduction of ambient voice technologies (AVT) and the roll out of validated AI diagnostic tools.

Featuring heavily in the plan, AVT could significantly reduce the documentation burden on clinicians. A London-wide study from Great Ormond Street Hospital is cited to justify investment, showing a 51.7% paperwork reduction and 13.4% productivity increase per shift. Whilst promising, these gains were most pronounced in A&E and may not generalise across settings. Meanwhile, some EPR vendors have asked NHS leadership to delay separate AVT purchases, promising to develop their own solutions in time. Whether that wait is justified remains to be seen.

But the plan maybe overstates the readiness of these tools, noting the problem is "not adoption but scale", a statement at odds with recent warnings from the NHS Chief Clinical Information Officer about unapproved AVT products. A new procurement framework is planned for 2026–27, to harness an already competitive and fragmented market.

This is interesting, as the government's AI programme places significant emphasis on adoption. It includes regional AI adoption hubs to provide tailored, sector-specific support, an Industrial Strategy AI Adoption Fund to back high-growth AI ventures in key sectors, and investment to connect AI Growth Zones with UK compute clusters and national data repositories. In addition, the programme will support the rollout of widespread AI literacy and training, with a focus on non-AI specialists.

Regulation

The Government has committed to removing regulatory hurdles through reform to the regulatory framework and a route for international reliance for medicines and medical devices so patients benefit. It commits to a more agile regulatory model for medical devices and reinforces the importance of early access and innovation pathways. However specific timelines for regulatory reform, funding, and impact assessments are still evolving. Although we have already had a call for a [second cohort of the AI Airlock](#), which is welcome.

More generally for AI, we are promised a new framework for AI regulation, scheduled for 2026, which will go alongside wider proposals from MHRA due to be published in Autumn 2026.

Clarity on the regulation of SaMD and AIaMD is critical given the debate over the status of high-profile technologies such as AVTs and the continued perception of a 'Wild West' in the digital health sector, much, in my opinion, driven by the lack of clarity of what is in and out of scope of medical device regulation.

The new framework will include proposals for an International Reliance Framework, although we know MHRA remain reticent to recognise products approved via predicate pathways, and previous statements on this subject have not held out too much hope for SaMD and AIaMD having a route to

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market via this reliance framework. Therefore, we await with hope, that the promised MHRA AI proposals deliver on the Industrial Strategy promise of streamlined regulation and market access.

Data, Data everywhere

Data is a red thread across the plans, which underscores that better, ethical, secure, and research-ready health data, supported by major investment and platform development, is essential to drive innovation, scale AI and genomics, and make the UK a global leader in life sciences. The data infrastructure is also, rightly, framed as a key enabler of the NHS's three strategic shifts.

Both the LSSP and 10YP highlight the health data research service (HDRS), which aims to transform access to health data by creating a unified, secure, and research-ready national platform. It will enable easier and broader access to population-scale datasets for academic, commercial, and other research. Rollout is set to begin by Autumn 2025 and will gradually expand, so that by 2030, HDRS will offer a single access point to comprehensive, AI-ready datasets. These will include GP, hospital, prescribing, and death records, with linkage to pathology, radiology, and genomic data. To support this infrastructure and streamline governance, new legislation will be required.

There are several critical interdependencies for HDRS, including the National Data Library, the existing SDE network and the existing consented health datasets (Biobank, Our Future Health and Genomics England). The latter datasets underpin the ambition to become a global leader in genomics by expanding consented health research datasets and developing advanced infrastructure to support routine use of genomics in healthcare. By 2030, major initiatives like Our Future Health, UK Biobank, and Genomics England will create vast, linked datasets combining clinical, genomic, and biobank information from millions of participants. These resources will support large-scale research and clinical trials, accelerate innovation in areas like cancer and rare disease, and enable more personalised, preventative care. The NHS Genomic Medicine Service will play a key role in integrating these advances into routine practice, ensuring faster testing, wider access, and better alignment with precision medicine.

I would recommend a re-read of the [Sudlow Review](#), as the LSSP states that it will be crucial in guiding the approach to health data.

Notable By Their Absence?

Electronic Patient Records (EPRs) are barely mentioned in the plan. In the section that does refer to them (though it uses the term "clinical systems," which I assume includes EPRs) the assessment is damning. It describes current systems as poorly designed, burdensome, and rooted in US billing models. The plan suggests no clear strategy for addressing this, other than to use AVT to avoid data entry (see below).

Despite a £370m commitment to the Federated Data Platform, the plan mentions it only twice. Its low profile may reflect political sensitivities, given its association with the previous administration and the controversy around its supplier.

Cybersecurity, meanwhile, is also conspicuously absent in the 10 Year Health Plan. This seems a significant oversight given last year's attack on the NHS that led to patient harm, and growing risks associated with centralised data systems. As the SPR and NHS App become major repositories of

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sensitive health data, their resilience will become a matter of national security. The current silence is unlikely to last.

Cyber Security is however highlighted in the Digital and Technologies Sector Plan as another of the 'Frontier Technologies' with significant growth potential and positioned as a key enabler for the other tech areas such as AI and Quantum. It underscores cyber security's role in economic and national security, noting geopolitical instability and the need for trustworthy digital infrastructure.

A new [Cyber Security Growth Action Plan](#) will guide investment, align with the [National Cyber Strategy](#), and support innovation and startups through a £16 million fund. A £187 million TechFirst programme will train one million people in AI and cyber skills and regional cyber clusters will be strengthened. DSIT has taken over public-sector cybersecurity, aiming for more integrated oversight and faster coordination. No clarity is provided on how this may link to NHS/Department of Health and Social Care cyber security reporting lines.

Opportunities

The 10-Year Health Plan outlines a strategic shift in how health services will be delivered, presenting multiple opportunities for digital health companies. Digital health developers will be able to integrate with the SPR ecosystem, particularly those working on wearable-linked diagnostics and monitoring, long-term condition management, and preventive tools.

Enhanced digital infrastructure will support deployment, aided by more streamlined processes for market access (NICE, NHS App, HealthStore, Rules Based Pathway and Innovator Passport) and procurement. However, the plan is clear that the number of technologies that will benefit from new pathways, will be limited. It is great to see that both DTAC and DPIA are highlighted in the LSSP as information to be included in the Passport.

Interoperability through international standards will position companies well to take advantage of a more nationally driven approach. Developers of evidence-backed HealthTech products can seek NICE endorsement to support NHS-wide commissioning and possibly funding. Companies with RCTs, real-world evidence, or economic models will be well placed.

With the NHS App evolving into a personalised, all-in-one assistant that supports symptom checking, diagnostics booking, medication management, and care navigation, the integration of third-party services will provide an entirely new route to access and support patients.

More broadly, an enhanced data infrastructure, both within health and through the National Data Library, will make access to data easier and create stronger incentives for the system to enforce interoperability standards.

The HDRS promises streamlined access to a broad range of NHS data to support research studies. This breadth of data will include information from wearables, and we can expect significant changes in how such data is ingested into the system and used to deliver enhanced care packages. It will also help empower patients to self-care, linked to remote management that provides oversight and a safety net. Access to wearables via the NHS is touted as the default by end of the plan, expect the build to that to be slow but inexorable.

AI with, and in, everything, is the order of the day - building out from the current focus in diagnostics and back-office automation. It is welcome that the plan acknowledges the issues with adoption and promises to "deliver faster and at-scale real-world evaluations of AI." This is critical to realising the

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opportunities, as is clarity of regulation and the interplay of the responsibilities of developers and deployers.

For digital health companies, the opportunities lie in:

> Interoperability & infrastructure support.

> Evidence-backed condition management tools.

> Patient engagement and remote monitoring.

> AI-enabled productivity gains.

Members that align to NHS priorities (efficiency, access, health inequalities, and sustainability) and plug into national platforms like the NHS App, SPR, and HealthStore will be well positioned.

Conclusion: Ambition Without Anchoring

For a Health Plan the 10YP is quite tech heavy whereas, for a Sector Plan, the LSSP is strong on health, a welcome factor no doubt of their co-development. They lay out a sweeping vision for a digitally enabled health system, offering a roadmap of what the NHS *could* become. But as things stand, it lacks the clarity, urgency, and resourcing needed to make that vision credible. HealthTech suppliers, clinicians, and patients are being asked to buy into a future without being shown how to get there

For now, the signal to industry is mixed: enthusiasm is welcome, engagement is expected, but certainty is scarce. The direction of travel is broadly correct, but the delivery plan is still on the drawing board. Without that plan, without the detail, we can be optimistic but remain wary about the extent and speed of opportunity. However, the Government has acknowledged that industry cannot be merely stakeholders but must be partners in its delivery, so there is a role for our sector to play in helping to determine how this plan will be delivered.

The ABHI Digital Health Group will be aligning work programmes to the key themes that have emerged from the publications. Some of these, such as Data, Artificial Intelligence and Market Access, are already key group objectives. Other areas will be incorporated as we discuss with system leaders the prioritisation of the various digital initiatives.

Timelines

Subject	Description	Target Date	Source Document
Clinical trials efficiency	Cut clinical trial setup times. By March 2026, the average setup time for clinical trials will be reduced to 150 days.	March 2026	DTSP
Rules Based Pathway and Innovator Passport	Streamlining the route to procurement, giving low-friction access to the NHS through a Rules Based Pathway (RBP) for MedTech, and an NHS 'Innovator Passport', enabling innovative MedTech products to reach patients more quickly.	RBP launched April 2026 IP introduced end 2026	LSSP

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Urgent care digital booking	Enable digital urgent-care appointments. By 2028, patients will be able to book into the most appropriate urgent care service (e.g. urgent treatment centre or same-day emergency care) via NHS 111 or the NHS App before attending.	By 2028	10YP
NHS App as "front door"	Transform the NHS App into a one-stop gateway for care. By 2028, the app will serve as a full "front door" to the entire NHS, enabling symptom advice, provider choice, test booking, virtual consultations, medication management, and more.	By 2028	10YP
Unified digital patient records	Establish a single, integrated digital health record accessible to patients and clinicians. A new law will mandate all providers to use a unified patient record, and from 2028 patients and professionals will be able to access this record via the NHS App.	From 2028	10YP
Health Data Research Service	Up to £600 million investment to create the world's most advanced, secure and AI-ready health data platform. This will unite genomic, diagnostic and clinical data at population scale enabling easier access to UK health data.	Sept 2026: minimal viable product Dec 2026: expand data assets Fully functional by 2030	IS/TAR/LSSP LSSP
New Regulatory Framework	Review regulations and publish a new framework for AI. Pre-market statutory instrument for Framework for International Reliance	2026 Autumn 2026	LSSP
Reforming the COPI Regulations	Parliament permitting, the Government will pass regulations reforming the current Health Service (Control of Patient Information, COPI) Regulations of 2002.	End 2026	LSSP
AI-enabled hospitals	Modernise hospital care with technology. By 2035, all hospitals will be fully AI-enabled, deploying artificial intelligence for diagnostics, administrative tasks (e.g. AI medical scribes) and clinical decision support to improve efficiency and patient care.	By 2035	10YP

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Wearable health tech	Make wearable devices for monitoring and managing conditions will be a routine part of care in preventive, chronic, and post-acute care, with all NHS patients having access to these as part of normal treatment.	By 2035	10YP
AI Sector Champions appointed	Government-appointed experts in key industries (e.g. health, finance, creative) will lead targeted AI adoption efforts, identifying opportunities, breaking down barriers, and engaging with regulators.	Summer 2025	TAR
Details on sovereign AI function	The government will define a new national AI capability to support UK-led compute infrastructure, secure access to quality data, and global talent recruitment. This "sovereign AI function" will underpin future competitiveness and resilience.	Spring 2025	DTSP
Digital regulation & copyright alignment	A review and reform of digital and IP laws will be undertaken to ensure they are adapted to the demands of modern AI systems. This includes clarifying copyright in the context of generative AI and providing legal certainty for both developers and rightsholders.	Not dated	TAR
Streamlining regulation and market access	Supporting MHRA to become a more agile regulator and give industry a clearer route to market through joint work with NICE. Expand capacity in the innovation service, alongside a route for international reliance.	Not dated	IS/TAR
Start of AI adoption fund & hubs	Network of regional AI adoption hubs providing tailored support for businesses, particularly SMEs, to implement AI technologies. Hubs will offer guidance, pilots, training, and links to R&D, with an emphasis on productivity and real-world outcomes.	Ongoing (2025–26)	TAR
Expansion of AI governance frameworks	Strengthen the approach to AI safety and trust by expanding assurance, auditing, and oversight frameworks. This includes developing regulatory testbeds, formalising ethical standards, and coordinating across regulators to guide safe and effective use of AI in critical sectors.	Under development throughout 2025	DTSP

Notes:

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10YP - <u>Fit for the Future: 10-Year Health Plan for England</u>, LSSP – <u>Life Science Sector Plan</u>, DTSP - <u>Digital & Technologies Sector Plan</u>, TAR - <u>Technology Adoption Review</u>, IS - <u>Industrial Strategy</u>

<u>With thanks to HSJ</u> for the idea and 10YP detail.

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