

Driving Digital Transformation: techUK's Recommendations for Health and Social Care

November 2024

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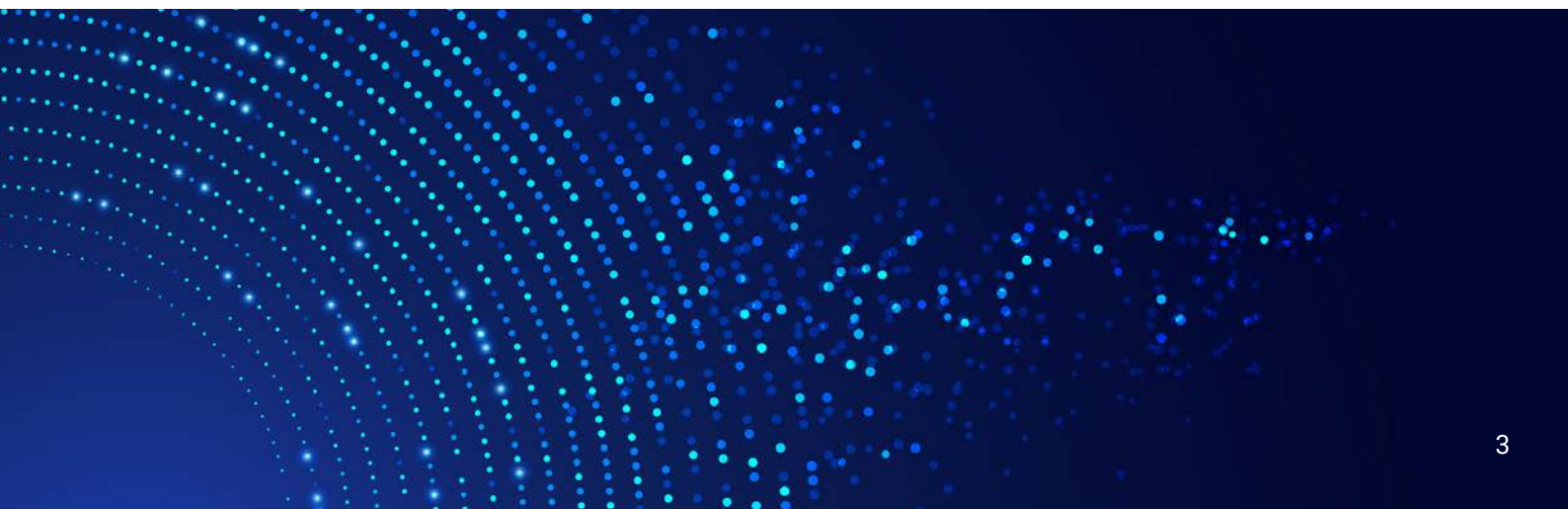
Foreword

from techUK's Health & Social Care Council

The new Government has recognised the need for decisive change. From moving away from treatment towards a prevention-focused approach, increasing productivity and supporting economic growth, the ambitions stated to date are clear and long-awaited. Lord Darzi's [Independent Investigation of the NHS in England](#) adds further gravity to the poor status of health and care services, and further reinforces that action based on the status quo will be inadequate to realise the transformation and reform required across the health and social care sector.

It is vital that we do not lose the current window of opportunity through which to act on these ambitions and make significant structural changes in health and social care. This has never been more important in relation to investment in digital transformation, the management of capital and operating expenditure for IT infrastructure, standardising and improving procurement practices, nourishing a thriving SME sector, and meaningfully addressing the interoperability challenges which currently hinder the modernisation and productivity of health and care services.

techUK members from across the health and care technology industry are ready to support the strategic planning efforts and implementation of the next phases of digital transformation in health and social care services. If the recommendations presented are not actioned with urgency, not only will the opportunity to deliver the systemic change and underpin the policies required to make long-awaited improvements across the NHS and social care be missed, but so too will the UK's vulnerability to losing valuable innovations overseas, and ability to sustain a thriving digital health and care ecosystem, be worsened.



Summary of recommendations



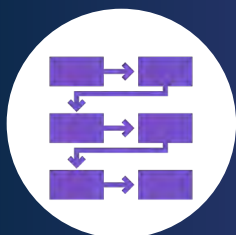
Support strategic change through industry engagement and cross-system collaboration

- The health and care technology industry must be regularly engaged as key stakeholders in the development of all policies, strategies and legislation relating to the use of digital, data and technology in health and social care.



Protect and invest in the digital transformation of health and social care

- The UK Government and NHS England should:
 - Ring-fence funding for digital transformation and cyber resilience in health and social care at previously committed levels as a minimum.
 - In collaboration with the Healthcare Financial Management Association (HFMA), develop guidance for NHS Chief Financial Officers regarding the management of capital and operating expenditure for IT infrastructure, with clarity on accounting rules to support the implementation of cloud-based services.
 - Increase central investment to support health and care systems to continue and expand the scope of their digital transformation.
 - Align existing and new digital investments to integrate with and build on the national platforms and services being invested in, for a common architectural approach to be cost-effective and compound value.



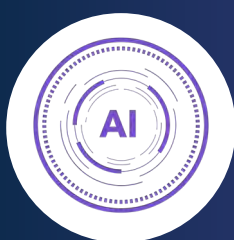
Improve commercial and procurement practices

- The UK Government should collaborate with Devolved counterparts to create a single UK-wide framework tracking environment to mitigate against each supplier doing so and remove disadvantages for SMEs.
- NHS England should:
 - increase transparency around commercial activity across the NHS at local, national and regional levels. This should include establishing clear commercial roles and responsibilities between the NHS Central Commercial Function in NHS England, NHS Trusts, Integrated Care Systems and Boards, and primary care organisations.
 - streamline and clarify procurement practices and criteria and how they will work in practice, including new NHS framework policies, infrastructure, and social value requirements.
 - support a transition to dynamic frameworks which allow a supplier that is compliant to be added at any time and allow timely removal of a supplier that is no longer compliant.
 - prioritise the delivery of the NHS SME Action Plan and engage with industry to support its implementation.
 - clarify the roles and responsibilities between organisations providing innovation-related support services, including the Health Innovation Networks and NHS Innovation Service.
- The Government, NHS and regulatory bodies should clarify and standardise the evidence base required for digital health and care solutions, providing consistency in requirements, and establish a national reimbursement system. This includes considering industry's responses to the NHS England-NICE Integrated MedTech Pathway consultation, including regarding demand signalling and reimbursement for digital health and care innovations.



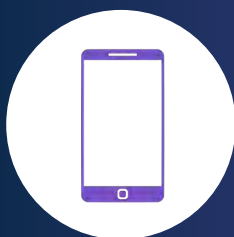
Organise the data landscape

- The UK Government, national and local NHS and social care organisations should:
 - Clarify the roles, interlinkages and information governance requirements between all nationally funded and overseen health and care data initiatives.
 - Work with suppliers to aid understanding of intellectual property ownership and rights when leveraging health and care data, common tools and platforms, to enable easy provisioning in the UK.
 - Prioritise engagement with the public and healthcare professionals for all UK-wide and national data initiatives.
- NHS England should:
 - Clarify the future strategy for the Connecting Care Records programme, the next phase of health and care records, and plans for future cross-sectoral interoperability, including APIs required for operational workflow integration.
 - Publish the NHS Standards and Interoperability Strategy, commit to collaborating with industry in its implementation, and consider its implications for social care.
- NHS England, DHSC and local NHS and social care organisations should prioritise initiatives to phase out the use of legacy systems in health and social care settings to reduce the considerable cyber risk.



Prepare for Artificial Intelligence

- NHS England and DHSC, working with key partners including regulatory bodies, should develop a central strategy and guidance to guide the safe, responsible adoption and governance for the use of artificial intelligence in health and social care.
- NHS England and DHSC should
 - Publish an evaluation of the NHS AI Lab's activities and impact to inform future AI projects across health and social care.
 - Publish the Collaboration Charter between the Government's Incubator for Artificial Intelligence and NHS England.



Define the next phase of the NHS App

- The UK Government and NHS England should publish a renewed vision, roadmap and commercial strategy for the NHS App, including the approach for integration with third parties.



Accelerate digital transformation in social care

- DHSC and NHS England should expand the remit of the Digitising Social Care Programme to include collaboration with the Department for Education, local government and other public services.
- DHSC and DfE, working with key partners such as NICE, should develop an assurance mechanism for technologies deployed in social care settings.
- DHSC, DfE, local government and key research partners should support research initiatives to expand the evidence base for technologies used in social care settings.



Foster integration across health, social care and core public services

- DHSC, NHS England, local government and Integrated Care Systems should support policies and initiatives for redesigning integrated care pathways across health, social care and other public services.
- DHSC and NHS England, working in partnership with local government, should adopt an integration-first approach and address both health and social care in future digital transformation policies and strategies.



Address the digital skills gap in the health and care workforce

- NHS England should publish the NHS Digital Workforce Plan and work with industry to support its implementation.
- Working in partnership with industry, Skills for Care, the Government and designated partners should support the implementation of Skills for Care's Social Care Workforce Strategy.

Introduction

The health and social care sector currently faces extraordinary pressures, with record-breaking waiting list lengths, low levels of public and staff satisfaction, demand for services continuing to rise, and a workforce experiencing huge strain. Considering these pressures, the next five years represent a critical time period to confront both these present-day challenges and shape the future of the health and social care system. Moving forward, clear strategic direction and stability will be vital to achieving such progress, including preparing for, and delivering, greater digital transformation across health and social care.

techUK's recommendations for health and social care highlight focus areas which we believe should be prioritised during the current five-year parliamentary term in order to maximise this window of opportunity. The health and social care technology industry is committed to working with the Government, NHS, health and care providers and key partners across the sector during the next five years and beyond to implement the proposed recommendations and address the critical challenges faced by the system.

Acting on techUK's recommendations has the potential to significantly improve citizen outcomes and the performance and productivity of health and social care services. Furthermore, the recommended actions will contribute to delivering progress on the Government's health and care priorities, including driving economic growth, reducing waiting times and placing greater emphasis on community-based health and care.

Support strategic change through industry engagement and cross-system collaboration

With significant planning and strategising underway which is anticipated to significantly influence the future of health and care services, including a 'One Digital' approach within the NHS and the [development of a Ten Year Health Plan](#) informed by [Lord Darzi's Independent Investigation of the National Health Service in England](#), consistent industry engagement is paramount to support the strategic development and delivery of the Government's health and social care priorities throughout both the current parliamentary term as well as the forthcoming decade. techUK is ready to support these initiatives and discussions, and continues to convene key stakeholders for critical dialogues across a diverse range of policies and practices relating to the development, adoption and use of digital, data and technology in health and social care.

Supporting the transition to a preventative, community-first approach

The health and care technology industry is well-placed to support the Government's ambition to transition away from a focus upon hospitals towards more community-based, decentralised health and social care services. Indeed, improving the adoption of digital, data and technology

tools can enable the delivery of physical, mental health and care services across the lifespan at, and closer to, home. For example, data-driven predictive analytics can identify individuals in need of pre-hospital intervention, while digitally enabled continuous monitoring and remote care appointments can reduce demand on hospitals and more specialised services. Additionally, these tools can also support population health management efforts and facilitate swifter and wider access to support across a variety of health and care needs.

The health and care technology industry is already transforming health and care

techUK's [Digital Health Evidence Pack](#) and [Five Point Plan for CareTech](#) highlight examples of a range of innovations and expertise which the health and care technology industry has already contributed to improving citizen outcomes, reducing demand on services, and transforming the way in which health and care are delivered. Embracing innovation and transformation, in conjunction with continued dialogue with industry, is essential to improving and reforming health and care services to better equip systems for the challenges of today and the years ahead.



Supporting structures to enable greater innovation

To support greater digital transformation and innovation adoption across the UK's health and social care services, strong collaboration and coordination is needed between core central organisations including NHS England, DHSC, National Institute for Health and Care Excellence (NICE), local government, DfE and the Medicines and Healthcare products Regulatory Agency (MHRA), as well as counterparts across the Devolved Nations. This foundational collaborative working should be accompanied by regular dialogue and consultation with the technology industry to support the planning and delivery of innovation and digital transformation-focused initiatives across the UK. The [Innovative Devices Access Pathway pilot](#) is a preliminary example of such cross-agency collaboration and industry engagement which should continue to be built upon. Such joint working practices will mitigate against duplicated efforts and ultimately improve the flow of innovation into the health and care system.

The health and care technology industry must be regularly engaged as key stakeholders in the development of all policies, strategies and legislation relating to the use of digital, data and technology in health and social care.

Protect and invest in the digital transformation of health and social care

To ensure continued advances in the scale and pace of digital transformation across health and social care, both protecting existing funding, along with further investment, will be central to securing this progress. From developing foundational digital infrastructure and enhancing data quality, to improving network connectivity or upgrading outdated (legacy) IT devices and systems, investment for these fundamental improvements will not only support the continued modernisation of health and care services, but will also ultimately have direct impact upon care quality, citizen outcomes, staff experience and organisational efficiency, as well as underpinning future additional service transformation.

Protecting previous commitments

Recent years have seen health and social care digital transformation funds repeatedly at risk of de-prioritisation and re-allocation to alternative causes. Crucial funding for cyber security initiatives protecting the critical infrastructure and operational resilience of health and social care systems- and ultimately, ongoing care- has also been subjected to significant cuts. Investment shortfalls and interruptions to digital transformation and cyber security funding streams prevent health and social care systems from completing vital projects and carry significant operational and clinical impacts. This can lead to negative consequences including poorer citizen outcomes, system-wide disruption and significant staff burden. Furthermore, inadequate digital transformation and cyber security investments over time may also give rise to further consequences such as delayed introduction of new innovations and even

greater cyber threat vulnerabilities due to persisting use of outdated technologies.

Accordingly, it is imperative that previously committed investment focused on digital, data and technology projects in health and social care must not be diverted. This includes cyber resilience funding via the NHS Cyber Security and Better Security, Better Care programmes, as well as for the NHS England Secure Data Environment and longer-term virtual ward expansion. The NHS productivity provisions pledged in the Chancellor's 2024 Spring Budget focused on NHS digitisation must also be upheld, and for which clarification is required regarding the target workstreams and outcomes this is intended to prioritise and deliver.

Optimising existing funds to support IT infrastructure

Further to sustaining pre-committed investment for digital transformation in the NHS, optimising the management of existing funds is critical to foster digital transformation. Specifically, how capital and operating resources are allocated to support more strategic investment in IT infrastructure, which has been a significant barrier to enabling digital transformation in the NHS to date. Inconsistencies in how International Financial Reporting Standards (IFRS) are interpreted across NHS organisations present a need for guidance for financial system leaders. Such guidance should aim to support accounting decision-making by providing greater clarity on the interpretation of IFRS to support more consistent application of respective capital and operating rules for IT infrastructure investments.

Increasing investment for transformative change

Digital transformation initiatives carry significant cost-saving potential and return on investment opportunities. To ensure that new technologies are accessible and sustainable for the NHS, a strategic approach to funding and integration is key to ensuring that supported initiatives are sustainable, additive and positively compounding. Whether providing opportunities to automate or streamline operational processes for improved efficiency (such as staff rostering or appointment booking), to innovating care pathways and clinical workflows in order to optimise outcomes, the benefits of investment remain resoundingly clear. techUK's [Digital Health Evidence Pack](#) and [Five Point Plan for CareTech](#) include examples of the impact and efficiency opportunities which the adoption of digital, data and technology tools can enable.

Further to existing commitments, additional investment will be unavoidable across numerous

domains, for example introducing new technologies and upgrading equipment, increasing the digital maturity of health and care systems and developing both general and specialist digital skills of health and care professionals. The significant pressures and limited resources of health and care systems currently offer limited capacity to carry out much needed change management exercises as part of digital transformation projects. Therefore, explicit provision for the sufficient change management support required to deliver transformation must be recognised as a fundamental component to support the organisational and workforce capacity required to deliver transformational change and realise the full potential of investment.

In addition, further digital transformation and introduction of new technologies in health and care will be contingent upon continued future investment to significantly improve the quality of existing health and care data and data governance processes. For example, the ability to successfully train and deploy AI-driven technologies will be dependent upon access



to high quality, large-scale representative health and care data repositories. Particular investment is also going to be required to reimagine information governance and clinical risk management processes, given that the agility which modern software and data capabilities offer are constrained by processes that are based upon a linear model of working.

Consolidating initiatives and building on common architecture

NHS England is making significant investments in platform architecture and services, such as the NHS App, NHS Notify, NHS Federated Data Platform and Secure Data Environments. There is now an opportunity to integrate existing national data and tools used by the market, such as the National Disease Registration Service and the Population and Person Insight project, to make them more accessible and valuable to the local NHS market. Going forwards, to avoid duplication, new strategic initiatives and newly funded programmes should integrate with or build on these common architectures.

Strategic investment and implementation remains fundamental to health and care services being better able to adopt new innovations and realise future digital transformation, with positive impacts upon citizen health and wellbeing, staff experience and system productivity. Furthermore, the UK will also have greater capability to keep pace with the digital transformation progress of international counterparts.

The UK Government and NHS England should:

- **Ring-fence funding for digital transformation and cyber resilience in health and social care at previously committed levels as a minimum.**
- **In collaboration with the Healthcare Financial Management Association (HFMA), develop guidance for NHS Chief Financial Officers regarding the management of capital and operating expenditure for IT infrastructure, with clarity on accounting rules to support the implementation of cloud-based services.**
- **Increase central investment to support health and care systems to continue and expand the scope of their digital transformation.**
- **Align existing and new digital investments to integrate with and build on the national platforms and services being invested in, for a common architectural approach to be cost-effective and compound value.**

Improve commercial and procurement practices

A complex system requiring clarity and stability

The complexity of the health and care procurement landscape can be challenging to navigate, with varied procurement structures and processes across organisations and between local, national and regional levels. Several policy changes and alterations to commercial and procurement processes in recent years have added to this complexity.

A lack of standardisation, stability and predictability presents a challenging environment for businesses of all sizes, in particular small-medium enterprises (SMEs), to understand and successfully operate within, with instability also acting as a barrier to private sector investment. With no clear single entry point into the NHS for innovators, routes towards obtaining a contract through which to work with the NHS may be fragmented. Furthermore, inconsistencies in specifications and standards across different frameworks can mean that many firms, particularly SMEs, find themselves barred from entering a framework or required to consider alternatives such as partnering with larger enterprises. In addition, social value requirements for industry require clarification and standardisation to resolve inconsistencies in requirements between health and social care organisations. techUK's recommendations on [Improving Social Value in Technology Procurement](#) identify several opportunities for improvements in this area.

Improving commercial and procurement practices to increase standards and fairness

Ensuring the fair and balanced adoption of proven effective products and services across the NHS is vital. This will help to reduce regional variation and inequalities and ensure equality of access to the most effective innovations for all citizens, irrespective of location. Improved standards and accountability can be supported by improved commercial practices within the NHS, including through assuring the value of products and services procured. For example, requirements to provide evidence of the impact of a given product or solution against pre-determined qualifications- which can be assessed both before and after purchase completion- could support greater assurance of products and services procured.

Greater equality of commercial opportunity can be realised by increasing awareness and transparency of new opportunities, as well as existing deployments. For example, a digital, data and technology product catalogue system which operates at national and local levels across the UK could offer live commercial opportunity tracking, as well as allowing oversight of purchased solutions which have already been deployed. A single repository through which to track opportunities across all frameworks would also prevent the need for each supplier to invest in this ability and help SMEs that cannot afford to make such investments.

Additionally, relative to more traditional procurement processes, dynamic structures such as Dynamic Purchasing Systems ('Dynamic Markets' under the Procurement Act 2023) can offer greater flexibility, competition and market access opportunities. This could be particularly beneficial for supporting the adoption of new innovations as well as greater business opportunities for suppliers. Furthermore, a dynamic arrangement allows a supplier that is compliant to be added at any time, and similarly allow timely removal of a supplier that is no longer compliant.

Communicating demand and structuring reimbursement

A structured and predictable system through which to manage demand and reimbursement for digital, data and technology products and services adopted by the NHS is urgently needed. The absence of a national systematic process through which to indicate the degree of citizen need, or what specific service or system improvements may be required for a given organisation or locality, is a fundamental challenge

impacting NHS organisations, suppliers and the patient. It also means that for companies selling to the NHS, those wishing to scale their product beyond its original pilot or implementation location must approach organisations of interest on an individual basis. This incurs significant economic disincentives including navigating bureaucracy, time and financial resources.

Challenges are also posed in the lack of clarity and standardisation regarding the evidence base required to demonstrate a product or service's effectiveness and cost-effectiveness, with inconsistencies in requirements across organisations and regulatory bodies. These variable demands, amidst unclear financial reimbursement opportunities, can be especially challenging for start-ups and less established SMEs who may be operating at a pre-revenue stage. The [joint consultation led by NHS England and NICE for a rules-based integrated Medical Technology Pathway](#) provides an opportunity through which to make improvements in demand signalling and reimbursement practices. The consultation responses from industry representatives should be carefully considered, and industry should be engaged in all subsequent stages of post-consultation activities.

Recognising and supporting digital health and care SMEs

Amidst a competitive international health and care technology market, the UK must do more to support digital health and care SMEs, including facilitating greater opportunities to engage with the NHS. Without doing so, there is a risk that companies may consider withdrawing from the UK market due to prohibitive factors which prevent companies from accessing or fulfilling opportunities to scale their business. This is especially pertinent for SMEs providing patient-facing digital health technologies; these tools can empower patients to manage their health and mental well-being while on waiting lists, support individuals with long-term conditions, and prevent crises before they occur. Digital platforms, mobile apps, and remote monitoring solutions already exist and have demonstrated their value in improving patient outcomes, particularly in areas such as self-care, mental health, and chronic disease management. However, at present, many of these solutions are at risk of becoming unavailable due to the lack of clear, structured financial support. If we are to harness the full potential of these vital tools, it is crucial to proactively consider how we can support their continued development and adoption within the NHS.

The lacking clarity, transparency and standardisation in NHS procurement criteria and processes also present significant barriers to entering business with the NHS for many SMEs with digital, data and technology products and services. In addition, due to resourcing constraints many SMEs are forced to focus their efforts bidding to gain access to a single or restricted quantity of frameworks, where failing to do so can risk being barred from accessing the market. As a result, the spread of innovations within the NHS may be hindered by poor procurement processes, as opposed to a lack of need within the health system.

The [NHS SME Action Plan \(2024\)](#) includes several commitments to supporting SMEs to work with the NHS, including to “ensure that SMEs are considered at every stage of the procurement process” and to “review unsuccessful SME procurement submissions”. To support the sustainability of digital health and care SMEs, NHS England must prioritise working towards fulfilling the commitments outlined in the Action Plan. In addition, regular SME engagement, including beyond the NHS SME Advisory Board which engages with a limited number of SME representatives, can provide NHS England with crucial feedback on the NHS SME Action Plan and its progress. This would also provide greater opportunities for digital health and care SMEs to inform commercial NHS policies and practices.

Innovation support and signposting

Whilst well-intended as innovator support mechanisms, poor understanding of the differing roles and responsibilities of innovation-focused support services at local and national levels - such as the regional Health Innovation Networks and NHS Innovation Service - remains a common challenge for digital health and care innovators seeking to supply to the NHS. Clarity on organisational roles, remits and any associated costs of their innovation-focused support would help innovators to better understand and navigate the innovation support landscape and which service(s) they are best suited to approach. It would also mitigate duplicated effort and the risk of potentially conflicting advice across support-providing services.

- **The UK Government should collaborate with Devolved counterparts to create a single UK-wide framework tracking environment to mitigate against each supplier doing so and remove disadvantage for SMEs.**
- **NHS England should:**
 - **Increase transparency around commercial activity across the NHS at local, national and regional levels. This should include establishing clear commercial roles and responsibilities between the NHS Central Commercial Function in NHS England, NHS Trusts, Integrated Care Systems and Boards, and primary care organisations.**
 - **Streamline and clarify procurement practices and criteria and how they will work in practice, including new NHS framework policies, infrastructure, and social value requirements.**
 - **Support a transition to dynamic frameworks that allow a supplier that is compliant to be added at any time and allow timely removal of a supplier that is no longer compliant.**
 - **Prioritise the delivery of the NHS SME Action Plan and engage with industry to support its implementation.**
 - **Clarify the roles and responsibilities between organisations providing innovation-related support services, including the Health Innovation Networks and NHS Innovation Service.**
- **The Government, NHS and regulatory bodies should clarify and standardise the evidence base required for digital health and care solutions, providing consistency in requirements, and establish a national reimbursement system. This includes considering industry's responses to the NHS England-NICE Integrated MedTech Pathway consultation, including regarding demand signalling and reimbursement for digital health and care innovations.**

Organise the data landscape

Reviewing concurrent initiatives

There is a significant ongoing activity across the health data landscape, including several co-existing initiatives which span primary care, secondary care and clinical trial data, including the NHS England Secure Data Environments for Research and Development, NHS Federated Data Platform, NHS DigiTrials, and OpenSAFELY. This year, techUK [reviewed the opportunities and challenges facing the NHS Secure Data Environment Network](#) and outlined opportunities for industry collaboration across the Network. There are also several live health data research programmes in receipt of public funding, including Our Future Health, UK Biobank, Genomics England's Research Environment (GEL), and the Clinical Practice Research Datalink, in addition to workstreams led by organisations such as the UK Health Data Research Alliance managed by Health Data Research UK. Additionally, organisations such as Commissioning Support Units may use further data sources to inform commissioning decision-making, such as the National Commissioning Data Repository.

As a result, there is a need for clarification of the roles, objectives, interlinkages and information governance requirements between all live data initiatives across the health data landscape at national, regional and local levels. Greater coordination and oversight are also needed

to foster cohesion, reduce duplication and fragmentation across the initiatives. The [Sudlow Review of the UK health data landscape](#) is a welcome step towards providing greater clarity and supports such coordination across the varying health datasets and uses in the UK.

As well as improving coordination across ongoing health data initiatives and strategies, further clarity is required for technology companies working with UK health data in terms of intellectual property (IP). Where IP is developed using UK health data, suppliers should be supported to understand their IP ownership and rights, that can enable easy provisioning in the UK market.

Engage with the public and healthcare professionals

The detrimental consequences from a lack of public engagement in previous national primary care and wider data initiatives provide clear examples for the paramount importance of engagement with the public and healthcare professionals about the uses of health and care data. Across all data initiatives, a strong and consistent engagement commitment which fosters open dialogue with the public and healthcare professionals must be an essential component. Such engagement can improve decision-making, build trust in how health and care data is used, foster greater transparency,

ensure concerns are addressed, and ultimately contribute towards improving the outcomes of initiatives and supporting wider digital transformation efforts. Failure to do so would be detrimental for the commissioned data programmes, and moreover could gravely and substantially set back progress made to date.

The UK Government, national and local NHS and social care organisations should:

- **Clarify the roles, interlinkages and information governance requirements between all nationally funded and overseen health and care data initiatives.**
- **Work with suppliers to aid understanding of intellectual property ownership and rights when leveraging health and care data, common tools and platforms, to enable easy provisioning in the UK.**
- **Prioritise engagement with the public and healthcare professionals for all UK-wide and national data initiatives.**

Increasing interoperability across health, social care and public services

Improving data-sharing across health, social care and other public services to create ecosystems of data can equip health and care staff and core public services with a greater understanding of an individual's current and historical health and care status and other significant information about an individual and their circumstances. In turn, this can increase the likelihood of the most appropriate, effective and person-centred care being delivered. Provided there are appropriate information-sharing guardrails in place, cross-sectoral dataflows could support more effective resource coordination and allocation based on greater insight from across datasets which have historically been separated.

Cross-system data-sharing can also support better targeted interventions resulting from the increased breadth and depth of information available about a given individual or population. However, differences in funding and data-sharing structures and permissions between government departments and local authorities currently act as barriers to information sharing across health, social care and other organisations. For example, sharing adult social care data with health services is a distinct process compared to sharing children's social care and education data with health services.

The longer-term direction of travel for the future sharing of health care data requires clarity in several areas. In England, programmes such as the NHS Connecting Care Records Programme, preceded by the Shared Care Record Programme, have focused on improving interoperability between health and social care data. However, clarity is needed on the longer-

term strategy and objectives for the Programme to inform the next stages of this work beyond its planned completion in March 2025. Further clarity on plans to improve data-sharing across the Devolved Nations is also critical, where persisting challenges to date include restricted data-sharing agreements and incompatibilities between technology systems used. Additionally, understanding plans for developing the foundations of digital social care records and the future storage and management of social care data is also necessary.

Planning for further interoperability and technology advancements

Not only is greater cross-sectoral interoperability key, but so too is developing interoperability within health and care organisations themselves. For example, increasing the comprehensiveness of individual health records will increasingly require data from multiple different systems to be interoperable such as through combining imaging, genomic and pathology information into a single record, alongside personal monitoring data and data from embedded devices.

Considering the wider market, the adoption of operational data platforms is driving greater demand for operational Application Programming Interfaces (APIs), where intelligence is driving actions back into systems of record such as electronic patient record systems and enterprise resource platforms. This requires a maturation on digital health solutions to have more complex APIs to support operational workflows. Given application integration goes beyond the traditional focus of interoperability for sharing access to data and messaging, this area will become increasingly involved with the scale of clinical decision support and movement towards

personalised medicine leveraging omic as well as phenotypic data.

To set clear direction for the future, a clear UK-wide strategy could provide clarity of the objectives and guiding parameters for improving cross-system and intra-organisational interoperability across England and the Devolved Nations. This should include the next steps for data standardisation, exchange formats, and API interfaces across health, social care and other public services. Industry consultation is critical to inform such planning, including for changes to how Information Standards Notices are used. Specific incentives and levers to support the implementation of interoperability standards should also be set out and will need to intentionally apply across sending and receiving organisations to ensure clear benefits and incentives to sharing and receiving information on both sides of an interoperability exchange.

As a starting point, significant time and industry participation has already been invested in developing an NHS Standards and Interoperability Strategy to date, which remains unpublished and could provide greater direction for efforts to improve data-sharing within the NHS in England. To ensure that this progress

is not mislaid, techUK calls for the publication of the Strategy, and for sustained industry engagement to support the implementation of its recommendations. Furthermore, consideration should also be given to the implications of the strategy for social care settings, with appropriate engagement with DHSC and key social care partners, including how the social care and healthcare sectors will need to interoperate going forwards.

Reducing reliance on outdated systems

Persisting legacy devices, infrastructure and applications continue to pose live risks to the cyber security of health and social organisations, risking significant data exploitation, clinical and operational service disruption, as well as potential harm to patients and people drawing on care services. This challenge is frequently met by a lack of resource (in terms of time and funding) to support decommissioning projects which require significant change management efforts. Working with industry to support initiatives to phase out legacy systems should be considered a critical priority, and continued industry engagement is essential to inform future frontline digitisation activities.





NHS England should:

- **Clarify the future strategy for the Connecting Care Records programme, the next phase of health and care records, and plans for future cross-sectoral interoperability, including APIs required for operational workflow integration.**
- **Publish the NHS Standards and Interoperability Strategy, commit to collaborating with industry in its implementation, and consider its implications for social care.**
- **NHS England, DHSC and local NHS and social care organisations should prioritise initiatives to phase out the use of legacy systems in health and social care settings to reduce the considerable cyber risk.**

Prepare for Artificial Intelligence

Although not a silver bullet for every challenge facing the health and care system, artificial intelligence-driven technologies may offer opportunities to support the delivery of some health and care services and operations. UK-based companies developing or deploying AI-driven technologies within the European Union will have already been affected by the passing of the European Union's AI Act. While the overall potential impact of AI continues to be highly anticipated, and although some health and social care organisations have already piloted or begun to formally adopt AI-driven technologies, access to these technologies has not been equal, with many settings facing AI adoption barriers such as insufficient digital maturity, data availability, resources and expertise.

Without significant investment and prioritisation to improve health and social care data quality, or access to adequate large-scale anonymised datasets to enable AI training and testing of bias, the ability to successfully train and deploy AI systems at scale will be limited. Furthermore, the governance of any AI-driven tool used for health and social care applications is crucial for ensuring safety and supporting public confidence. The current landscape of varied AI projects and inconsistencies in governance practices presents challenges for AI regulation, particularly where misalignment exists in oversight and governance practices between organisations. A central AI strategy and

guidance for the health and social care sector would support a more cohesive approach to the development and regulation of AI-driven tools across health and social care settings.

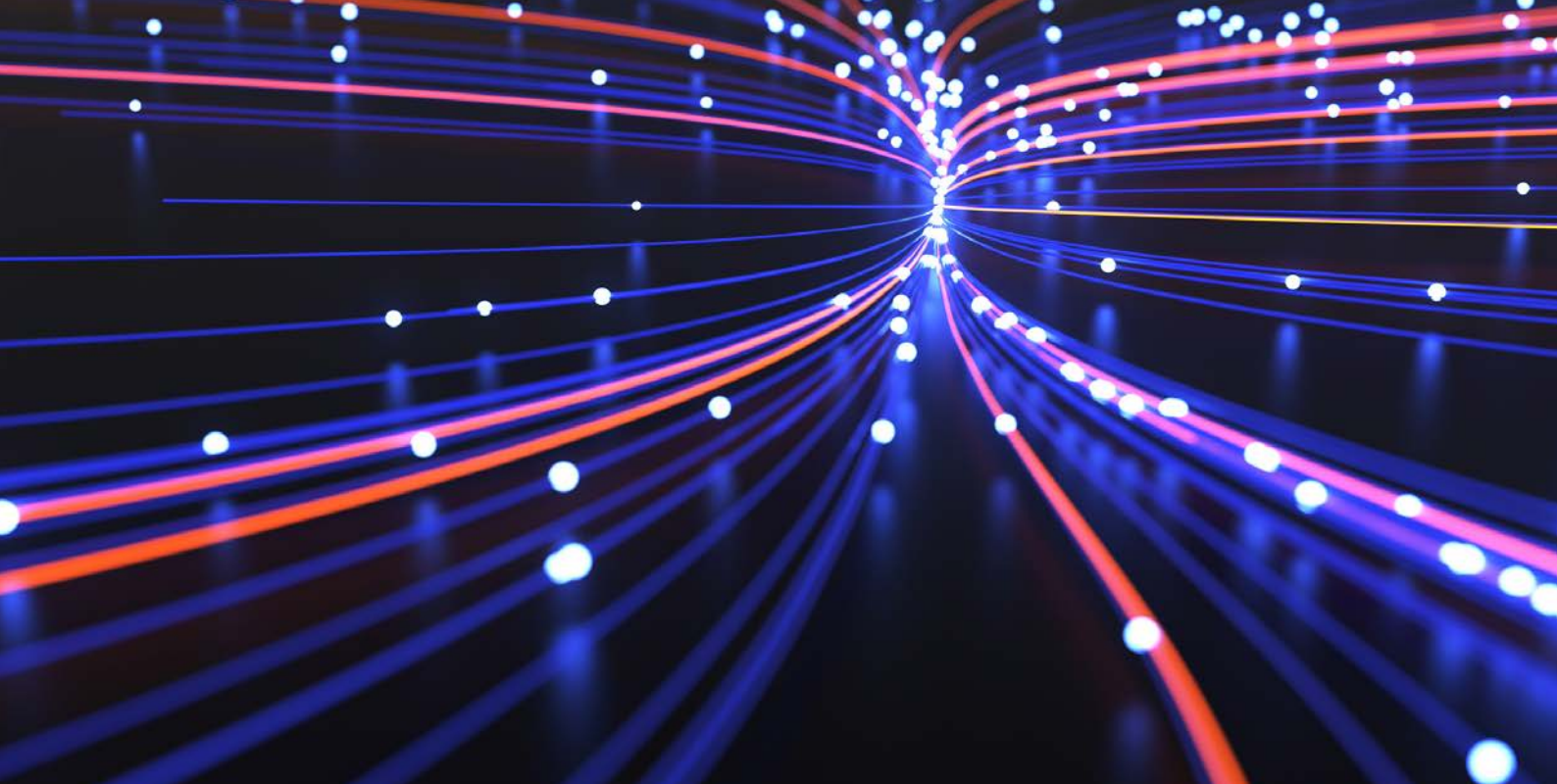
In addition, a central AI strategy and guidance could provide clarity on governance roles and responsibilities for industry, the Government, regulatory bodies, health and care organisations, and staff. Indeed, the need for such a strategy has already received endorsement, including [from The Health Foundation](#). Such a strategy would also need to set out how AI systems will be tested, and the criteria against which they will be evaluated in terms of assessing safety, appropriateness and ethics. A wider strategy would also contribute to obtaining greater value from the use of AI across the health and care system as a whole, as well as guiding a deployment approach which is responsible and sustainable.

Greater AI adoption across health and social care will require significant expansion of existing central policymaking and regulatory resource and expertise. For example, the NHS AI Lab has received significant funding cuts and is due to cease from March 2025, while the [MHRA's approach to artificial intelligence \(2024\)](#) has highlighted staffing constraints. Going forwards, greater resource and expertise are critical to ensuring that policymaking and regulatory capacity do not hinder opportunities for the

adoption of AI tools which have proven evidence of benefits, safety, appropriateness and ethics within health and social care settings. Changes to regulatory advice and requirements should provide industry with as much clarity and notice as possible, and regulatory approval processes, especially for innovations classified as a medical device, should be streamlined and proportional. These steps will help to mitigate against unduly costly and time-consuming demands on technology companies, particularly SMEs, which act as barriers to innovation adoption and can significantly delay deployments. Such streamlining will also mitigate against approval processes falling significantly behind the pace of real-world developments.

Preparing for a future which entails greater use of AI in health and social care settings will also require greater real-world evidence to support the most appropriate use cases and demonstrate the validity and reliability of AI systems. With the NHS AI Lab's work due to cease from March 2025, NHS England and DHSC should also publish an evaluation of the Lab's activities and impact to inform future health and social care AI projects. Additionally, given the fundamental importance of transparency and trust in the use of artificial intelligence tools, all significant policies and strategies relating to the development and implementation of AI in health and social care settings should be published to allow review and scrutiny. This includes documents such as the [Collaboration Charter developed by NHS England and the Incubator for Artificial Intelligence](#).

- **NHS England and DHSC, working with key partners including regulatory bodies, should develop a central strategy and guidance to guide the safe, responsible adoption and governance for the use of artificial intelligence in health and social care.**
- **NHS England and DHSC should:**
 - **Publish an evaluation of the NHS AI Lab's activities and impact to inform future AI projects across health and social care.**
 - **Publish the Collaboration Charter between the Government's Incubator for Artificial Intelligence and NHS England.**



Define the next phase of the NHS App

With ownership and usage of the NHS App at the highest levels since its inception, with May 2024 recording 34 million logins, 1.5 million consultations and 9.2 million notifications and messages, the reach and capabilities of the NHS App have continued to increase in recent months.

An industry-informed strategy which supports a platform-based approach should be an essential feature of planning further developments to the App's remit, functions and personalisation. Plans should also clarify to what extent the App will interface with non-NHS services, such as social care organisations and charities providing health and care services, and clarify how the App will recognise wider factors outside the remit of the NHS which impact citizen and population health and wellbeing. Taking a platform-based approach will encourage innovation by allowing suppliers to work with the NHS App through integration opportunities, and would reduce pressures on the NHS App's supporting workforce through the outsourcing of NHS App functionalities.

A renewed vision and roadmap for the NHS App should set out the key objectives and performance indicators for the next phase of the App's development. This is essential for businesses who already, or may in future wish to provide, services through the App. Furthermore, a clear commercial strategy for the App will enable businesses to ascertain what opportunities for partnership with the App are possible going forwards.

- **The UK Government and NHS England should publish a renewed vision, roadmap and commercial strategy for the NHS App, including the approach for integration with third parties.**

Accelerate digital transformation in social care

Further to the recommendations made in [techUK's Five Point Plan for CareTech](#), additional steps should be taken to further support digital transformation progress in social care settings. These include greater collaboration on adult and children's social between central and local Government, in terms of both policy and service provision; developing a mechanism to assure adopted technologies are effective and evidenced; and supporting research to develop the care technology evidence base.

The National Digitising Social Care Programme has made progress in supporting social care record digitisation, with over 60% of registered adult social care providers in England now in possession of a digital social care record solution, and latest progress on track to reach a target of 80% by March 2025. Going forwards, the scope of the Digitising Social Care Programme should be expanded to include close collaboration with the Department for Education and local government. This would not only support wider digital transformation efforts across the care sector, but also promote greater collaboration across health, children's and adult social care, and other public services, for example education, justice and employment.

Within the care sector, the absence of infrastructure to assure the quality, safety and effectiveness of technologies deployed in social care settings which are not classified as medical devices remains a persisting challenge. This challenge can hinder the adoption of high-quality, efficacious care technologies and give rise to the adoption of care technologies which are ineffective. Prioritising high-quality research to develop greater evidence for the impact and effectiveness of technologies used in children's and adult social care could address the paucity of evidence in this area. This in turn would lead to progress in ensuring that people who draw on care, as well as the relatives, staff and organisations delivering and overseeing such care, can safely and confidently adopt and use assured, evidenced innovations which genuinely support improved care delivery and care outcomes.



- **DHSC and NHS England should expand the remit of the Digitising Social Care Programme to include collaboration with the Department for Education, local government and other public services.**
- **DHSC and DfE, working with key partners such as NICE, should develop an assurance mechanism for technologies deployed in social care settings.**
- **DHSC, DfE, local government and key research partners should support research initiatives to expand the evidence base for technologies used in social care settings.**

Foster integration across health, social care and other public services

A lack of integration across health, adult and children's social care and other public systems such as education, justice and housing, remains an enduring challenge affecting the funding, planning and delivery of health and social care. With consequences including fragmented and poor care continuity, inefficiencies, duplication and delayed care, the need to prioritise integration efforts across health, care and other public services has never been more imperative. When successfully achieved, cross-service integration and integrated care pathways offer opportunities to more effectively deploy resources, facilitate care continuity, and support better citizen health, wellbeing and social outcomes. Additionally,

cross-service integration can support wider population health management efforts, including a greater focus on prevention and health inequalities.

An intentional, sustained transition towards integrated health, social care and cross-public service policymaking, which includes greater collaboration between local and national levels, will be an enabling factor in working towards achieving cross-service integration. Redesigning care pathways to encompass services across sectors will also be dependent on making evidence-based amendments which support optimal care and resource utilisation. Such



pathway changes would also need to reflect the use of medical technologies, including those used for diagnostics and monitoring. This joining up of health, social care and other public services involved in care would require a systematic review, strategic change, and redesigning of existing models of care and information governance, as well as establishing a governance framework of accountability across organisations.

In terms of integration between health and social care, techUK calls on DHSC and NHS England to work together to adopt an integration-first approach to all new national digital transformation policies so that they encompass both health and social care, and accelerate efforts towards developing combined health and social care records.

- **DHSC, NHS England, local government and Integrated Care Systems should support policies and initiatives for redesigning integrated care pathways across health, social care and other public services.**
- **DHSC and NHS England, working in partnership with local government, should adopt an integration-first approach and address both health and social care in future digital transformation policies and strategies.**

Address the gap in digital skills and leadership

Improving the digital skills and leadership of existing and future health and social care staff, regardless of seniority level, remains vital to supporting successful digital transformation projects and the adoption of new innovations in health and social care. This is especially true in cases of supporting change management processes necessitated by digital transformation projects and the rollout of new technologies. The technology industry has a strong social value offer to support health, social care and other public sector services with digital skills development, including training and on-the-ground support, with many organisations offering academy-style training opportunities. Digital education and upskilling also have the potential to impact upon wider factors which can support successful digital transformation, including improving confidence and trust in using digital tools. Expanding digital, data and technology-related training and career opportunities within the health and social care at local and national levels will also directly support the Government's vision of harnessing health and social care services as "engines of economic growth".

Further to improving baseline digital, data and technology skills and knowledge across the health and care workforce, cultivating additional technical expertise will also be essential to

supporting digital transformation and innovation adoption across the health and social care sector. Greater clarity on the specialist digital, informatician and technologist career paths available within health and care services would provide greater guidance through which to develop such expertise, as well as indicating longer-term progression and leadership opportunities. NHS England's anticipated Digital Workforce Plan could provide a clear vision and path for specialist digital careers within the health service. Additionally, the closure of the Faculty of Clinical Informatics and the consequent new establishment of a wider more representative Faculty of Digital Health & Care at BCS, The Chartered Institute of IT, may also present an opportunity for renewed focus in this area.

The introduction of the Chief (Clinical) Information Officer role in the health service was significant in creating an opportunity to bring greater specialism and skills in information management, digital transformation and use of technologies into the NHS. With respect to expanding digital career pathway options in the health and care workforce, developing a similar role within the social care sector may offer similar impact. Moreover, career pathways which jointly span health and social care services at an Integrated Care System level could help to bridge



gaps between health and social care systems. In the immediate term, Skills for Care's Social Care Workforce Strategy provides pragmatic recommendations for developing more specialist career paths within social care, including recommendations to pilot a 'care technologist' role, develop a continued professional development strategy, and to expand digital skills training. These recommendations should be adopted to increase digital skills within the social care workforce as a priority.

- **NHS England should publish the NHS Digital Workforce Plan and work with industry to support its implementation.**
- **Working in partnership with industry, Skills for Care, the Government and designated partners should support the implementation of Skills for Care's Social Care Workforce Strategy.**



Summary

techUK's recommendations for health and social care demonstrate practical opportunities which should be prioritised to support the Government's ambitions for strategic change and digital transformation across the health and social care sector over the next five years and beyond.

techUK and the health and care technology industry look forward to continuing to work in close partnership with central and local Governments, the NHS, social care representatives and key partners across the health and care landscape to support the implementation of these recommendations and improve the health, care and lives of citizens.



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Our Health and Social Care Programme

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