

Change NHS: help build a health service fit for the future

techUK response to the 10 Year Health Plan

Q1. What does your organisation want to see included in the 10-Year Health Plan and why?

techUK members have identified the following key themes to be addressed in the 10-Year Health Plan. These include:

Strengthen collaboration with industry

- techUK advocates for greater collaboration between the public and private sector, particularly as the citizen is having to manage their health journeys with points of access between the private and public sector.
- To facilitate and guide responsible investment decisions, industry requests that NHS England sets out its technology implementation strategy. This should clearly delineate which projects will be developed in-house and where the NHS will look for solutions from industry to solve challenges.

NHS England should be a driver of innovation

- Innovations and solutions that are being developed and proven in NHS settings should be available to all NHS services. The current landscape promotes a system of 'pockets of innovation' but does little to incentivise cross-system collaboration.
- Industry would like to see a comprehensive roadmap which promotes cross-system collaboration, community sharing and allows technology companies to scale across NHS England and social care bodies. techUK would encourage roles and responsibilities across NHS England, Health Innovation Networks, NHS Innovation Service and other bodies to be clarified.

Improving Reimbursement Processes

- techUK calls for the establishment of a *National Reimbursement System* to create a clear approach to sustainable reimbursement and avoid digital health & care suppliers repeatedly competing for solitary finite funding options. International analysis suggests that a clear path to national reimbursement (like DiGA in Germany) for highly evidenced digital treatments would:
 - improve patient experience & outcomes
 - boost NHS productivity and reduce waiting lists
 - create a thriving new industry to drive R&D and economic growth
- The absence of a national reimbursement system means that if companies wish to scale their product beyond their original location, the current system necessitates that ICSs must each be approached individually incurring significant economic disincentives including time, bureaucratic and financial demands.

- In addition, businesses may approach primary care sites or NHS Trusts directly in an attempt to scale their product, adding further complexity and additional bureaucracy to navigate. Furthermore, there is a lack of clarity around the evidence base required for an innovator to be able to guarantee return on investment, with much variability in the evidence requirements between organisations and regulators. These demands, and the lack of certainty regarding fiscal reimbursement, is especially challenging for suppliers.

Continuing Reform of the Procurement Processes

- Current NHS procurement structures and processes are not designed in a manner which is inclusive for start-ups and SMEs. Fragmentation across different parts of the system (for example between regional, local and national levels), combined with a lack of clarity, transparency and standardisation in NHS procurement criteria and processes are also key barriers to entering business with the NHS.
- This issue isn't limited to new entrants. techUK would encourage NHS England to ensure existing suppliers innovate their products. Current payment models and flat funding make it difficult for suppliers to phase in new products. Greater flexibility would allow suppliers to implement new innovations.
- There is no one entry point into the NHS for innovators, and routes to NHS contracts can be convoluted and unclear; there are often inconsistent specifications and standards across different frameworks, leaving many barred from entering a framework and forced to consider alternatives such as partnering with larger enterprises. As a result, the spread of innovation in the NHS is more often hindered by poor procurement processes, as opposed to a lack of demand from the health system.
- Whilst acknowledging the ongoing work of the *NHS Commercial Efficiencies & Optimisation (CEOP) Programme* and the *Procurement Act*, Industry would like to see further reforms to the procurement of digital technology within NHS England, including:
 - Signposting suppliers to existing frameworks;
 - Specialist training for procurement staff who are buying technology;
 - Prioritise the streamlining of existing and future frameworks by continuing the work of the CEOP;
 - Implementing an outcomes - based approach to digital transformation procurements.
- Improved clarity and transparency around commercial activity (including of ICBs and ICSs), including:

- Ensuring that early market engagement with industry is a core part of all digital transformation projects.
- Demand-signalling:
 - ICSs should prioritise clear demand-signalling at a local level, seizing the opportunity to ensure efforts around population health are coordinated both regionally and centrally. This would enable industry to innovate proactively in the areas of greatest urgency to populations.
 - Making priorities clear to industry will help suppliers build a greater variety of products and services that work on the ground and deliver benefits to patients, staff, and the wider system.

Increase 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. In turn, this can increase the likelihood of the most appropriate, effective and person-centred care being delivered.
- Differences in funding, data-sharing structures and permissions between government departments and local authorities 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.
- 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 application API interfaces across health, social care and public services.
- The NHS Standards and Interoperability Strategy should be published imminently to provide greater direction for efforts to improve data-sharing and for sustained industry engagement to support the implementation of its recommendations. Furthermore, the Strategy should consider how to include social care and include a commitment to standardised data sharing agreements to help facilitate the exchange of data between organisations.
- techUK members remain committed to existing, modern, standards-based interoperability frameworks. These standards have been developed by NHSE and should be reinforced to achieve greater linkage across the tech landscape. We would encourage further communication to raise awareness of these initiatives.

Integration of 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. 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.
- Currently funding is often distributed in silos, with acute care settings prioritised. techUK calls for co-ordinated funding to make integration of services a reality.

Clarify the current data landscape:

- There is significant ongoing activity across the health data landscape requiring further clarification. This includes 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. 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.
- Therefore, 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. However, we would encourage greater industry engagement. techUK recommends that industry is engaged in a full and substantive manner before plans are finalised as industry can offer much in terms of pre-existing solutions and options that can be scaled faster.

Increase investment in Cyber Security and Observability:

- Industry emphasised the paramount importance of ensuring trust and confidence within the service in securing patient data.
- Increased investment in digital skills is paramount, particularly in cyber skills. There is a 3.9 million person shortage of cybersecurity professionals globally, across all sectors. Cybersecurity in health requires special knowledge of the health care setting and cybersecurity. The sector lacks graduate and mid-career upskilling pipelines focusing on cybersecurity and health. In addition there is an opportunity to build cyber skills into professional curricula.
- Observability, enables the NHS to monitor the health of its digital infrastructure in real time, ensuring rapid detection and resolution of technical issues, ultimately minimising disruptions. With services shifting into community settings, rapid detection and response becomes paramount. A robust strategy for cybersecurity and observability would help ensure patient services remain available.

Preparation for Artificial Intelligence

- AI-driven technologies may offer opportunities to support the delivery of some health and care services and operations.
- Many health and care settings continue to face barriers to the adoption of AI such as insufficient digital maturity, data availability and lack of central AI strategy.
- Without significant investment and prioritisation to improve healthcare 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.
- A central AI strategy and guidance for the sector would support a more cohesive approach to the development and regulation of AI-driven tools across health and care settings. The NHS and suppliers must align on the risks associated with different AI solutions to ensure consistency in procurement, evaluation, and implementation. Guidance, such as the EU Artificial Intelligence legislation can facilitate this alignment. Greater consistency between the UK and Europe would benefit both UK suppliers and the NHS by streamlining processes and improving collaboration.
- Patients should also be given the opportunity to consent to the use of AI in their treatment, ensuring there is informed consent with a patient's treatment pathway.

Define the next phase of the NHS App

- 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 App through integration opportunities, and would reduce pressures on the App's supporting workforce through the outsourcing of functionalities. We would also encourage the NHS App team to consider what 'off the shelf' functions and features could be integrated into the App rather than building from new in-house. This would accelerate the features within the App.
- A renewed vision and roadmap 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.

Address the gap in digital skills across the Health & Social Care Workforce

- Members expressed concerns at the ongoing skills shortages within the health and social care workforce and the need for a national *Digital Workforce Plan*.
- Indeed, current technologies aren't being effectively utilised due to poor staff *Digital Data and Technology* skills, leading to poor uptake of digital technologies and cybersecurity risks.

Investment in Social Care

- Increased investment in social care settings can deliver avoidable admissions and provide safe early discharge, ensure independence and that the population remains economically active. Investment in social care will categorically reduce the costs of secondary care settings.
- techUK would welcome clarity on how the Government intends to support the future of the social care sector.

Question 2: What does your organisation see as the biggest challenges and enablers to move more care from hospitals to communities?

techUK members have identified various challenges in moving care from secondary to community based settings, including:

Infrastructure and resource limitations

- Many community care settings lack modern healthcare facilities and equipment.
- A shortage of healthcare workers, particularly primary care providers, nurses, and mental health professionals, who are essential for community-based care.
- Technology gaps hinder the implementation of telehealth, remote monitoring, and electronic health records (EHR) systems. Many areas lack the broadband infrastructure or technological capacity for these tools.
- techUK expects further clarity on the longer term capital spending allocation, specifically prioritising capital investment towards technology tools which support neighbourhood interventions. This area has consistently remained underfunded. Investment in Digital, Data and Technology within Primary and Community Care is essential in delivering the Government's ambitions on prevention and alleviating pressure on secondary care settings.

Interoperability and Data Integration

- Digital health tools, such as remote monitoring devices and telemedicine platforms, often operate on different systems, making it difficult to integrate them into existing electronic health records (EHRs) and other systems.
- When data from multiple digital tools isn't easily shareable, it can lead to gaps in patient information and hinder continuity of care, as well as make it difficult to gain a holistic view of a patient's health status. This increases the workload of already strained staff.
- techUK would encourage NHS England, DHSC and other bodies to consider creating a national digital maturity framework, in order to measure local and ICS level transformation. This would mitigate against regional disparities, whilst still ensuring the organisational and financial independence of ICSs and ICBs.

Financial and Reimbursement Barriers

- Reimbursement for telehealth, remote monitoring, and other digital health services is often inconsistent, which can discourage providers from adopting these technologies.
- Digital health infrastructure, including software, hardware, and training, represents a substantial upfront cost for providers. This financial burden can be particularly challenging for community clinics or small practices.

Patient Trust and Engagement

- Community-based care often requires patients to take more responsibility for their own health. This can be challenging for patients who may lack the knowledge, confidence, or skills to manage their conditions effectively.
- Encourage the use and standardisation of Care Plans, providing patients with the capability to determine how and where they would like their care provided.

Digital Health Regulation and Standards

- New digital health technologies, including AI tools, often face complex regulatory approval processes. Regulatory standards vary by region, creating barriers to widespread implementation in community settings. The lack of standardised protocols for digital health delivery can lead to inconsistent quality and outcomes. Standardised guidelines are needed for digital health technologies.
- Policy and Regulatory challenges including data privacy concerns and slow regulatory approval processes from MHRA and NICE and other public bodies.

Data Privacy and Cyber Security concerns

- Industry has highlighted the increased complexity of moving sensitive patient data across diverse care settings.
- Additionally, smaller clinics and community health organisations may lack the resources, infrastructure, or cybersecurity expertise necessary to transfer data. Therefore, ensuring cybersecurity in a decentralised, community-based care model requires significant investment in secure digital infrastructure, data-sharing protocols, and consistent cybersecurity practices across all care settings.

Lack of Integrated Workforce Plan

- The healthcare service faces a skills shortage within the Digital, Data and Technology workforce – with shortfalls estimated at 50,000 by 2030.
- Digital Data and Technology roles, which include specialists in data analytics, cybersecurity, digital infrastructure, and health informatics, are essential for supporting the technology-driven aspects of community-based care. However, without a cohesive strategy to recruit, train, and retain these professionals across healthcare settings, there are often gaps in technical expertise.

- These roles are vital for maintaining secure data systems, enabling seamless data sharing, and developing user-friendly digital health tools that support both patients and providers.
- Without this targeted approach, the healthcare sector faces risks such as inconsistent data security practices, fragmented patient information, and insufficient digital support for community health workers, ultimately slowing the transition to tech-enabled community-based care.

techUK members also identified a number of enablers, including:

Investment in Digital Infrastructure, particularly in broadband infrastructure

Investment in Advanced Digital Health Technologies

- Such technologies can reduce the need for in-person consultations, allow real-time health data sharing and timely interventions, empowering patients to receive care in their own communities, help healthcare providers make proactive decisions and enable earlier interventions.

Interoperability (see section above)

Supportive Policy and Reimbursement Models

- Consistent reimbursement policies are needed to support innovation from industry.
- techUK advocates for Value-Based Care Models. Shifting from fee-for-service to value-based care encourages healthcare providers to focus on outcomes rather than volume of services. This aligns well with community-based care, which emphasises preventive and ongoing management over acute hospital care.

Cultural Shifts in Healthcare Delivery

- Shifting the focus of healthcare delivery to a patient-centered model allows for personalised, flexible, and convenient care in community settings. This requires buy-in from healthcare providers, patients, and policymakers alike.
- Community-based care must be promoted as a reliable and preferred alternative for appropriate health issues reducing the perception that hospitals are the primary setting for all health needs.

Question 3- What does your organisation see as the biggest challenges and enablers to making better use of technology in health and care?

Industry engagement is inconsistent and incomplete. techUK calls for regular, consistent engagement with the digital health technology industry. techUK can support dialogues with the technology industry to facilitate the development of pragmatic-policy-making.

Barriers include:**Capacity to support change management**

- Insufficient change management support to deliver digital transformation initiatives leads to poor engagement and as a result, suboptimal engagement and use of digital health technologies.

Ongoing use of legacy technologies, presenting significant interoperability challenges and cyber security vulnerabilities

- Additionally, a lack of support for suppliers to amend or upgrade existing legacy systems may give rise to inaction due to an absence of incentives including remuneration. There is a need for a clear strategy for the adoption of new technologies and digital infrastructure which supports an approach to integration in a way which is compounding and positively additive. This would increase the effectiveness and cost-effectiveness of new integrations and support improvements to the fundamental infrastructure of health services across primary, secondary and community settings.

There is currently a scarcity of user-centred design in the development of digital health technologies

- This can negatively affect the impact of innovations due to a lack of meaningful engagement with service users and health and care staff, and as a result, technologies which are inaccessible have suboptimal engagement from service users. Ensuring that innovations are designed based on user need is paramount for any innovation to be successfully adopted.

There is a need to improve digital literacy and leadership across the workforce, policymakers and decision-makers, particularly regarding the future uses of health data

- Without this, there is an ongoing risk of overly simplistic, reductionist approaches to using health data which do not take into account the full complexities of the current UK health data landscape.

Commercial and procurement barriers

- Existing frameworks can lack agility and thus reduce the ability to adapt to changing organisational needs and priorities. Frameworks which are less rigid could improve the likelihood of new, impactful innovations being adopted in

health and social care settings. Furthermore, there is a lack of transparency around the digital products and solutions which are adopted into the NHS.

Enablers include:**Greater clarity of direction at a national level on the strategy for health technology and data would be a significant enabler**

- Recent years have seen a proliferation of policies and strategies relating to the use of digital, data and technology in the NHS and social care. There is a need for a clear, overarching strategy to provide long-term strategic direction and predictability which will not be significantly affected by changes in leadership. Updates and amends to such an overarching strategy should ensure the entire direction of travel is not altered. Promoting greater collaboration on uses of technology across the breadth of the NHS to maximise its use would be a further enabler to better use of technology in health and social care. An overarching strategy could incentivise initiatives towards this goal.

Question 4 - What does your organisation see as the biggest challenges and enablers to spotting illnesses earlier and tackling the causes of ill health?

Members recognised that prevention has abundant opportunities for innovation if key issues undermining digital transformation can be overcome. At its core, the challenge is systemic, particularly as NHS funding is still directed principally to acute care services. techUK members stated that better prevention measures lies more in the challenges of effective system implementation rather than technological development.

For a preventative care transition, the Health plan should tackle three major challenges:

Market Structure and Funding

- Innovators face a plethora of challenges when accessing funding, struggle to signal the technology to customers, and face a complex procurement process without a single point of access.

Integration of Services and Health Data

- Currently, the fragmentation of health and social care systems undermines the potential for preventative healthcare delivery. This includes:
 1. The separation between health and social care services

2. How critical health data remains siloed in different non-interoperable systems making it harder to spot trends and intervene early

System Capacity

- Members raised concerns that the NHS may not have the capacity to realise these changes at scale. Exemplified by the financial focus on acute services, the strain of long waiting lists, and wide-spread staff shortages, it is essential to empower prevention with a holistic planning of the patient journey not to exacerbate or create potential bottlenecks for care.

Members emphasised how the UK ecosystem of care is in a unique position to effectively implement preventative care strategies.

- Members called for both a wide integration of health and care policy with wider government departments as well as targeted ringfenced funding for preventative care technology implementation.
- Innovations like population health analytics and user-centred design could leverage the unique UK data landscape with great impact.

Question 5- Use this box to share specific policy ideas for change. Please include how you would prioritise these and what timeframe you would expect to see this delivered in, for example:

Irrespective of timeframe, there are three areas which techUK strongly recommends upholding as continuous, mainstay priorities:

1. Consistent and regular engagement with the health and care technology industry is key to informing future strategic planning. techUK welcomes the opportunity for dialogue to support the development of the Ten-Year Plan for Health as well as future digital, data and technology strategy and policy formation.
2. The need for long-term strategic direction for the use of technology and data in health and social care which is sheltered from significant diversion or revision following leadership and political changes is paramount and transcends any specific timeframe. This will help to ensure that future initiatives are additive and can continue building upon- rather than counter previous progress which has already been made.
3. It is essential that funding for digital transformation projects and the use of technology in health and social care is ring-fenced to sustain progress in the long-term and to protect against the repurposing of resources for other initiatives. Moreover, it is imperative that new investment which supports the use of technology

and data in health and social care is considered as core priority within budget allocations going forwards. This investment should encompass resources for cyber resilience in health and social care settings, as well as initiatives to improve data quality and to support change management exercises which are required for successful innovation adoption and digital transformation. As stated before, the plan should indicate where NHS England is looking for external supplier technology to solve challenges.

Priorities

Short-term

- The current moment presents a huge opportunity through which to realise the benefits which better use of digital, data and technology offer health and care services and citizen outcomes. The digital health and care industry has already demonstrated manifold examples of the positive impact of innovations and digital transformation, including significant return on investment delivered by the implementation of digital and technological solutions, improved patient outcomes, care and service optimisation, increased productivity, and alleviated burden on health and care staff. techUK's Digital Health Evidence Pack, Five Point Plan for CareTech and Driving Digital Transformation report include examples of the transformative positive impacts which the technology sector is already demonstrating in health and social care settings across the UK.
- Current commercial barriers which prevent greater quantities of SMEs from accessing the NHS market must be addressed. Current commercial frameworks used within the NHS often present challenges for SMEs and consequently impact upon the health service- and by extension, citizen- ability to benefit from impactful innovations. A framework tracking environment would help companies to navigate a complex NHS commercial environment to navigate and reduce the significant time and financial burden entailed. Additionally, with no single point of entry into the NHS market, inconsistencies in specifications and requirements between different frameworks must be resolved, as SMEs may be further disadvantaged by having to expend limited resources to prove their product multiple times across different services and localities. Moreover, greater framework flexibility would help to move away from the rigidity present in several existing frameworks used by the NHS, and could increase the likelihood that SMEs bringing new, innovative solutions are provided access to these frameworks.
- Improve the accessibility and sharing of innovations across health and social care services. Commercial changes can support these efforts, as would the publication of a clear overarching approach to innovation adoption within the NHS and social care. This would help to mitigate good practice being confined to limited geographical areas, and would allow multiple services and citizens to

benefit from established, impactful innovations.

- The use of AI within health and social care settings is currently countered by a lack of guiding strategy or principles to support the safe, sustainable and responsible use of such technologies. Where organisations may be piloting or formally adopting AI-driven technologies at present, there are also inconsistencies in governance between deployment settings, presenting future challenges for regulation. NHS England, DHSC, regulatory authorities and key relevant partners must prioritise the development of a strategy and guidance in this area. In cases where AI tools are adopted, such procurement and deployment decisions must be supported by evidence-based use cases. The level of interest and anticipation in relation to the use of AI in health and social care must not overlook the significant barriers to larger-scale adoption which remain, including insufficient digital maturity, data availability (especially to large, anonymised, representative datasets for training purposes), and expertise.

Medium-term

- The Government have stated their ambition to transition the focus of the health service away from a hospital-based towards a community-based model of care. This will require significant alteration of existing funding flows and sustained capital investment in order to direct greater resources towards primary and community care services. Additionally, this transition will require considerable care pathway redesign to support more preventative care models which prioritise value-based care and include greater focus on early illness detection and intervention. A national path to reimbursement for highly evidenced digital treatments, referenced in Question 1, would exemplify these shifts.
- Cybersecurity mandates at all levels (national, regional and local). This would create clear, specific cybersecurity rules ensuring guidance and consistency.

Longer-term

- There is an inescapable need to review legislative and funding structures which currently prohibit effective integration between health and social care systems. Lord Darzi's Independent Review of the NHS in England highlights how 13% of NHS beds are consumed by service users awaiting social care support or care in "more appropriate settings" and the Hewitt Review of Integrated Care Systems underscored the "need for social care to be better understood within the NHS". Additionally, neglecting the need to support further digital transformation in the social care sector will continue to be a barrier to successful integration of services and the Government's ambition to achieve greater community-based care. techUK's Five Point Plan For CareTech sets out pragmatic recommendations to improve the adoption of digital, data and technology within social care settings.

- As the health and social care landscape becomes increasingly digitised and digitally complex, greater investment in cyber resilience is vital. This not only includes financial support, but also a greater focus on increasing cyber skills, literacy and leadership within the health and social care workforce. It is also likely that greater cyber support will also be required at regional levels compared to at present.
- Upgrading the leadership and culture of health and social care organisations will be necessary to deliver greater digital transformation and strategic change across health and social care systems and to realise the Government's three 'shifts' for health and care. Organisations will need to be able to tolerate greater uncertainty and less top-down directionality as a core part of project delivery, and a transition from linear to more agile ways of working is necessary. Training for health and social care leaders will be key to changing the overall management culture to support these more flexible ways of working and engender greater responsiveness and adaptability of health and social care organisations.
- In considering the wide variety of sources which impact upon individual and community health and wellbeing, including social determinants of health, there is a clear case for greater integration of health and social care services with other public services such as housing, criminal justice and education. Technologies already exist which could support such joining-up of services. Key barriers currently include data-sharing restrictions and lacking cross-service interoperability, both of which would require policy and legislative changes. Changes to funding models which support holistic, cross-service care pathways would also be required to overcome challenges where there may be different competing priorities and incentives. Strong leadership will also be required to support the cultural changes required to enable greater cross-service coordination by transcending organisational barriers and historically siloed ways of working. Relatedly, clarification of the specific roles and responsibilities across organisations will be critical to supporting accountability and effective integration across services.