A Manifesto for Matt
Shaping the vision for digital health and care
In July 2018, the Rt Hon Matt Hancock MP became Secretary of State for Health and Social Care, following Jeremy Hunt’s record-breaking tenure of five years and 309 days. Mr Hancock is the 30th person to take up the role (in its various guises) since Aneurin Bevan led the formation of the NHS in 1948.

Mr Hancock is a well-known advocate of digital technologies, from his use of online GP consultation tools, to creating his own app to communicate with constituents.

“NOWHERE DOES TECHNOLOGY HAVE GREATER POTENTIAL TO IMPROVE LIVES THAN IN HEALTH CARE.”
MATT HANCOCK, SECRETARY OF STATE FOR HEALTH AND SOCIAL CARE

Within days of his appointment, the new digital-savvy Secretary of State announced his initial priorities (on Twitter, of course).

Since that tweet just over 100 days ago, we have seen a frustrated sector galvanised by a Secretary of State on a tech mission. In addition to announcing over half a billion pounds in funding and convening a new health technology advisory board, Mr Hancock launched a Vision for Digital, Data and Technology in Health and Care, setting out his Department’s initial approach to digitising the sector.

The Vision document is described as “a first bite: a provocation to clear, collective thought and an invitation to feed back.”¹

With this new impetus to fast-track the long overdue changes needed in the sector, and in the spirit of collaboration outlined in the Vision, techUK has drawn up a list of priorities for the new Secretary of State.

A Manifesto for Matt seeks to build upon the Vision document by providing some of the most promising ideas - not only from the vendor community - but from the service users, health and social care professionals and policymakers that we work with on a daily basis.

We look forward to working with Mr Hancock and the wider ecosystem to build a world class, sustainable, digital health and care sector.
Summary recommendations

1. Promoting public-powered prevention

1.1 To make person-centred care a reality, the NHS needs to make it easier for citizens to access their health and care data and play a greater role in publicising how they can do so.

1.2 The Department of Health and Social Care (DHSC) should consult on a wider expansion of the personal budgets policy; whereby any citizen could apply for a Personal Technology Budget if the state is already funding an alternative treatment on an ongoing basis.

1.3 The guiding principle of the NHS App should be to act as a springboard to give the public access to the best available digital health tools.

2. Enabling a world class workforce

2.1 NHS trusts need to be benchmarked and supported to implement what staff see as the digital basics, including fast and secure single sign-on, reliable WiFi, secure peer-to-peer communication tools and sufficient handheld devices to allow contemporaneous work.

2.2 The NHS needs to play a stronger role in developing digital health and care talent by expanding the NHS Graduate Training Scheme to attract informatics and computer science graduates; and by extending and commissioning the NHS Digital Academy for the duration of the long-term plan.

2.3 Digital leaders should be represented on the board of trusts to enable an understanding and ownership of digital transformation at the highest levels.

3. Making the UK the #1 destination for health tech innovators

3.1 NHS Digital should work collaboratively with the Academic Health Science Networks to provide a local ‘one stop shop’ where innovators can simply, safely and securely access health and care data.

3.2 To make it easier for NHS bodies to make quick and informed procurement decisions, DHSC and NHS England should work together to encourage and simplify the use of frameworks in the NHS.

3.3 Health technology funds should be properly ringfenced so that underspends are not siphoned off to alleviate other pressures in the system.
1. Promoting public-powered prevention

Background

By the age of 50, most people will have at least one long term health condition, such as serious mental illness, asthma or diabetes. Together, these long term health conditions account for 70 per cent of the health service budget. Giving people the support to self-manage these conditions can hugely improve health outcomes at reduced cost.

The NHS’s Five Year Forward View and ‘next steps’ documents make clear that a ‘radical upgrade’ in prevention and public health are necessary to improve health outcomes and make the NHS more sustainable.

“MANY PEOPLE WISH TO BE MORE INFORMED AND INVOLVED WITH THEIR OWN CARE, CHALLENGING THE TRADITIONAL DIVIDE BETWEEN PATIENTS AND PROFESSIONALS, AND OFFERING OPPORTUNITIES FOR BETTER HEALTH THROUGH INCREASED PREVENTION AND SUPPORTED SELF-CARE.”
SIMON STEVENS, CHIEF EXECUTIVE, NHS ENGLAND

Opportunity

The public is the ultimate frontline of the NHS. They play a major role in the prevention of ill health, self-management and navigating the system; and can be an integral part of their own care team. But their potential remains an untapped, frustrated resource.

Enabling people with access to data and technology to self-manage conditions and the tools to navigate and coordinate interactions with the system will undoubtedly improve outcomes.

The proliferation of smartphones and other connected devices gives patients and the public the opportunity to have far greater control of their own care.

There are now more than 300,000 health-related apps, double the number available just two years ago. In parallel, we have witnessed a similar increase in the availability of consumer and medical wearable devices.

Many of these tools have proved to be beneficial in monitoring and treating a wide range of conditions, including the 70 digital tools now featured in the NHS Apps Library.
Barriers

A number of barriers remain to the widespread adoption of digital tools by the public, particularly in the apps and wearables space:

- Members of the public find it difficult to access their full health and care record, despite their legal right to do so.⁷

- Payment and prescribing models designed for traditional services, medicines and treatments have not been adapted to pay for digital products meaning that companies may rely on data, advertising, and ‘freemium’ models for reimbursement. These models can be particularly problematic when applied to potentially vulnerable end-user groups.

- Attitudes to technology, perceptions of budgetary pressures and a lack of dedicated innovation budgets amongst clinicians and commissioners can mean that technological solutions are dismissed out of hand, even when evidence suggests that they will save money during a patient’s lifetime.⁸

- In the fast-moving apps and wearables space, getting traction in the NHS can take longer than the lifespan of some digital products as improved solutions emerge.

- It can be difficult for suppliers to decipher what constitutes evidence of effectiveness – with innovators being asked to meet different criteria or thresholds by different health and care bodies.

- Fragmented structures mean that each region can write different rules on prescribing, leading to duplication of effort in the NHS; and grossly unequal access to life-changing technology for the public.

- Patients, who often rely on GPs to prescribe digital products, regularly find that they know more about the product than the clinician they are seeing.⁹

- Patients report that switching between competing digital products is time consuming and difficult; discouraging competition and innovation.¹⁰
1. PROMOTING PUBLIC-POWERED PREVENTION

Case study

techUK’s annual Rise of the Machines conference was held with NHS England and more than 100 people with type 1 diabetes in February, exploring the barriers to the uptake of digital tools that can have a transformative effect on the lives of people with the condition.

The conference looked at innovative approaches to glucose monitoring from companies including Abbott, Dexcom, Medtronic and Roche.

Many of those present were using Abbott’s FreeStyle Libre device - a technology developed in Oxfordshire that allows users to test their glucose levels more regularly and less painfully than traditional methods, providing richer data to patients and clinicians at a potentially lower cost.¹¹

The device has proved to be extremely popular in people using insulin, with more than a million people now using the device worldwide. However, it was approved by healthcare systems around the world long in advance of the UK and 20,000+ Britons found themselves buying the device for themselves directly from the manufacturer more than three years after its launch.

A year after it was approved for prescription on the NHS in November 2017, coverage remains patchy and dependent on where someone lives rather than clinical need. Individual regions continue to make their own assessment of how effective the device is and apply different eligibility criteria, duplicating effort and creating a postcode lottery.

Timeline: Abbott’s FreeStyle Libre

| October 2014 | Goes on sale in UK |
| February 2017 | 20,000 UK users reported |
| May 2017 | French Health Ministry becomes 13th European country to approve for reimbursement |
| November 2017 | Approved by NHS Business Services Authority for prescription in England and Wales |
| October 2018 | 1 million users globally |
| October 2018 | 30% of Clinical Commissioning Groups (CCGs) yet to prescribe. Wide variation in criteria for prescribing applied by each CCG |
Recommendations | Promoting public-powered prevention

1.1 Empowering the public with its own data

Giving members of the public the ability to access their own health and care data can drive patient engagement, helping people to understand treatment plans, adopt healthier lifestyle choices and have less need for unscheduled visits to healthcare professionals – ultimately improving lives.

Awareness amongst the public of their legal right to see electronic records is growing, particularly in light of EU General Data Protection Regulation (GDPR). But the process for a member of the public to view all their records across multiple health and care bodies can be a laborious. There are a growing number of apps that allow people to view their own health and care data in a user-friendly format.

Importantly, these apps need to have access to full health and care records (not just primary care) and a robust mechanism for confirming citizen identity to be truly effective.

The Local Health and Care Records Exemplars (LHCRE) programme shows great promise for realising this ambition but is constrained to a two-year funding window. Extending and operationalising the LHCREs beyond the window, with a requirement to publicise to citizens and to collaborate with the health tech industry, would help to maintain the momentum currently being built around the LHCREs.

We would also welcome an easily accessible and well promoted NHS website that lists approved apps where people can access their data in a user-friendly form. This could be an extension of the NHS Apps library but needs much greater visibility and awareness raising from the NHS, being signposted by GP Surgeries, hospitals and other health and care intermediaries.

1.2 Empowering the public with digital health tools

The 2017 Conservative Party Manifesto committed to “further expand the use of personal budgets” in the NHS.¹²

Personal budgets have been used in both health and social care to allow people with long-term conditions the ability to choose and book health and care services within a set budget. They use existing NHS money that would have been spent on a person, in a different way that meets an individual’s health needs.

However, to date, they have largely been restricted to people who have high care needs and the recent moves to expand eligibility retain a narrow focus.¹³

“EVIDENCE SUGGESTS THAT AT WORST, PERSONAL HEALTH BUDGETS ARE COST-NEUTRAL, WHILST DEMONSTRATING AN ABILITY TO IMPROVE OUTCOMES AND ENHANCE QUALITY OF LIFE.”  
LORD O’SHAUGHNESSY, MINISTERIAL LEAD FOR NHS INNOVATION

techUK would like to see DHSC consult on a wider expansion of the personal budgets policy; whereby any citizen with a long term condition could apply for a ‘Personal Technology Budget’ if the NHS is already funding an alternative digital or non-digital treatment on an ongoing basis.
This would allow people with long term conditions the opportunity to rapidly take up and switch between
digital products that have been approved at the national level. It would also cut out the need for duplicate local
assessments.

1.3 Making the NHS App a springboard for innovation

The NHS App is due to be launched in December 2018 with the stated aim of giving the public more power to
manage interactions with the system – checking symptoms; accessing 111 services; booking appointments; ordering
repeat prescriptions; viewing personal health records and stating preferences around organ donation and data
sharing.

For a generation of Britons who have grown up accessing everything from mobile banking to grocery shopping
through an app, the ability to access health services in this way cannot come soon enough.

However, concerns have been raised that the app will crowd out a number of public-facing apps that have already
been developed as a ‘front door’ to the NHS.

Through pilots and procurement, the NHS has been encouraging innovators to develop digital tools to perform the
precise functionality that has been included in the specification of the NHS app.

As yet, there has been a lack of information as to how the new NHS App will compete on a level playing field
alongside the existing apps currently being offered in the marketplace.

This has caused concern beyond those directly affected, as other digital innovators fear that the scope of the app will
increase or that the NHS will be looking to build other competing technologies in the future. This also has a negative
effect on the investment community that underpins the innovators.

Innovators need clear signals from the System about what the NHS wishes to build and what it is looking to the
market to provide.

The app could present a huge opportunity to provide customised digital tools to those who need them. Future
iterations of the app should allow users to link to a wide range of proven digital tools to meet their health needs. It is
vital that in doing so the NHS looks to the market to provide the best tools available rather than seeking to reinvent
the wheel. This will encourage investment and innovation whilst ensuring that the public can access the best digital
health tools in the world.
2. Enabling a world class workforce

Background

The NHS is the largest employer in Europe with more than a million staff including doctors, dentists, nurses, health visitors, pharmacists, scientists, computer programmers, project managers, web designers and more.¹⁴ This figure more than doubles when the social care workforce is added – meaning that 3.1 million¹⁵ - more than 1 in 10 working people in England - work in health and social care.¹⁶

The workforce is perhaps the NHS’s greatest asset, and it continues to deliver better ‘bang for the buck’ than many of our international counterparts.¹⁷

However, it is widely recognised that frontline NHS staff is under real pressure, often working long and inflexible hours¹⁸ with mixed levels of job satisfaction.¹⁹ Recruitment continues to be a challenge, exacerbated by a fall in healthcare professionals coming to the UK from other EU countries,²⁰ and difficulties in attracting and retaining new generations in the workforce.²¹

We are conscious that technology is no panacea, but it can certainly help. Far too many of the workforce will leave their digitally-enabled home, put away their smart phone and tablet, and pick up a pen and paper when they arrive at work.

Old and outdated technology intensifies the problem and can add to the burden on staff. The Health Secretary has recognised this issue, making the workforce one of his key priorities. In his landmark speech at NHS Expo the Health Secretary said: “Staff waste hours logging on, transcribing vital clinical data by hand or over the phone, systems are slow, fail to communicate with each other”, wasting the scarce resource of time of clinical staff.²²

The Vision paper prioritises skills and culture and recognises that the “use of IT systems should not be an additional burden that staff need to be extensively trained for. We need to build technical skills in the whole health and care system to help professionals and leaders to manage their technology, articulate their user needs better and buy the best tech.”²³

Parts of the NHS are making good progress towards digitisation but in areas where progress is slow, poor IT capacity and digital literacy is aggravated by a lack of support for digital leaders.

Opportunity

Used and implemented well, technology has the potential to empower the health and care workforce to spend less time on burdensome administrative tasks and processes and more time on what they do best: caring for patients.²⁴ It can also alleviate pressure on staff and help enrich their experiences at work.

The Academy of Medical Royal Colleges has outlined the opportunity for technology to support the work of clinicians while freeing up time for care. Its vision for a digital healthcare system focuses on infrastructure that allows access at every clinical encounter including remote access, and easy access to the entire patient record across care boundaries. It also emphasises that systems that are easy to use and quick to learn for staff and non-permanent staff are increasingly important in enabling efficiencies and more agile ways of working.²⁵

The Royal College of Nursing echoes these requirements stating that “a digitally enabled health service would free nurses and midwives to devote more of their time to the people and populations who need their services.”²⁶
Barriers

There are several barriers preventing the realisation of a digitally enabled health and social care workforce:

- There is a perception that focusing attention on exciting, ‘shiny’ new technology can leave the workforce without solutions to address their day-to-day challenges.²⁷

- Where digital solutions are being implemented, some are not as user friendly or intuitive as the technology available in other industries and the already over-burdened workforce has little opportunity to take time off for extensive training.

- Some health and care professionals are turning to tools like WhatsApp to solve some of their communications challenges as their organisations have been too slow to adopt safe and appropriate technology already available in the market.²⁸ This presents multiple challenges as information shared through this platform does not link back to the patient record and does not adequately protect patient privacy.

- As will be explored elsewhere in this document, money that should be spent on digital transformation has historically been redirected to address other pressures in the System. This leaves many NHS trusts with inadequate hardware and slow and old operating systems and software.²⁹

- Although staff members are willing to adopt technology in the workplace, substantial culture change and sound change management are both required to lead meaningful digital transformation.³⁰ This requires digital leaders with appropriate authority, budgetary responsibility, and board support which is often lacking from the governance structures of hospitals.³¹

- Although many of the workforce are eager to adopt digital tools in their working lives, a lack of digital skills and limited time and capacity to develop digital skills is often cited as a barrier.³²

- Staff members are increasingly frustrated by the lack of relevant, usable and joined up information and analytics they need at the point of care to empower them in their decision-making and patient care.³³
Case study

WhatsApp has more than 1.5bn monthly active users worldwide. It has transformed communications across groups of people in different echelons of societies in countries all over the world - becoming a vital tool for parents, partners, peers and even politicians.

In addition, recent research published in the British Medical Journal found that most doctors surveyed routinely used WhatsApp to share sensitive patient information. Whilst convenient, the sharing of patient data in this way, without a patient’s consent is hugely problematic. It breaches GDPR and could see the NHS face huge fines.

Sharing data and images in this way can also increase the risk of leaks. Whilst the app itself is encrypted, many users will have default settings whereby images are automatically saved to a device and the cloud, making them potentially accessible by others.

Healthcare professionals are not ignorant of these concerns, with 68 per cent of those questioned in the British Medical Journal survey expressing concern about sharing information in this way.

Clearly, health and social care professionals need quick and simple ways of sharing information but they also need tools that can integrate with patient records; log changes and audit data; and meet exacting cyber security and data protection standards.

A range of companies have launched tools to address these needs, including System C’s Careflow Connect, Forward Health, Hark, Hospify, medCrowd, MedShr, Medic Creations, Sharesmart and Siilo.
Recommendations | Enabling a world class workforce

A significant amount of work to address the challenges is already in progress across health and social care. The Vision paper clearly outlines the importance of technology that meets the needs of care professionals, makes their lives easier, and frees up time for care.³⁶ The Topol Review is exploring how to prepare the NHS workforce to take advantage of the opportunities presented by game-changing technologies.³⁷ The NHS long term plan is yet to be published but we expect it to focus on closing the decade-long gap between technology in the health and care industry and technology in other industries, as well as preparing the NHS to capitalise on developments in Artificial Intelligence, Genomics, 5G and Blockchain technology.

In parallel, the NHS Digital Academy has been established to grow the next generation of digital leaders to “drive the information and technology transformation of the NHS”³⁸ and in social care.

2.1 Getting the basics right - technology and the gift of time

“For most staff the IT they use every day should be easier and meet their user needs, not be an additional burden they need to be extensively trained for.”

THE RT HON MATT HANCOCK MP, SECRETARY OF STATE FOR HEALTH AND SOCIAL CARE

In September 2018, techUK brought together clinicians and industry for a discussion on how technology can enable the health and care workforce. The most common theme raised was the importance of getting the basics right. This theme is echoed in the Vision paper which notes that although there are pockets of excellence, “for many people – patients, service users, carers and staff – we still need to sort the basics.”³⁹

It is vital that we embrace technology that gives time back to clinicians to do what they do best, to care for and treat their patients. techUK looks forward to working with the NHS to ensure that by the end of the long term plan, the health and care industry is no longer seen as a laggard industry and is brought in line with the digital maturity of other industries.

As a priority, NHS trusts should be supported to implement what staff see as the digital basics, including fast and secure single sign-on, reliable WiFi, secure peer-to-peer communication tools and sufficient devices to allow contemporaneous work.

This should be a focal point of any future digital maturity assessments, which should be refreshed and published on annual basis.⁴⁰

It is vital that the health and care workforce is using 21st century technology that matches the technology available to them in the rest of their lives.

“As a nurse, my dream would be to go online and see any patients records that I needed to see. They would be together, well-curated, under that patient’s name/identifier. It would include GP, acute, community interventions and interactions and all correspondence. There would be click-through contact points for details of other staff involved.”

ROYAL COLLEGE OF NURSING
2.2 Building on the success of the NHS Digital Academy

The NHS cannot be a 21st Century digital service without equipping health and care leaders with the right skills. The Vision paper acknowledges this and notes “we want to empower our workforce with enough technical expertise to be able to identify opportunities where technology can help meet user needs, and to implement new technology at the coalface with confidence.”⁴¹

TechUK and the NHS Digital Academy hosted a joint event in June 2018 to explore how industry can work to support the development of the next generation of digital leaders in the health and care system. We have since signed a partnership agreement to stimulate industry engagement with the Academy; to build trust and foster positive relationships between industry and Chief Information Officers (CIOs) and Chief Clinical Information Officers (CCIOs) by creating a common understanding of shared goals and priorities; and to work together on the goal of a digital ready workforce. This professionalisation can help propel the digital transformation of the system.

The Academy initially received funding for three years, with the aim of training 300 digital leaders by 2021. In our Budget submission, we asked the Chancellor to use the Budget to guarantee the funding of the NHS Digital Academy until 2030. We recommend that the Health Secretary works to ensure the sustainability of the NHS Digital Academy in line with the NHS Long-Term Plan; and increase its intake so that it can develop a greater number of digital leaders in health and care.

“THE NHS NEEDS A FAR LARGER, MORE PROFESSIONAL, AND BETTER SUPPORTED NETWORK OF INDIVIDUALS EMBEDDED IN TRUSTS WHO UNDERSTAND BOTH THE CLINICAL WORK AND THE TECHNOLOGY.”
WACHTER REPORT

The NHS also needs to play a stronger role in developing a pipeline of skilled professionals at the start of their career. The NHS management scheme for graduates should be broadened to attract informatics and computer science specialists and promote rotation to informatics-related roles.
2.3 Empowering local health tech champions

technUK’s roundtable on empowering the health and care workforce emphasised the importance of digital skills embedded throughout NHS and social care organisations, from board level and throughout the workforce. Successful digital transformation requires cultural change along with significant change management. This can only take place by empowering the leaders who have deep technology and clinical knowledge, and by ensuring that staff is equipped to foster and support technology-enabled change in their organisation.⁴²

“TRUSTS NEED A ROBUST, WELL TRAINED, AND WELL SUPPORTED CADRE OF EXPERTS WHO UNDERSTAND CLINICAL PRACTICE, TECHNOLOGY AND CHANGE MANAGEMENT.”
WACHTER REPORT

NHS England is working to make the NHS a better employer and to free up the capacity of the existing workforce.⁴³ Our roundtable participants noted that solving this capacity gap is vital to enable the workforce to have the time to foster and develop digital skills. The Topol Review notes that “in a fast-changing healthcare environment, with a growing and ageing population, the task of ensuring that the workforce has the skills, knowledge and time to care is essential to future proofing the NHS and its ability to meet patients’ needs.”⁴⁴

Key to realising this aim is board level support for digital transformation. We welcome the acknowledgement in the Vision paper that “all health and care organisations should ensure board-level understanding of how data and technology drives their services and strategies, and take charge of the digital maturity of their organisations”.⁴⁵

technUK believes this can be achieved by encouraging digital leaders in the health and care profession to be represented on the board of trusts. This position could either be given to the CCIO, CIO or a Chief Technology or Transformation Officer (CTIO) or Chief Nursing Information Officer (CNIO).

With the move towards Integrated Care Systems and as Sustainability and Transformation Partnerships mature, these organisations could consider establishing a Digital board. The board can “support the design, adoption and implementation of digital services and applications to improve service delivery and underpin smarter community initiatives in a time of reduced budgets and increasing demand.”⁴⁶

technUK recently published a report on What makes a ‘good’ Digital Board?⁴⁷ which contains principles that are easily transferable to a health and social care setting.

Empowered digital leadership at the highest level, with not only board level support but the authority of a board level position, is a key step to achieving the aim for every health and social care worker to be a digital worker. It is also a vital step to ensure that technological transformation is a consistent priority regardless of the multitude of issues that inevitably face NHS boards.
3. Making the UK the #1 destination for health tech innovators

Background

The Vision paper states that:

“We need to put in place a framework that allows innovators and technology companies to thrive... so Healthtech innovators feel supported and can see our commitment to them.”⁴⁸

This is a welcome statement, but a huge shift from where we are at present. techUK has almost 1,000 technology companies in membership working across different industries and sectors. None is perceived to be more difficult to ‘crack’ than health and social care in the UK.

Opportunity

To quote a recent front page from the Economist, “the world’s most valuable resource is no longer oil, but data”.⁴⁹ Alphabet, Amazon, Apple, Facebook and Microsoft are the five most valuable listed firms in the world; with the biggest oil company trailing in tenth.⁴⁹

As a public health system dealing with one million people every 36 hours,⁵⁰ the NHS has the potential to be the world’s most data-rich healthcare organisation. Some estimates put a value of £10bn on the data that the NHS holds.⁵¹ In reality, it is priceless.

Integrated health and care data could empower the ecosystem to improve outcomes and lower costs. But the benefits go beyond that. Fostering a world class health tech ecosystem in the UK will also create a range of high-skilled jobs; revenue for the Exchequer; and can enable us to target global healthcare export opportunities, with worldwide spend in the sector growing by seven per cent a year. ⁵²
Barriers

- Data, like oil, is worth nothing if it is left in the ground. Far too much data is held in non-digital form or in siloed repositories making it impossible to join up.

- Tech companies that need data to build, develop, test and prove their solutions find it difficult to access, while companies that produce valuable data find it difficult to feed back into the System to inform better decision making.

- There is a perception that information governance and cyber security standards can be unclear and burdensome, making life difficult for tech companies and purchasers alike.

- The legal and ethical landscape for working with health and care data is complex and often misunderstood, with prevailing perceptions of overlapping regulation and advice from central NHS Bodies, The Information Commissioner, National Data Guardian, Care Quality Commission and local providers.

- Different local and national bodies ask for different levels of evidence. Evaluation processes seem obscure and are often repeated in different forms around the country.

- Procurement is slow and costly. Suppliers are dealing with a system that consists of 7,000+ GP practices, around 200 Clinical Commissioning Groups and 200 trusts; and a myriad of other providers. Scaling up a successful innovation across the system requires huge duplication of effort.

- There are multiple frameworks used across the NHS. Applying to be on just one of these frameworks can be time consuming and costly – especially for SMEs.

- National funding commitments, incubators, accelerators, catapults, catalysts, pilots and other initiatives are usually welcome - but unless we fix the multiple, overlapping, labyrinthine hoops that form the procurement processes of the NHS their efforts are often in vain.

“TO SELL TO THE NHS MUST BE ONE OF THE MOST FRUSTRATING AND CHALLENGING EXPERIENCES ON THE PLANET.”
ANDY KINNEAR, DIRECTOR OF DIGITAL TRANSFORMATION AT NHS SOUTH, CENTRAL AND WEST CSU
Recommendations | Making the UK the #1 destination for health tech innovators

3.1 Safe and secure access to health and social care data

techUK welcomes the commitment from the Health Secretary to ensure that robust standards of interoperability, privacy and security will soon be published.

As well as being ‘robust’, it is vital that these standards are both singular and transparent, so that innovators have clarity about the standards their solutions need to meet.

We would like to see NHS Digital provide a ‘one stop shop’ online facility that publishes up-to-date, clear guidelines on standards. But the type of NHS-industry collaboration needed to unleash the power of NHS data must go beyond that.

Innovators need a simple framework that allows them to safely access NHS data to develop, test and prove their solutions. The initiatives of Developer.NHS.UK, the NHS Digital API Labs and the Digital Innovation Hubs are welcome steps in this direction, but we would like to see these initiatives stepped up in magnitude. The Vision document states that DHSC will introduce ‘regulatory sandboxes – safe spaces for businesses to test innovation’.⁵³

To ensure that this model succeeds we would like to see NHS Digital, Health Data Research UK (as hosts of the Digital Innovation Hubs) and the 15 regional Academic Health Science Networks (AHSNs) working together to ensure that companies in all regions can benefit from access to data in a secure environment. The AHSNs offer an unparalleled opportunity to promote health tech innovation in all regions of England. Given the right funding and national guidance, they could host facilities to offer support, advice and tools to companies in their region to facilitate simple, safe and secure access to health and care data.

3.2 Simpler procurement processes

techUK has worked in partnership with NHS England over the last 12 months to help to support a broad range of innovative companies in getting on to the Health Systems Support (HSS) Framework, with the aim of enabling NHS bodies a simpler route to procuring a wide range of technology solutions. The Framework has been a flagship project for NHS England with a huge amount of work taking place in NHS England, provider bodies and the technology companies applying to be on the framework.

The Vision document recognises the value of frameworks in easing procurement and proposes a ‘G-Cloud for health’. Whilst techUK supports the principles of frameworks in speeding up procurement there is a degree of ‘framework fatigue’ amongst suppliers. Many suppliers are already on G-Cloud and are now on the HSS framework. There are a multitude of other frameworks in use across the NHS so the inevitable question that comes from suppliers is ‘why do we need another framework’?

In looking at a ‘G-Cloud for health’ we would urge DHSC and NHS England to work towards a much simpler framework landscape that is more coherent, less time consuming and less costly than is currently the case. DHSC and NHS England should also work together to encourage the use of the frameworks that exist in the NHS – and if another new framework is developed, there should be sufficient funding linked to it to justify the costs required by NHS to service it and industry to respond to it.

techUK members, large and small, but particularly at the smaller end, have struggled with the time and resource commitments necessary to get on to multiple frameworks. Reducing or justifying the burden that this places on them would be a very welcome step.
3.3 Ringfenced funding to aid long-term investment decisions

We have already discussed the need for clear signals to the market on where the NHS wants to build digital tools versus where it wants to create a healthy market in which to buy them.

In addition to certainty over scope, innovation investment also requires clear signals on scale.

The Government has committed significant funding to the digitisation of health and care in recent years. In February 2016, the then Health secretary Jeremy Hunt announced a £4.2bn fund for NHS technology, including £1.3bn of new money to fund the ‘paperless 2020’ programme.

However, DHSC figures showed an underspend of £256m in the first year of the fund. This money was then used to “offset pressures in other parts of the system.”⁵⁴

We were encouraged to see that since taking office the new Secretary of State has announced or confirmed more than half a billion pounds in funding commitments for digital health and care. It is vital that these hard-won funding settlements are properly ringfenced and not siphoned off as soon as the unsurprising pressures of winter kick in. Similarly, we have seen the damage that can be done when funding seeks projects rather than the other way around. ‘More haste’ has significantly contributed to the lower speed of NHS IT in the past; and damaged the ability of advocates to secure future funding.⁵⁵

As such, techUK recommends a long-term health technology fund whereby underspends can be allocated to the right digitisation initiatives at the right time. We would like to see ring-fenced funding remain exactly that – to expand the allegory, a 50ft high ringfence, with barbed wire on the top.
Putting ethics at the heart of health tech innovation

Improved data sharing is vital to realising the vision outlined in this paper - of empowering patients; enabling clinicians; and making the UK a destination of choice for health tech innovators. We are conscious that previous initiatives have failed in part because of a lack of public trust.

We are entering an era where the long-held promise of machine learning and Artificial Intelligence is genuinely improving outcomes in the NHS. The adoption of AI technologies in the NHS is increasing at an exponential rate and is likely to be at the heart of some of the biggest technological gains in the system. This raises issues that go beyond the protection of personal data.

As digital technologies become more powerful, the ethical implications of data driven innovation become more significant. Building a culture of trust and confidence that data driven technologies, such as AI, are being developed with human values at the core and support human flourishing is vital.

For industry suppliers, implementing good ethical practices means better business decisions and improved outcomes for the public. The industry is playing a significant role to help drive forward the ethics agenda: techUK has formed a Digital Ethics Working Group that has been contributing to the creation and establishment of the Government’s new Centre for Data Ethics and Innovation. These initiatives and bodies send a clear message that the UK is taking a leadership position in the development and adoption of ethical and responsible data innovation.

On 12 December, techUK is hosting its annual Digital Ethics Summit, which will assess the progress made over the last twelve months in building the capacity and capabilities needed to recognise, identify and address digital ethical issues and concerns. It will consider the practical action that has been taken by industry and the public sector and consider what more may be needed to create the right environment to develop and operationalise ethical decision-making.

By taking proactive action it is possible to put ethics by design at the heart of digital innovation in Health and Social Care and we are now seeing strong collaboration across the private and public sectors, civil society and academia to ensure that this happens.
Afterword

This paper outlines several measures that can improve health and care outcomes by empowering the public; enabling the workforce; and making the UK the best place to innovate in health and care technology. We would welcome further collaboration and consultation to see these ideas come to fruition.

The paper has been informed by our extensive work across health and social care, including, but not limited to our strategic partnership with NHS Digital; joint work with NHS England on the HSS Framework; our partnership with the NHS Digital Academy; our work with the AHSNs; membership of the National Social Care Advisory Group and an array of other events and initiatives. Not least, it is informed by the experience of a good portion of techUK’s 950 member companies. As such, many of the proposals herein predate the publication of DHSC’s Vision paper; and others respond directly to it.

Overall, the tech sector’s response to DHSC’s Vision paper is amongst the most positive we have seen across all Government Departments. The Vision is an honest recognition of the current state of play; a bold call to action; and opens the door to much deeper collaboration between the tech sector and the many public bodies that make up our health and social care system.

We applaud the approach, which is best summarised by the paper itself:

“WE DON’T HAVE ALL THE ANSWERS – THIS SHOULD BE THE BEGINNING OF AN OPEN CONVERSATION ABOUT HOW WE CAN ITERATE TO BEST ACHIEVE WHAT IS NEEDED AND WORK WITH THE MANY BRILLIANT, FORWARD-THINKING PEOPLE IN THE SYSTEM TO GET IT RIGHT.”

Delivering on the Vision will involve substantial and long-lasting collaboration between health and care bodies and the tech sector. On behalf of the supplier community, techUK will continue to play an active role in these conversations to play our part in ensuring that the execution is as well received as the Vision.

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A Manifesto for Matt
Shaping the vision for digital health and care
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