

Data saves lives: reshaping health and social care with data

This is my second London Tech Week in this role, and it couldn't be more different from the last. Last year's London Tech Week was delayed to September due to Covid, but it was also virtual, and it's great that we can meet like this face-to-face. It's brilliant that London Tech Week is back in its rightful place this summer. It's yet another example of how life is returning back to normal, and it's our tech pioneers who have helped get us here.

Technology is something that I've always been very excited about because the story of technology is the story of human progress. When I took my current role, I saw so many opportunities where I could make a difference. The NHS, as many of you will know, is one of the world's largest employers with some 1.4 million employees, and health and care, it's fair to say, touches us all – it may be you, it may be your loved one, but we all care about our health and care, especially over the last few years. It's with us and important to us from our first moments to our last moments.

And so I believe we have the scope and the scale to drive some incredible change, especially if we build on what we've learned during the pandemic, where you could say we've seen at least a decade of change, at least a decade of change, happen in just a couple of years. It's brilliant to be here with some pioneers that have helped make that change happen. You more than anyone understand the benefits that digital transformation can bring, but we need to keep shouting about it and be unafraid to be ambitious about what we can achieve.

You may have seen a few headlines over the last few days about some comments I made in Cabinet last week, where I talked about the health and care system, and I said it must avoid the curse of Blockbuster. Who remembers Blockbuster? Who was a Blockbuster member? You'll remember this was a company that fell behind the change that was happening around it, and it never fully recovered. Less than two decades ago, Blockbuster had more than 9000 stores across the globe. Now it has just one. It's a museum that hosts 1990s-themed sleepovers. That's true. Meanwhile Netflix, who not so long ago were sending people DVDs in the mail, they adapted, and now they're one of the world's most successful media companies.

Of course, health and care is far more instrumental and important to our lives than a video store, but the message remains the same. I firmly believe in the founding principles of the NHS: having a world-class health system paid out of general taxation that's free at the point of use. But we must acknowledge that if health and care doesn't keep up with the rapidly changing world around us, then we will get stuck in the slow lane, and we won't be able to deliver the care that people deserve and expect.

I'm coming up to almost a year in this role, and I remember when I first came

into this office, one of my very first decisions was to bring what was NHSX and NHSD, and put that together to merge it with NHS England, convening all of the NHS's digital bodies under one roof for the very first time. Imagine if any one of your organisations, or indeed any FTSE 100 company for example, allowing responsibility for one of the most important leaders of change, digital transformation, to sit outside their organisation – especially an organisation that is as crucial to the nation's health and happiness as the NHS. Because digital isn't an add on. It is something you cannot delegate; it must be owned and driven from the very top. This is something I will do and Amanda Pritchard, head of the NHS, that we both will do for as long as we are responsible.

So we are now needing a radical programme of digital reform that will make sure the NHS is set up to meet the challenges of 2048 – not 1948, when it was first established. I have already given the NHS a new target of to ensure 90% coverage of Electronic Patient Records by the end of next year, and we are on track to hit that. Although it's fantastic that the NHS already has seen 63% of English adults have downloaded the NHS app – last year I understand it was the most-downloaded free iPhone app in England – I'm determined to make sure this number for the app reaches 75% of all adults in England, and we will do this by adding much more functionality to the app.

We're also publishing a series of transformative documents showing the changes that we need to see in health and care. Last week, I accepted the recommendations of the independent Health and Care Leadership Review, and we will very soon be publishing the Digital Health and Care Plan, which will put in one single place our overall vision for this digital transformation.

Today, I want to talk to you about another major milestone: the publication of our new Data Strategy. The strapline for this strategy says it all: data saves lives. This landmark document will look at how we can build on the momentum that we've seen and apply the lessons of the twin challenges of recovery and reform. It's a document with something for everyone, whatever part you play in health and care, and today I want to take you through some of the themes that underpin this new strategy.

First, how we will improve trust in data, which is the currency that data-driven technologies need to function. Research from the Open Data Institute says that when it comes to handling personal data, the NHS is already one of the most trusted organisations in the UK, and surveys show that the majority of people are supportive of their health and care data being used to help others.

Of course this is a great starting point to build from, but we cannot take public trust for granted, and we haven't always got this right, so we need to demonstrate that we are a trusted custodian of data. We will work with the public, including people working in health and care, to develop a new pact on data, which will set out how we will use health and care data and what the public has the right to expect.

Second, we must give health and care professionals the information they need to provide the best possible care. Some 27% of doctors who responded to a

survey by the BMA said that they lost over four hours a week because of inefficient hardware or systems that they use. We must free up their time to focus on what they do best: giving the best quality care.

To do this, we need to have shared records so clinicians can make decisions based on all the relevant information, whichever part of the system they have come from, and add to the same shared record in a safe and straightforward way. This means better, more accurate diagnoses, but it will also help to spur the more personalised care that is so important to my plans for reform. Basic shared records are now in place in all Integrated Care Systems, which of course I think is a fantastic start. But as well as putting these systems in place, we need to give people the confidence to use them.

We hear from many staff that they are hesitant when it comes to using data, as they are worried they might get some things wrong. We need a fundamental shift in culture. The duty of patient confidentiality stretches back to the Hippocratic Oath and is rightly seen as sacred, but the duty to safely use data must be seen as just as important. To do this, guidance to colleagues on how they can use data must be as clear and as simple as possible. We saw some huge steps in this regard during the pandemic, where we simplified vital information, vital guidance onto just one page, and we'll be applying this approach to guidance across health and care to bring safety and clarity.

I want to move to an approach where safe access to data is the default, because the opportunities that this data can unlock are too important to be left to chance. So, we will introduce a new legal power that means health and care organisations can require anonymous information from each other and from commissioned private providers. This will help us to smash silos, and make sure that anonymous information can be shared more easily across the system.

Third, we will place a particular focus on promoting data-driven technologies in adult social care too. We must be open and honest about the fact that social care lags behind the NHS when it comes to digital transformation. Currently, only 45% of social care providers use a digital social care record, the same percentage that has expressed concern that their staff lacked digital skills. Too many staff in social care are spending their days chasing health updates and discharge summaries and dealing with antiquated paper-based systems and we must urgently bring a close to this digital divide.

We have already committed to investing at least £150 million to support digital transformation in adult social care, and the Data Strategy builds on this investment, showing how we will be develop a comprehensive digital training offer for people who work in the sector, and how we will join the gaps that exist when it comes to data sharing between health and social care so it's only collected once and then flows right across the system.

To do this, I want us to be using the NHS number universally across adult social care, and by March 2024 we've set a target for at least 80% of all CQC-registered social care providers to have a digitised care record, which will be integrated with the wider shared care record. To back this work, I'm pleased to announce today that we are launching £25 million of funding this

year across all Integrated Care Systems in England.

This is the first of three years of funding that will allow ICSs to work with partners in social care to scale up adoption of these records. Along with other promising technologies, like for example sensors to detect and prevent falls, I want to see a technology revolution in adult social care.

Fourth, we will give local and national decision makers better and more sophisticated data to help them to plan services. When it came to making important decisions about our life and liberty during the pandemic, I would depend on platforms like the coronavirus dashboard, some of you might remember, which brought together data sources from across Government in a clear and accessible way. For me and other ministers this was absolutely invaluable. Now that we're living with Covid and taking forward the important reforms that are essential to health and care, we must take this forward.

Running through all these reforms is a population-based approach, which draws on all of the elements that determine our health in a local area. Traditional divisions that may have been created decades ago, like between the NHS and council services, have created deep-seated divisions in data too. Not only has this led to a lack of coordination in care, but it makes it harder for local and national leaders to plan, to develop and to commission policy.

Now that we are taking forward this more coordinated approach through our new Integrated Care Systems and the Integration White Paper, this is the perfect moment to bring data together and reap the benefits. So, we will develop a federated data platform which will allow Integrated Care Systems to bring together operational data – for example the number of hospital beds in their area, or the availability of medical supplies – to allow for better decision making and a clearer picture of population health.

This type of technology, already being piloted by the NHS, will allow organisations to coordinate care between them, ultimately freeing up more clinical time for care, and helping ICSs to share data and learn more quickly from each other.

Finally, I want to talk about the work that we are doing for pioneers like you. In this country we have some of the world's best research institutes and universities, a powerhouse life sciences sector, and a thriving health tech industry. Growth in health tech is nearly six times larger than growth across the rest of the economy, so not only are you making the country healthier, but you are making it more productive and prosperous too.

I see my role as making sure this country is seen as the best-possible place for innovators to come and make their breakthroughs here, and to be the natural home for tech talent from right across the world. As we chart a new course after leaving the EU, I am determined to pursue every single opportunity to give ourselves a competitive advantage, and that includes our approach to data.

We know that when ingenuity in this room meets the insight of health and care data, the opportunities they really are incredible. We saw this through the

RECOVERY trial that was held here in the UK using NHS data, and it identified dexamethasone as the first effective coronavirus treatment – a discovery that has saved over a million lives worldwide. I want many more of these breakthroughs to be made right here, especially through emerging technologies like AI and machine learning. We've already created the NHS AI lab to promote the safe and ethical use of AI technologies, and we've backed some 80 promising AI projects through the AI in health and care award, with funding of over £100 million.

Behind all of these products are huge amounts of very, very complex data. And whenever I speak to innovators from across the world, they tell me that what they want are clear standards and guides to help them to innovate, and our new strategy shows how we will do exactly that.

Take for example the secure data environments that allow access to be granted to authorised researchers in a controlled and recorded way. In these environments, identifiable data cannot be removed from the system, and all access to the data is recorded and monitored, massively reducing the risk of data breaches. We will work with expert partners and the public to expand the use of secure data environments right across the NHS. As we break down the organisational silos that hold data, we must rebuild them based on the foundations of openness and interoperability.

During the pandemic, we openly published the code for our new platforms, like the Covid-19 app and the QCovid predictive tool. We did it in the interests of transparency, and also because it helps data-driven innovators to build systems that can easily work with the health and care systems. We will keep leading the way in this area – after all, the NHS belongs to everyone. The Strategy shows that we will reshape our systems and platforms by allowing data to talk to each other and work together, and I am looking at passing legislation so we can make sure we can get the right structures in place.

These are just a few of the commitments in this radical agenda for change. We are at a unique moment in history as we emerge from a crisis that has brought incredible hardship but also phenomenal change. This important document, the new Data Strategy, it shows how we will keep accelerating and innovating, and working with tech innovators like you, to transform health and care for the better. Because quite simply, data saves lives.