Speech: I care about tech because I care about people

This place has always looked to the future. Charles Darwin, Edward Jenner, Alexander Fleming: all fellows of this great institution, all coming together to “share knowledge” to “benefit society”.

I’d like to thank another great fellow – Dr Eric Topol – for the amazing work he, and his team, have done to benefit the NHS.

They’ve looked to the future. They’ve looked at genomics, digital medicines, AI and robotics. They’ve looked at the potential of new technology to save lives and improve the nation’s health and wellbeing.

And they’ve looked at how tech can help staff, make their lives easier, and what we need to do to help our NHS workforce prepare for a digital future.

The Topol Review is a forensically thorough analysis of what we need to do and how we should do it. But I’d like to take a moment to focus on the why.

Why do I care about getting the right tech in the NHS? Why should we all care about getting the right tech in the NHS?

It’s not about having the latest gizmos. It’s because the right technology saves lives. Every major technological leap, from penicillin, to vaccination, to MRI, has meant more lives saved.

I’m confident that our children and grandchildren will look back at genomics, AI and robotics in the same way. They’ll be the ones asking us why, if we fail to seize this opportunity.

As Dr Topol says, we’re 10 years behind in some fields. If we just made better use of today’s tech, we could save more people.

So I care about tech because I care about people. I care about our NHS staff and our NHS patients. And I care about getting this right. Because I know the consequences when we don’t.

There’s something that Dr Umesh Prabhu said that has stayed with me. It’s the reason why he devoted his career to becoming an NHS medical director and an expert in patient safety.

When he was a consultant, he made a mistake. There were 2 babies with the same name on his ward. His junior doctor picked up the wrong case notes and when Dr Prabhu was brought the wrong x-ray, he discharged the wrong baby.

Two days later that baby boy was admitted to another hospital with severe brain damage. The baby’s step-father had stamped on his skull. X-rays showed the baby had multiple rib fractures, some of which were old.

As you can imagine, Dr Prabhu was devastated. Here was a man who cared deeply about his patients, who had made helping people his life's mission.

That tragedy had a profound effect on him. He vowed to change the system, to put in place safety protocols and ways of working that would mean a simple mix-up couldn't lead to such devastating consequences again.

Thankfully, thanks to his efforts, much has changed in the NHS since that happened. But it hasn't changed enough.

Dr Prabhu says human beings make 5 to 7 mistakes every day. Everybody makes mistakes. Doctors and nurses will make mistakes, despite their best efforts and intentions.

That's why, for me, getting the right tech – tech that works, tech that helps our medical staff, that makes their lives easier, that reduces the chance of human error leading to human tragedy – is so important.

I care passionately about giving our medical staff the right tools to do their jobs. I understand their frustration at systems that make their jobs more difficult. I get how a tough day becomes even tougher because something won't work like it's supposed to.

Digital tech has the potential to transform our health service in the future, but the right tech, right now, will improve lives, and save lives. So the work must begin now.

We're going to have a chief information officer or a chief clinical information officer on the board of every local NHS organisation within the next 3 years.

Getting the right leadership, people who understand tech, who have tech skills themselves, involved in management decisions is vital to getting the right mindset in place. It's the first step to training up staff, building up digital capability in hospitals and GP surgeries.

So I'm delighted to launch the Topol programme for digital healthcare fellowships. This programme will give clinicians the skills to make a practical difference to their local NHS organisations and start them on a career path to become CCIOs and CIOs. That way, those leaders can help train and prepare our workforce for a digital future.

And here I'd like to quote from the report: "There is a need to raise awareness of genomics and digital literacy among the health and social care workforce. This requires development of the skills, attitudes and behaviours that individuals require to become digitally competent and confident."

So, the Prime Minister and I have asked Baroness Dido Harding to take forward a 'workplace implementation plan'. She will build on the recommendations in the Topol Review:

- all healthcare professionals should receive core training in genomic

literacy to help them understand the basis, benefits and ethical considerations involved

- we need to create a career pathway from undergraduate to specialist, a digitally enabled health system with a culture of continuous learning, and we need to support the educators, and the development of the whole workforce

Of course, we want the NHS to be world leaders in digital healthcare, so we need to attract the brightest and the best into our health service, we need to increase the number of clinicians, scientists, technologists and specialists.

But if we want to see transformative change in the NHS, then we need to embed digital skills into every level, and every part of it.

We must invest in training up the existing workforce. Staff must have the opportunity to learn about digital technologies and develop the necessary skills. They must have ongoing training.

The government is putting a record £20.5 billion a year into the NHS – the longest and largest cash settlement in its history.

It's a once-in-a-generation opportunity. To seize that opportunity and build a better, more sustainable health service for the future, we must ensure our NHS workforce have the right tech and the right tech skills.

Because, thirdly, and finally, I'd like to bring it back to why – why we're here today.

That's not a metaphysical question – I'm afraid I can't answer that one for you – but why I'm here today is because I want us to harness the power of digital technology, to shape it as a force for good, because I want to help the NHS cut costs and save lives.

When we talk about the importance of data management and inter-operability, most of the public won't know what we mean.

This is what I mean: right now, Tesco has more sophisticated and more efficient systems than the NHS. They know who you are through loyalty cards, where you shop through store IDs, and what you buy through the items scanned at the checkout.

That wealth of information means they can run their operations with just-in-time deliveries and market their goods to shoppers with personalised discount vouchers.

In the NHS, we don't have anything like that. We don't use common identifiers to identify patients, we don't know which hospitals a patient has been to, we don't know which medicines have been put into them. We don't even know what we already know!

Of course, there are security and privacy concerns over sensitive medical data and that data has to be managed carefully and with consent. But the NHS is missing out on valuable information. Information that could make NHS services more efficient and safer.

A world in which a hospital can’t pull up a patient’s GP record to see the reason for stopping and starting medications is downright dangerous. True inter-operability means having the right systems and the right standards.

We have learned the lessons of the past. We don’t need the same system across the NHS, but we need the same standards so machines can talk to each other and data can be exchanged.

Six acute NHS trusts have taken up ‘Scan for Safety’, a standard methodology using standardised naming conventions and proven technology to identify and monitor patients, and track products and places.

I want to see this taken up by the entire acute sector. As the review says, we can have the most advanced tech, but we won’t see the benefits unless we have real inter-operability. So staff have to make scanning a routine part of their working day.

It takes seconds, but saves hours. If adopted across the NHS, the time saved would equate to almost 400 extra nurses.

As Dr Topol says in the report: “Wherever possible, the adoption of new technologies should enable staff to gain more time to care, promoting deeper interaction with patients”.

Because, ultimately, this is about people. It’s about doctors like Dr Prabhu. It’s about babies like that little boy.

For tech to succeed, for tech to fulfil its potential and deliver on its promise, then human beings are absolutely critical to making it happen. We need a culture change as much as we need a technological change.

So, let’s work together towards a digital future that works for people, that puts people first, that helps the NHS do the job it is there to do, ensures the NHS is always there, for all of us, for generations to come.