

[News story: 2019 Academy event programme](#)

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[Speech: Amanda Spielman at the 2019 Annual Apprenticeships Conference](#)

Introduction

To say that the last few years have marked monumental changes for the apprenticeship market is no exaggeration. We have seen the introduction of the levy, standards, the off-the-job training quota, and of course degree apprenticeships – to name just a few. This is a heady mix, and understandably, the sector's had to work hard to adjust.

Since I spoke to you last year, apprenticeships remain in the headlines, and not always for the right reasons. The continuing fall in starts, highlighted again by the National Audit Office (NAO) earlier this month, is still a major cause for concern.

I am well aware that apprenticeship providers have a lot to contend with. The wider context that means that many of you are struggling to make apprenticeships available.

Amid these challenges, Ofsted's focus has to remain resolutely on quality. I'm sure you would expect no less. Apprentices deserve the highest standards of training in and out of work, regardless of the issues faced by the sector.

Despite this, there are, as they say, reasons to be cheerful. Last year, I spoke about the slow move away from frameworks. This process still has some way to go. But many new apprentices are now working to standards. And so far, inspection suggests that this is having a positive effect on apprenticeship

quality.

Reform, is of course, never neat and tidy. That is why I'm pleased to be here today. If we are to continue making progress, and to create an apprenticeship system that rivals the best in the world, these frank conversations are vital.

Overview of the apprenticeship landscape

Returning to the context you're working in, there are currently more than 2,500 providers on the apprenticeship register, a huge increase since the levy was introduced 2 years ago. The nature of these providers, too, has changed.

The levy has given employers far more control over the way they manage apprenticeship funding. More employers have decided that if they control the funding, they might as well deliver the training themselves. Indeed, employer providers now account for some 10% of the market. And we're also seeing an increasing number of higher education providers.

Yet despite this increase in providers, the number of apprentices continues to fall. The latest NAO report shows a fairly staggering 26% drop over all, with the fall particularly acute at levels 2 and 3.

At the same time, we've seen the proportion of higher-cost, higher-level apprenticeships rise nearly 50%, to nearly 50,000. Higher apprenticeships now make up more than a quarter of the number of starts.

As we highlighted in our [latest annual report](#), a diverse range of apprenticeships is to be welcomed, particularly when there is clear progression in an occupation from level 2 to degree level.

But what is of concern is the fact that levy money is not always being spent in the intended way. So, for example, on graduate schemes that are in effect being "re-packaged" as apprenticeships.

This trend towards higher apprenticeships also narrows the options for the third of young people who leave school without a full level 2 qualification. I do think that we have to be concerned if this rise is limiting the options available to young people who don't do as well at school. Their path to a good job, is after all, already a more difficult one.

Ofsted's commitment to apprenticeship quality

Ofsted's overarching goal, as I have said many times before, is to be a force for improvement in all the areas where we work – whether that is providing evidence of what is working, or warning where things are going wrong. As the market continues to grapple with many changes, this role is more relevant than ever.

In terms of the inspection picture, last year, we inspected the apprenticeship provision at just over 100 providers. Nearly 60% of those were

good or better. Most good and outstanding providers were training larger numbers of apprentices, and around two-thirds of apprentices were in good or better provision.

More recent inspections show that, for now, the sector is holding steady – despite so much new provision coming on stream. Since last September, of the 52 full inspections that reported on the quality of apprenticeships, nearly 60% were found to be good or better. So, while the picture isn't getting worse, I think that you would all agree that there is still work to do. The challenge is to move past this 60%.

Our new provider monitoring visits, announced at the end of last year, support this work. They are providing important extra reassurance on quality for apprentices.

The visits aim to make sure that all apprentices get the highest quality training and support. They check that all providers know about the expectations for high-quality apprenticeships.

So far, findings from over 150 monitoring visits show a somewhat varied picture. Around 60% of providers were making “reasonable progress” across all 3 lines of enquiry. Almost a quarter received at least one insufficient progress judgement, while the rest received at least one judgement of significant progress. Again, we see this 60% figure across the bulk of these inspections. What is holding back the other 40%?

There are various factors at play here. You won't be surprised that in the providers that do less well, leaders don't have a good grasp on how well their apprentices are doing. Governance is often ineffective and doesn't challenge leaders to do better.

We see little evidence that off-the-job training is coordinated to make the most of what apprentices are learning and doing at work. And when they do develop skills, they do so slowly.

In these providers, tutors and employers pay scant regard to the knowledge and skills that apprentices already have. The training that takes place bears little or no relationship to the tasks and activities that the apprentice does at work. Assignments and assessments require apprentices to demonstrate things they can already do. And in some cases, apprentices may not know they are doing an apprenticeship at all! This beggars belief.

Of course, there's no guarantee that providers making reasonable progress will go on to be judged at least good in a full inspection. What we are assured of, though, is that apprentices in these organisations are getting the training and support they need.

I also want to take a moment to celebrate the providers, many of you in this room, who champion the cause of apprenticeships. Amid the worrying statistics and headlines it can be easy to overlook the success stories. In good or better provision, we see you working closely with employers to plan a curriculum that meets industry-specific training needs.

At Ace Training, for example, tutors and employers determined that apprentices' training should be re-ordered because the apprentices needed to gain skills earlier than planned to fix intricate architraves, and hang doors accurately. Effective sequencing like this is so important. It means that apprentices build, consolidate and build again upon what they know.

The Greater Manchester NHS Mental Health Trust uses apprenticeships both for recruitment of new staff, as well as to help existing staff get on in their careers. Managers use apprenticeships as part of their recruitment strategy. They look at their available jobs and decide which can be filled by apprentices new to the Trust. They also offer apprenticeships to existing health care workers. This allows existing staff to develop their knowledge and skills enough to gain promotion and fill vital roles throughout the Trust.

In good or better providers that we see, apprentices' progress is also monitored meticulously. If they fall behind, they get the support they need to help them catch up quickly.

Substance and integrity

As I said earlier, evidence so far points towards most apprenticeship standards making a positive difference. Many of these standards do seem to be capturing the occupationally specific knowledge better than their predecessor frameworks.

This focus on occupationally specific knowledge, skills and behaviours is also reflected in Ofsted's [plans for the future of inspection](#). We want to make sure inspection looks at the substance of what children, young people and adults are actually learning – not just the grades and qualifications they achieve.

Of course, the picture for apprenticeships could be better still. We want to see that 60% figure moving in the right direction. And together, all of you can make sure that more provision is judged to be at least good by being clear about what apprentices know, and can already do, before they begin their apprenticeship. This is especially important for apprentices who are existing employees.

You will all have heard me talk before not just about substance in education, but also integrity. These are the qualities we want to reward on inspection, and that we are focusing on steadfastly with our new inspection approach.

For apprenticeships, as in any other area of education, this means acting in the best interests of learners at all times. It means spending money effectively in the development of each apprentice. And it means treating every apprentice as an individual, with potential to be unlocked, not a number or statistic. I know that this will resonate with all of you in this room.

Good initial assessment is the foundation of any decent apprenticeship. After all, regardless of which level they are starting or moving on to, most people

will have learning from what they have done before; some will have previous occupational experience.

To ignore this as apprentices move to higher levels risks repeating learning unnecessarily. Or it can undermine an apprentice's confidence because they may feel that they aren't developing new knowledge and skills.

It is important to remember that where we have judged providers to be less than good, we often see apprentices who, because initial assessment was weak, aren't getting the training and support they need.

Initial assessment must be much more than testing of English and maths, or as we used to see around Train to Gain apprenticeships, of a confidence "check list". It must get down to the detail of what it is an apprentice is bringing to the table as they start an apprenticeship.

If they already know more than the standard requires, then they plainly don't need to be on an apprenticeship! And if they can already do some of it, then the length should be adjusted, so that it reflects their experience.

It is particularly concerning where, in extreme cases, this comes down to providers cynically exploiting the new funding arrangements to their own ends – taking on larger numbers of apprentices, whether they are really learning anything or not.

This focus on quantity over quality must be discouraged. I believe that inspection has a valuable role to play here.

Apprenticeships and the education inspection framework

I'm sure (or rather I very much hope!) that by now you're aware of the [proposals for our new inspection framework](#). If you haven't already [replied to our consultation](#), you have just a few more days! Please, do let us know what you think.

For a sector that has so much going on, dealing with a new framework may feel like an unwelcome distraction. But, as you may have heard me say before, this will be evolution not revolution. In the main, it is rebalancing what we are already doing to get to better inspection conversations. We want to have the best possible professional dialogue that contributes as much as it can to your future development.

And as I mentioned earlier, the focus will be on the substance of education. Whether that is early years, schools, or post-16, we want to know what young people are being taught, how well are they being taught it, and how it is setting them up to succeed at the next stage.

For apprenticeships, as with the new provider monitoring visits, we are going to be paying more attention to whether these foundations for a good curriculum, training, and apprenticeship offer are in place.

The new framework will ask providers to be clear about why their curriculum is as it is. In apprenticeships, this means looking at whether the apprenticeship offered meets the needs of local and regional employers.

For example, if a college was training 200 'business fire safety advisor' apprentices, inspectors would want to know about the rationale for delivering such an apprenticeship. They would want to find out what the medium- and long-term job prospects were for those who have completed their apprenticeship.

If it's about the upskilling of existing employees for a large local employer to improve their productivity, then we will explore whether the provider and employer know about the knowledge, skills and behaviours that those employees already have.

Then we will look to see if the provider has adjusted the length of the apprenticeship to account for what apprentices already know and can do. And let me be clear – an apprenticeship that does not include enough training and skill development to meet the minimum 12-month duration is not an apprenticeship. It is staff development.

Conclusion

With any new reform, it takes time for change to bed in. But equally, for those young people who are starting apprenticeships, time is of the essence. Their apprenticeship needs to be of the highest quality now, not in a few years' time.

That is why we won't shy away from giving very clear messages where the system isn't working. About those providers who aren't doing enough to get the initial assessment of apprentices right. And those who end up accrediting apprentices for the knowledge and skills they already have.

We should all be able to celebrate what is great about apprenticeships, and the life-changing opportunities they offer to young people from all backgrounds, as well as their contribution to building skills and preparing a workforce for the future.

There are many reasons why it's essential that we get apprenticeships right. Not just for people who want to get on in life, but for the wider success of the nation. I know all of you here are determined to get the system to where it should be.

Thank you.

Speech: Home Builders Federation Policy Conference 2019

As you will imagine, this is a busy time in government – I've come straight from Cabinet – and as a government we remain absolutely resolved in charting that positive course for our country, to find our way through to gain that positive sense on how we deliver on the Brexit referendum.

That does indeed mean following through on the agreement and the deal that we have in place. That's the approach that we will continue to take.

I suppose in that context it is right that we are meeting today at a time when, yes, there are challenges that are there.

And indeed, these are a critical point in terms of the nation's history, when social, economic and political issues come together. That is most definitely relevant in the context of our housing agenda too.

Many of the same forces that drove the Brexit vote – people that weren't getting, in their view, a fair chance to build a better life – are also driving concerns about lack of fairness in the housing market.

Families and young people feeling that no matter how hard they work – no matter how hard they hope – that something as basic as a decent, affordable, secure home is slipping further out of reach.

And when they're held back, we're all held back.

That's why, as the Prime Minister has made clear, building the homes our country needs is central to our ambition to build a country that works for everyone. Together, we're making meaningful progress.

- For the first time in 10 years home ownership amongst 35 – 44 year olds is up.
- And last year we built more homes than in any other year bar one of the previous 31.

This is good news and I am hugely grateful for the contribution that you have made in this.

But to be clear, this isn't simply about getting the numbers up.

It's also about delivering high quality homes that are, yes, beautiful, and stand the test of time.

That grow a sense of place and pride, and not undermine it.

That do build on the best of what's gone before, but also harness the latest innovations whilst keeping our feet firmly grounded in what communities want and need.

Because we're not simply building units.

We're building communities.

And as output increases to 300,000 new homes a year, these issues of quality and design will only become more important, not less.

Of the 222,000 net additions to the housing stock last year 195,000 were new build homes.

Now, I don't want to tell people what to build, but I do want to ensure that the next generation of homes we build are ones of which we can be proud.

And I know that there are a number of developers who are delivering on this, who are following through on this, and I think are setting that lead for the industry – but we cannot be blind to the wider challenges the industry faces.

Businesses need to make money to be viable, absolutely yes.

But the public looks at some companies' profits and bonuses and wonders how they tally with extensive snagging, unfair leases and a seeming lack of understanding of the responsibility they have towards customers who are left struggling and out of pocket.

For most people, buying a home is one of the biggest financial and emotional investments of their lives – and for that to go from being a cherished dream to becoming a nightmare of snagging problems months after moving in, and punitive costs, is simply unacceptable.

This can't continue, and I know many of you share my view.

Especially as the government remains committed to working with the sector to restore the dream of home ownership – to extending the franchise to future generations.

That's why we cut stamp duty for most first-time buyers.

And why we announced a new Help to Buy scheme which will run until 2023 – a policy that, together with schemes including Right to Buy, has helped over half a million people get their foot on the housing ladder since 2010.

The new scheme – which is targeted at first-time buyers and includes regional property price caps – will build on this success by ensuring it supports those who need it most.

And I will be considering carefully how the developers who work with us meet the standards and quality that customers expect and deserve.

As we've already announced, the new scheme will not be used to support the unjustified use of leasehold.

Indeed, I've been clear that this practice has no place in a modern housing market and I look forward to responding to the consultation we've carried out

on reforms to make the system fairer.

Because whether we're talking about banning unjustified leaseholds or improving quality and design, it's in all our interests to create a fairer, stronger, more diverse housing market that responds to what consumers and communities want.

And those consumers and communities want to see not just more homes, but better homes.

That's why we're bringing forward legislation to require developers to belong to a New Homes Ombudsman, which will protect homebuyers and champion quality of build.

We'll soon be consulting on the details of how this will work and will continue to work with you, in the interim, to raise standards and ensure that problems encountered by consumers are resolved faster and more effectively.

We'll also look to accelerate the New Homes Ombudsman's development by exploring the option to introduce it in shadow form before its formal launch.

We're also championing higher standards in design and quality through the Building Better, Building Beautiful Commission – something that was reinforced last month when we hosted a second national design conference.

This is not just the right thing to do, but crucial if we're to persuade people to back rather than block new development.

Quite simply, if we're to build more, we have to build better.

I think that provides the incentive to get things done more quickly, to see that we are able to fulfil our ambitions of development, and how that helps all of us.

Above all, we also need to ensure that we are keeping people safe – underlined by the appalling events at Grenfell Tower.

And I am hugely grateful to the growing list of building owners and developers who are coming forward to protect leaseholders from bearing the costs of remediating buildings with unsafe ACM cladding systems.

I urge others to follow suit and show the kind of leadership that has made building sites much safer for workers in recent years – the same must now happen for residents.

We're making progress, but I want to pick up the pace – and the government is looking at extra measures to achieve this.

But as well as building better – to increase supply – we also need to build faster and reduce planning delays that do hold up good development.

That's why we'll be publishing an Accelerated Planning green paper later this year – as announced at this month's Spring Statement – to look at how greater

capacity and capability within local planning authorities, better performance management and procedural improvements can accelerate the end-to-end planning process for all.

Stripping out the lost weeks and wasted money.

So with the focus and support that's on offer from government, this is very much a moment for the industry to also play its part, make changes, and show what you can do.

And these changes will span all areas – because there is no single lever we can pull to boost supply and quality.

But a strong skills base is clearly vital – and our departure from the EU provides an opportunity for us to consider afresh how we can enrich this and invest in our workforce.

In this context, I know that many of you will be thinking especially about what this means for employing temporary workers from overseas.

And I do hope – and we encourage you to do so – you contribute to the engagement the Home Office is carrying out with industry on proposals set out in the [Immigration white paper](#), supported by all government departments, to ensure that areas such as the operation of the temporary workers route and sponsorship arrangements work well and reflect the needs of this sector.

But as well as resolving these immediate issues, we must also grasp the opportunities to grow our own talent.

And that's precisely what we're doing through the education system, with the most significant reform to advanced technical education in 70 years: the T Level.

From 2020, T Levels will be a high-quality technical alternative to A Levels, rivalling some of the world's best-performing systems.

We're also championing apprenticeships through initiatives such as the [Construction Sector Deal](#) – led by my colleague Greg Clark at BEIS. This aims to work with industry to deliver 25,000 construction apprenticeships and 1,000 Construction T level placements by 2020.

Indeed, no-one is better placed than you – than the sector – to understand what skills we need to keep up the momentum on building more homes, creating skilled jobs and driving growth after Brexit.

Which is why we want the industry to take a stronger lead on this issue – to invest in your workforce and help address long-standing issues around training and productivity.

We're supporting these efforts through schemes such as the £24 million Construction Skills Fund – a partnership between the Department for Education and Construction Industry Training Board – which backs innovative and employer-led approaches to training.

We're also mindful that, as well as access to skills, access to materials is also paramount to help you continue delivering at scale and pace.

It's important to remember that 80% of our construction materials are produced in the UK.

As with skills, I think the sector has the chance to reinvigorate supply chains – particularly when it comes to making the most of what new partnerships and new approaches can offer.

Innovation has changed other industries – improved productivity, quality and choice – beyond recognition. I want to see it do the same in housing.

Indeed, I want us to be seen as a leader – not just domestically, but internationally – in terms of how we build and what we are achieving through our housing agenda.

It's why our £4.5 billion [Home Building Fund](#) is so focused on backing more diverse builders, particularly SMEs, and cutting-edge building methods – I know a focus of part of your discussion here today.

It's a fund that has proved a huge success.

Over 92% of the original £1 billion Short Term Funding has already been allocated to support SMEs, custom builders and innovators and is expected to unlock over 30,000 homes – around 5,000 more than the original target.

We're also investing £170 million from the Construction Sector Deal to spread innovation across the sector through digital technologies, new production systems and other measures to manufacture better buildings.

Initiatives such as the Accelerated Construction Programme – which involves Homes England and other partners working with local authorities to identify suitable surplus public sector land to deliver innovative housing projects at pace – also demonstrate our absolute commitment to this agenda.

And, earlier this year, we announced an agreed definition and categorisation for all modern methods of construction (MMC), with a unified quality assurance scheme, assessing these technologies, about to be launched – an important step to making sure that, as the use of MMC expands, quality does remain at the forefront.

And I think it's great to see the sector really embracing MMC – both new entrants as well as established players like L&Q, which has announced that it will use MMC in all new builds by 2025.

So, the momentum is building, and I want to see the sector really taking this drive for innovation up a gear over the coming months to blaze a trail for the high-quality, energy-efficient, manufacturing-led smart homes of the future.

These new methods of construction offer the prospect of building at pace with a leaner and high-skilled workforce – ensuring that access to labour should

no longer be the brake on production that at times it has been in the past.

So, there are good reasons for the whole sector – public and private – to make the most of these advances and secure the prize that's in our grasp: a more diverse, vibrant market that increases supply and that's also more resilient and agile in responding to changing demands.

And I can say to you that I will continue to listen. I very much appreciate the engagement that I have had with the HBF and others across the sector in listening acutely to the opportunities and, yes, the challenges as well.

And I can certainly underline that message of engagement here again today, because there is that shared ambition – that shared intent – to build the homes that our country needs.

And these changing demands – to build a country that works for everyone – rang out loud and clear through the Brexit vote.

A mission that very much includes a housing market that does work for everyone – with all of us striving, as part of the same system, to deliver on this.

Delivering over one million new homes since 2010.

Putting billions into housing and infrastructure.

Empowering Homes England, our new national housing agency, and reforming planning to drive delivery.

Paving the way for a new generation of social housing by removing the government cap on how much councils can borrow to build, with an extra £2 billion of long-term funding to help housing associations deliver.

Backing our housebuilders through the £4.5 billion Home Building Fund.

And this year, introducing a New Homes Ombudsman and consulting on a new regulatory framework for building safety as part of the work flowing from the tragedy at Grenfell Tower.

Vital work.

But I know that there is so much more that needs to be done.

That's why I welcome the chance to be here today to underline that commitment from me and from government.

To underline the support, but also the ambition that we have: I think offering a significant opportunity to ensure that all our people and places can thrive at a crucial time in our country's history.

And so my message is that yes, we need to come together. We do have those opportunities that are there. I will continue to work with you to follow-through on that ambition and intent.

Because there is that responsibility to look to the future – to look to the needs of the next generation coming through and ensure that they have the sorts of opportunities that we have benefited from as a generation.

And profoundly, that means building more homes, building the right homes: fulfilling that ambition and intent.

And I know that together, that's precisely what we can come together to seize.

Thank you very much.

[News story: Government leads the way in tackling modern slavery in public procurement](#)

The event in London today (Wednesday 27 March), co-hosted with the Ethical Trading Initiative and the Organisation for Security and Cooperation in Europe, aimed at driving change in the public sector of addressing issues of modern slavery.

As part of the conference, the Home Office launched a free Modern Slavery Assessment Tool, which will be available across the UK's public sector. Developed in partnership with Ethical Trading Initiative and the technology firm NQC, it will help public sector organisations identify and address modern slavery risks in their supply chains.

The tool will provide organisations with a tailored report, based on an online questionnaire, indicating the risks of modern slavery being present in their supply chains, and providing recommendations to reduce those risks.

A new online training course on ethical procurement, developed with the Chartered Institute of Procurement & Supply (CIPS), was also launched. The course will be available to all CIPS members for free, and at a discounted rate for all civil service commercial staff.

The Cabinet Office will also shortly publish new guidance on tackling modern slavery in supply chains for commercial staff across the public sector.

In her speech, Minister for Crime, Safeguarding and Vulnerability, Victoria Atkins, highlighted the need for the UK and its international partners to harness their spending power to drive change. In the UK alone, central government spends £47 billion and the wider public-sector spends £220 billion a year. It has been estimated that there are 25 million people in forced labour globally.

The Minister added:

We all know that modern slavery, forced labour and human trafficking are not evils of the past. They are with us today and their victims are hidden in plain sight.

We are doing more to leverage UK government procurement spend and take responsibility for the conditions in our supply chains, but we need the global public and private sector to do the same if we are to succeed. The best way we can do this is to work together so we can make more of an impact.

Minister for Implementation Oliver Dowden said:

The government is determined to tackle modern slavery throughout society, so it is only right that we work with our suppliers to address any traces there may be within our own supply chains. This is a moral imperative. We must remember that people are at the heart of this work and just one victim is one too many.

That is why we will be asking our suppliers to act quickly and responsibly in identifying and tackling instances of modern slavery throughout supply chains and we're letting them know that they have our backing in tackling this serious issue.

More than 150 delegates, policy makers, procurement officials, leading UK businesses, civil society experts and key international institutions attended to share best practice and discuss common barriers to addressing modern slavery in public sector supply chains.

Cindy Berman, Head of Modern Slavery Strategy at ETI, said:

Governments have huge power and leverage. They need to show political leadership and commitment and push public sector suppliers to conduct robust human rights due diligence.

In-house expertise and appropriate procurement policies and practices are an absolute necessity,

Since the Modern Slavery Act became law in 2015 private companies of a certain size have been required to produce a statement setting out what they are doing to identify and address modern slavery in their supply chains.

The Prime Minister announced at the G20 summit that the government would be producing its own transparency statement, setting out the actions being taken across central government to address these risks.

The UK government also last year launched the Principles to Combat Human

Trafficking in Supply Chains at the UN General Assembly in partnership with the United States, Canada, Australia and New Zealand.

[Speech: Building a digitally enabled NHS](#)

Good morning. It's great to be here today.

This my second time round in this job and when I was reappointed in January it was great to see just how much momentum there is now in health data and healthtech policy.

As some of you may have noticed, our Health Secretary has made sure this is core business at the Department of Health and Social Care (DHSC).

With his [Tech Vision](#), the Health Secretary set out the road map for digital standards, interoperability and much more. The [Long Term Plan](#) filled in more details and finally we have [launched NHSX](#) – a digital transformation team worthy of the task at hand.

I have found the twittersphere's reaction to this important. The techies – predictably – love it. Their reaction can be summed up more or less in 3 words “about bloody time”. The wider public though (even some in the NHS if we're honest) too often still see investment in healthtech as a zero sum game.

On one level, this is understandable frustration born out of painful experiences we could all name.

But digital solutions today are light years on from the clunky offerings of the past that gave us the National Programme for IT, and it is time we move on from that now.

On another more fundamental level I think this attitude is contrary to the very foundations of research, development and innovation on which modern medicine is built.

Since before the establishment of the NHS in 1948 we have sought more and better ways to record, analyse, share and structure health and population data for patient benefit.

John Snow, for example, is hero to many of us. Not just exploits in Game of Thrones, but in his earlier incarnation as the father of epidemiology – a physician whose use of dot maps and statistical analysis of the link between water quality, pump locations and cholera cases in 1849 was the beginning of the end for miasma theory and literally life-saving for those at risk from

contaminated water supplies across the world.

Next year is the 200th anniversary of the birth of Florence Nightingale. Few will think of her as an early data scientist but she pioneered analysis of large amounts of statistical data, using graphs and tables, regarding the condition of thousands of patients in the Crimean War to evaluate the efficacy of hospital services. And her methods proved convincing enough to reform services in military and civilian hospitals saving countless lives.

During the US Civil War, the Sanitary Commission collected enormous amounts of statistical data and reported some very 21st century problems of storing information for fast access and analysis. So a resourceful surgeon, John Shaw Billings, built the Library of the Surgeon General's Office and figured out how to mechanically analyse medical and demographic data by turning facts into numbers and punching the numbers onto cardboard cards that could be sorted and counted by machine.

The applications were developed by his assistant Herman Hollerith who invented the punch card and counter-sorter system that dominated statistical data manipulation until the 1970s. Hollerith's company became IBM in 1911.

In other words, it has never been possible to make progress in medical research without getting health data right – the difference today is we have the tools to deliver at scale, ethical and affordable digital solutions to health data problems that these unsung heroes of medical statistics could never have dreamed of.

Now there are, of course, barriers in the NHS of which we are all aware:

1. We need a consistent understanding across the NHS, regulators, industry and the public about what good evidence for health tech looks like – a lot of work is going into this and I know you will be hearing about this later from Indra Joshi
2. We need to gain and retain public trust in health data sharing – this is why we established the [National Data Guardian](#) and put her on a statutory footing and why we will continue to work on patient engagement so that #DataSavesMoreLives
3. We need to train, challenge and win over the NHS workforce to digital from boards to wards – the NHS Digital Academy is part of this, as are Topol's Review and Dido Harding's workforce strategy, of course

A digitally enabled NHS will:

- be the cornerstone upon which sustainable, high-quality services, fit to face the challenges of another 70 years, will be built

- turbocharge our life sciences and health research ecosystem
- empower patients in a way never possible until now

Building the digitally enabled NHS

Now anyone with a digitally enabled friend or relative in their 70s will know that it is an unpredictable business. The iPhone – no problem, Netflix – bring it on. But mobile banking, perhaps – a complete mental block.

And so it is for our NHS, as it approaches its 71st birthday. We are seeing pockets of simply brilliant digital innovation but, let's be honest, some remaining pockets of reluctance.

Make no mistake, though, things are changing:

Take primary care. Research by the King's Fund, Health Foundation, Nuffield Trust and Institute for Fiscal Studies showed that well over half of all patients, no matter their age, want to access online GP services.

So in the NHS Long Term Plan, we made the commitment that in the coming years every NHS patient will be able to access digital primary care services. Through our new GP contract and the GP IT Futures Programme, we are stripping out barriers to innovation and experimentation that will allow new service models to flourish.

In acute care, we want to give patients the opportunity to access services digitally – and thus avoid the daily, weekly, or monthly trudge that many of us must make to our nearest hospital.

I want to see transformation akin to that provided in Tower Hamlets by e-clinics for those with chronic kidney disease. These e-clinics provide a single patient pathway, with rapid access to specialist advice by consultants. Since the e-clinic began in 2015, 50% of referrals are managed without the need for a hospital appointment, and the average waiting time for a renal clinic appointment has fallen from 64 days to 5.

Inspired by the Secretary of State's Tech Vision, I also want to gut the internal wiring of the NHS, and deliver real interoperability of health data and technology.

Our new unit, NHSX, which 'goes live' in 12 days, will play a vital role in driving forward this agenda, and bringing together partners from across the health and care system to radically improve the digital provision and organisation of services.

By working together to get this right, I genuinely believe it will be:

- good for quality of care
- good for efficiency of services
- and good for staff and patients

Turbocharging and life sciences and research ecosystem

But we all know that digital is also an essential driver to progress our life sciences and research ecosystem.

Everyone in this room understands the UK has unimpeachable life sciences credentials: 25 of the 100 most used medicines globally were developed here using a public and philanthropic research infrastructure, which is, pound for pound, more effective than anywhere else in the world.

But to maintain this kind of record in an ever more competitive global environment, we must fully exploit the opportunities offered by digital.

First, we must make our world-leading data assets more accessible. That is why, in collaboration with Health Data Research UK, I am driving forward the development of the Digital Innovation Hubs. Through our £37.5 million investment, we will make the NHS's data assets radically more accessible and usable by researchers and innovators.

Health Data Research UK will in May announce a final detailed specification and call for applicants to implement the regional hubs, and through the upcoming Spending Review we will look to secure additional funding to advance our work in this area.

Second, we must accelerate the development of innovative digital products. We have provided over £100 million to support the development and adoption of innovative healthcare products, including £35 million for the digital health technology catalyst.

The catalyst has already supported small and medium-sized enterprises (SMEs) to develop a huge range of innovative digital products, ranging from VR surgical training tools, through to 'gaming' technology to support the rehabilitation of patients in their own home.

Round 4 of the competition is open until 10 April, and I strongly encourage you to get SMEs to apply.

Thirdly, the generation, collection and analysis of real world data has been recognised as a major enabler for the optimal use of digital medical products in clinical practice.

The National Institute for Health Research (NIHR) i4i Programme, therefore, is a new £2 million funding stream designed to evaluate medtech innovations based on the generation of clinical evidence from their use in real world healthcare settings.

Finally, we must ensure that when effective products have been developed, there is rapid uptake. That is why we have established and empowered the Accelerated Access Collaborative, under the chairmanship of Lord Darzi.

The Accelerated Access Collaborative will work as the umbrella organisation

for UK health innovation, and serve as the front door for innovators seeking to access the health system.

It will set the strategy and priorities for a more effective innovation ecosystem: overseeing and co-ordinating funding and support for innovation, and maximising the opportunity provided by the NHS Long Term Plan funding settlement.

I am delighted that the AMRC is now represented on the board of the Accelerated Access Collaborative, and will help us to drive forward progress.

Working in partnership is central to everything we want to do on the digital and wider life sciences and research agenda – the life sciences sector deal is a leading part of the government's [Industrial Strategy](#) and I want us to be restlessly ambitious as we deliver and review and renew it.

Empowering the patient

Finally, I want to discuss the most important part of the digital innovation landscape: the patient.

The lives of patients across the country will be profoundly improved by digital technology. Whether it is:

- the NHS app helping them to keep track of their health record and interactions with the NHS
- wearable technology that helps monitor a patient's health in an ever more sophisticated way
- the Matt Hancock app, helping patients across the country in need of some light relief

But we must be very clear – we do not have a right to patients' data, or their engagement in our digital programmes and activities. We must earn this by gaining and retaining their trust.

Our responsibility as an internationally trusted health and care system is to use all the tools at our disposal to improve the quality and safety of care, including data-driven technologies, in a safe, ethical, evidenced and transparent way. For this reason, we have developed our [10 principles in a code of conduct](#) to enable the development and adoption of safe, ethical and effective data-driven health and care technologies.

The code is designed to recognise that, while data-driven health and care technologies will undoubtedly deliver huge benefits to patients, clinicians, carers, service users and the system as a whole, it is our duty to capitalise on these opportunities responsibly.

If we do not think about issues such as transparency, explicability, and bias, it is also possible that the increasing use of digital technologies within the health and care system could cause unintended consequences.

That is why the code clearly sets out the behaviours we expect from those developing, deploying and using such technologies, to ensure that all those in this chain abide by the ethical principles for digital initiatives developed by the Nuffield Council on Bioethics:

When used as part of an overarching strategy it will help to create a trusted environment that supports innovation of data-driven technologies.

To help make this easier in the research space, the Be Part of Research website will be launched in May as the new service to help patients and the public find opportunities to take part in research. It will be a 'one stop shop' to promote opportunities across the range of NIHR services (including, for example, the Bioresource, People in Research and Join Dementia Research), as well as charity and other registers and information.

It will provide links to useful health information and background to help members of the public become more research-literate. It has been designed with extensive input from patients and the public.

Join Dementia Research

And just to pull out one of those programmes to show what can be achieved when we work together, 40,000 people have now registered on Join Dementia Research.

11,000 participants have already taken part in research as a result of registering with Join Dementia Research, meaning that it is already linking people up with research and making a valuable contribution to dementia research.

The people choosing to register choose what information to share and which research opportunities they want to take up, and stay in control of managing their accounts.

It is a digital service, working through a website, supported by charity helplines.

This is a fantastic example of what we can achieve together – a collaboration between research charities (including AMRC members Alzheimer's Research UK and Alzheimer's Society as well as Alzheimer Scotland), NIHR and DHSC, researchers, and people living with a condition, their carers and others who simply want to help drive dementia research forward.

This is what we want to see in every area of research. It will only become a reality, however, if we work together to make it happen. With your support we can show patients and the public that if we follow the rules, we deserve their trust and engagement in our health data and healthtech work.

Conclusion

Realising this vision – a fully digitised NHS – is a challenge I know.

But John Snow and Florence Nightingale and John Shaw Billings all faced technical, social and structural barriers to the reforms that they introduced. But they did not let that stop them. Why? Because lives depended on it.

The same is true of us today. We must get this right because #DataSavesMoreLives.

I also know that no health system in the world is more equipped to respond to these challenges.

And I know that because of all of you and the work you have already done.

Today I have referred to a few examples of success we are having in transforming health data and healthtech in the NHS but you will all know of many more examples of outstanding practice from across the country. Clinicians, industry, researchers, charities and government working together to improve patient care, patient safety and NHS services.

To all of you leaders in digital health here today – I want to offer my personal thanks.

I look forward to working with you.

I look forward to working with the AMRC – not only to ensure we keep building trust but also to ensure that data saves more lives.