News story: £86 million funding announced for new medicine and technology

The government has announced new funding of up to £86 million for UK firms to develop medical breakthroughs.

The package will allow small and medium sized enterprises (SMEs) to develop and test new technologies in the NHS. This could include innovations such as digital technologies to help patients manage their conditions from home instead of a hospital, or to develop new medicines.

Access to this funding will also speed up the time it takes to get new technologies from the lab to patients in the NHS.

The announcement is the first step in taking forward the Accelerated Access Review (AAR) — an independently chaired review, which made recommendations to government on speeding up patient access to new technologies.

Technologies that have previously received support are already bringing benefits to patients. For example, MyCOPD is an online system that helps people with Chronic Obstructive Pulmonary Disease (COPD) better manage their condition. It has helped over 32,000 patients by helping them improve their breathing, manage flare-ups and track medicine use. This reduces reliance on GP and hospital appointments.

Health Minister Lord O'Shaughnessy said:

The government's ambition is that NHS patients get world-leading, life-changing treatments as fast as possible.

That can't happen unless we support medical innovation and tear down the barriers — like speed to market and access to funding — that can get in the way, especially for SMEs.

Our investment in innovation shows how much we value the UK life sciences sector.

The funding is split into 4 packages. These include:

- £39 million of funding to the Academic Health Science Networks (ASHNs), enabling them to assess the benefits of new technologies and support NHS uptake of those that deliver real benefits to patients according to the local need
- £35 million Digital Health Technology Catalyst for innovators this will match-fund the development of digital technologies for use by patients and the NHS

- up to £6 million over the next 3 years to help SMEs with innovative medicines and devices get the evidence they need by testing in the real world, building on existing opportunities such as the Early Access to Medicine Scheme (EAMS)
- £6 million Pathway Transformation Fund, which will help NHS organisations integrate new technologies into everyday practices this will help overcome more practical obstacles such as training staff on how to use new equipment

Business Minister Lord Prior said:

The government has an important role to play in driving innovation that will increase economic growth and support businesses across the country. Through this funding we will quicken the pace of scientific discovery and innovation in the UK. Our Industrial Strategy will boost our status a global hub for life sciences.

Association of British Healthcare Industries (ABHI) CEO Peter Ellingworth said:

ABHI welcomes the announcement as a further commitment to supporting the UK medical technology sector. These additional funding initiatives will complement work already in place on Innovation Tariff, NICE processes and horizon scanning as part of the overall Accelerated Access Review. The measures could significantly enhance the UK as a destination of choice for MedTech companies, in turn, benefiting patients, the health system and the wider economy.

Ben Moody, Head of Health and Social Care at techUK, said:

The UK is a world leader in health tech but we must not be complacent. The Digital Health Technology Catalyst will be a great boost for innovators in the sector.

The announcement also recognises that the resources needed to generate evidence to show that a technology is worth reimbursing can be prohibitively difficult for SMEs — so the fund to support evidence generation for innovative devices is particularly welcome.

British In Vitro Diagnostics Association (BIVDA) Chief Executive, Doris-Ann Williams MBE, said:

BIVDA very much welcomes the government's announcement about funding towards practical support for the introduction of new medical technologies into the NHS. It is a constant source of frustration that implementation of new tests takes years to achieve. It means that not only are people not benefiting from improved diagnosis and disease management but also that the NHS is losing the chance to gain cost efficiencies along clinical pathways.

We would like to congratulate the Department of Health and the Department for Business, Energy and Industrial Strategy on pulling together these funding streams ahead of the Industrial Strategy to show practical support of their intent to foster healthy and vibrant Life Sciences industries in the UK.

Press release: Lord Chief Justice appointment: Rt Hon Sir Ian Burnett

Her Majesty The Queen has been pleased to approve the appointment of The Rt Hon Sir Ian Burnett as the Lord Chief Justice of England and Wales from 2 October 2017.

This appointment follows the retirement of The Rt Hon The Lord Thomas of Cwmgiedd on 1 October 2017.

Further information

Sir Ian Burnett was born on 28 February 1958. He was called to the Bar (Middle Temple) in 1980, becoming a Bencher in 2001. He was in practice as a barrister, Temple Garden Chambers, from 1982-2008 (Head of Chambers from 2003-2008). He was Junior Counsel to the Crown, Common Law, 1992-1998 and became Queen's Counsel in 1998. He was appointed Assistant Recorder, 1998-2000; Recorder, 2000-2008; a Deputy High Court Judge, 2008; Deputy Chamber, Security Vetting Appeals Panel, 2009. He was appointed Judge of the High Court, Queen's Bench Division, in 2008 and was Presiding Judge on the Western Circuit from 2011-2014. He was appointed to the Court of Appeal on 6 October 2014. He was Vice-Chairman of the Judicial Appointments Commission from 2015-2017.

The appointment

The appointment of the Lord Chief Justice is made by Her Majesty The Queen on the advice of the Prime Minister and the Lord Chancellor following the recommendation of an independent selection panel chaired by Lord Kakkar, Chairman of the Judicial Appointments Commission. The other panel members were: Lord Neuberger, President of the Supreme Court, Sir Adrian Fulford, Investigatory Powers Commissioner, Dame Valerie Strachan (DCBE), lay member of the JAC and Professor Noel Lloyd (CBE), lay member of the JAC. This

selection exercise was run under the relevant sections of the Constitutional Reform Act 2005 as amended by the Crime and Courts Act 2013.

In accordance with section 70 of the Constitutional Reform Act 2005, as amended by the Crime and Courts Act 2013, the panel determined the selection process to be followed and consulted the Lord Chancellor and the First Minister of Wales on the process followed.

In accordance with s.10(3) of the Senior Courts Act 1981 c.54, the selection exercise was open to all applicants who satisfied the judicial-appointment eligibility condition on a 7-year basis, or were judges of the Supreme Court, Court of Appeal, or High Court.

Given the need to deliver significant Court reforms and to steer the judiciary through our exit from the EU, candidates were expected to be able to serve for at least 4 years.

<u>Speech: Matt Hancock's speech to the</u> Leverhulme Centre

It's an enormous pleasure to be invited to speak to the Leverhulme centre about trust and policy in an age of intelligent machines.

A pleasure, yes, and also daunting. After all, the centre exists so you can spend your time thinking of the future of intelligence. I'm sure that starting with a politician isn't the best place to start. At least it means that the only way is up.

I'm glad that you've linked trust and policy in the title.

Because our starting point should be to ask why trust matters in public policy overall.

And the truth is this:

Without trust, public policy is incredibly difficult. At one level, any progressive politician, particularly of the centre right, believes that our task is to unleash the potential of all citizens: to remove barriers where we find them, and to empower and help citizens to make the most of their lives. So the entire mission and purpose of government is founded on a profound trust of people's capability, so a free society is a better society. Trust the people!

This freedom of course has boundaries, to prevent harms, and we must trust that society, through legitimate democratic systems, can find that balance to protect people, and protect our freedom. I will return to this later.

And trust matters on a much more direct, practical level too.

It's hard to see how citizens will back innovation in the public or the private sectors, and won't be prepared to take decisions that enhance the collective good without high levels of trust in others, and especially in those making decisions about them, whether businesses, or public services, or elected officials.

So innovation and progress depend on trust. Good policy improves trust, and trust in turn improves policy.

So far, so ageless.

The next question I want to ask is, how does, and how will, artificial intelligence change this?

I want to ask, how do we best ensure advanced digital technology enhances, rather than undermines, trust, and how can we generate the trust needed to harness advanced digital technology?

In part thanks to technology, we are living in an age of scepticism, in which sources of authority are challenged in a way unprecedented. Rational scepticism is the basis of scientific progress; so how do we harness scepticism to generate, not undermine, trust in a wider sense?

And then I want to ask an even more prosaic question: what role can and should government play to make it happen?

I am glad that these questions are being asked explicitly, now.

As a society, sometimes technology moves ahead of the rules and norms we have — the framework — in which the technology operates. This is particularly true — and particularly tricky — with a general purpose technology like AI, which has the potential to disrupt so many areas.

Like Lord Leverhulme himself, I believe we need to come at the question from a point of optimism about technology.

The prospects of this technology are simply enormous and we all know that the UK is already a word leader. So I look forward to reading the findings of Professor Dame Wendy Hall and Jermoe Pesenti's AI review, which we commissioned to help make sure the UK remains at the cutting edge.

But we mustn't allow optimism to become panglossian.

Digital technology is incredibly powerful, and with great power comes great responsibility.

Just because you could doesn't mean you should.

So we need to do the work now to build the framework, of ethics, norms, rules and regulations, in which digital technology can thrive and innovate safely. Where we balance freedom and that responsibility.

Fortunately, this need to develop freedom in a framework that prevents harm is not new. We've been doing it offline for generations. And we can look to the rich seam of political philosophy to guide us.

Perhaps Burke put it best when he said this:

"of all the loose terms in the world, liberty is the most indefinite. It is not solitary, unconnected, individual, selfish liberty, as if every man was to regulate the whole of his conduct by his own will. The liberty I mean is social freedom. It is that state of things in which liberty is secured by the equality of restraint. A constitution of things in which the liberty of no one man, and no body of men, and no number of men, can find means to trespass on the liberty of any person, or any description of persons, in the society. This kind of liberty is, indeed, but another name for justice; ascertained by wise laws, and secured by well-constructed institutions."

I submit that, online, it is Burke's liberty is what we seek.

Trust has to be part of how AI can develop to benefit society and the economy now, not an afterthought.

Why is this important?

Senior decision-makers will not let their organisations' data be used for AI if they don't believe the data will be used securely, and if they don't believe AI can help them to deliver better.

Employees will not work well with AI-driven functions if they don't trust that those work better than what they have.

Consumers and citizens won't accept widespread use of AI if they don't see questions of trust properly addressed.

And they will not be enthusiastic if no one explains the benefits.

So this is the right time to raise the questions, and find out where trust needs to be built, and how to build it.

So the next question is, what is the role for Government?

Because digital technology is changing so many aspects of our lives, there is no one simple solution to this challenge.

We are agreed, I think, on some principles.

An important legal one: that what's legal offline, is legal online.

Next, that freedom is precious, but not the freedom to do harm.

That our drive for protection must not undermine the enormous innovative power of technology to improve people's lives.

And that transparency matters, and even when uncomfortable, doesn't just improve trust, but improves outcomes too.

Given these broad principles, I want to talk about three crucial areas where governments can help drive trust in an age of intelligent machines.

First, a solid legal framework

In the UK, we benefit from a good starting point of a strong consensus behind the laws over the digital world, underpinned by the Data Protection Act, overseen by our independent Information Commissioner, who gave a thoughtful and important speech on this topic last week.

We will strengthen that with a new Data Protection Bill in this Parliamentary Session, which will bring the laws up to date for the modern age, introduce new safeguards for citizens, stronger penalties for infringement, and important new features like the right to be forgotten. It will bring the EU's GDPR and Law Enforcement Directive into UK law, ensuring we are prepared for Brexit.

This sort of strong, effective regulatory regime is vital. It must balance strong privacy protections with the need to allow innovation, and I think the ICO's proposal of a data regulatory "sandbox" approach is very impressive and forward looking. It works in financial regulation and I look forward to seeing it in action here.

But the legal framework is not enough.

Second, we need to look ahead and understand future challenges on the horizon, before they are subject to the law and regulators.

Our Digital Strategy sets out our overall plan, including on skills, infrastructure and cyber security.

And we need to identify and understand the ethical and governance challenges posed by uses of data, now and into the future, where they go beyond current regulation, and then determine how best to identify appropriate rules of the game, establish new norms, and where necessary regulations.

Let's take an example.

Unfair discrimination will still be unfair. Using AI to make some decisions may make those decisions more difficult to unpack. But it won't make fairness less important.

And this is not all about risks: some applications of AI could make it easier to detect unfair biases, including biases in the institutions and processes that we already use to make decisions affecting people.

In terms of governance, it's likely that we will need overarching principles, broadly across different uses of AI in different sectors.

However, that may only get us so far. AI is also likely to generate specific challenges, and need specific answers in different sectors. We have different concerns and different tolerances about fairness in, for instance, retail, finance, and personalised medicine.

We don't yet know how much we will be able to rely on general issues in AI and automation, and how much will be more specific to application areas.

We may find that the solution to many challenges created by application of AI in particular sectors is to make sure that application of the existing sector rules can keep up, with the right tools, rather than that we need completely new rules for AI.

We already have expertise in sector regulators. They may need to develop new skills to look at AI-related cases in their sectors, if the major businesses in their sectors use new data technologies, which many will.

I'm delighted that the Royal Society and the British Academy have done such excellent work, setting out the challenges we face, and proposing a new body or institute that can take a view, talk to the public and provide leadership. It's a very interesting idea similar to that we proposed in the manifesto, and we are considering it carefully.

But it can't all be done for people.

So third, we will need senior decision-makers in business and the public sector to be able to understand and talk about the implications of AI, and represent their use of it to the public, to customers, to employees, and to shareholders, if they are going to use it confidently and effectively. And be trusted to use it.

We will need to encourage individual businesses and organisations across sectors to do more themselves to be responsible and transparent in the ways they are using data, and to understand and manage the risks posed by it as they would any other significant corporate risk.

Businesses are now realising that cyber security is not a niche issue for the IT department, but a boardroom issue for core management.

So too, increasingly for AI.

Business will need clear and transparent governance, accountability and quality assurance around the algorithms they use and processes for understanding and managing risk.

The UK will not grow full AI capability and broad application across sectors, if trust is not built and maintained.

These are not by any means all of the issues we must confront.

Our Digital Charter represents a broad array of changes we seek to bring to harness digital technology for good. We need to work with businesses and build consensus around shared understanding of how technology should be used, and how we act online — balancing freedom and security.

This is what will be set out in a Digital Charter, which will help citizens and businesses understand their freedom and responsibility, allow them to interact safely and securely, promote fairer ways to do business and ethical

use of data and technology, and protect intellectual property and value online. Crucially, we can't do this alone.

The issue of who in society is able to earn and build trust, and how they do so, is increasingly complex. Politicians, policy makers and Parliament have a key role to play, but in reality we're not always the only or best placed to earn trust.

So thats a question I want to leave you with today

What do we know now about what drives or harms public trust in the digital age?

Who or what is best placed to take citizens with them on this journey, and how best can governments partner with and enable that to happen?

By strengthening public confidence, and giving greater clarity to business, this will support — and must be done alongside — measures to help the tech industry to flourish, strengthening the UK's position as one of the world's leading digital economies.

This is our goal: to be a world leader, in allowing innovation within a framework of development that doesn't just provide safety but requires it, and doesn't just allow innovation but nourishes it.

We seek to be the best place in the world to start and grow a digital business and we want the UK to be the safest place to be online.

These two are not in contradiction, but complementary, and I think the prize for the society that answers these questions is to be the best place to seize the enormous opportunities for the benefit of citizens of this amazing, powerful, new technology.

News story: Royal Navy and Royal Marines train alongside partner naval forces

Around 60 Royal Navy and Royal Marines personnel exercised with their counterparts from other countries during the five-month annual French naval deployment to the Indian Ocean and Far East, including the first ever four-part maritime exercise involving France, Japan, the UK and US.

The two-staged exercise named Forager Deux and Arc 17 took place in the sea and in the skies near to Japan, Guam, and Tinian, with the purpose of enhancing joint operating between the UK and international partners and deepening Defence cooperation.

In addition to UK maritime personnel, the exercise also included two Royal Navy Merlin Mk3 helicopters from the UK's Commando Helicopter Force, which as part of a week-long practice assault moved 330 French, Japanese and American troops to and from Tinian.

UK forces have been on board French assault ship FS Mistral since March as part of the Jeanne d'Arc 2017 French task group, which has visited Singapore, Sri Lanka, Japan, Guam, Australia and Vietnam.

Minister of State for the Armed Forces Mark Lancaster said:

Working shoulder-to-shoulder with French forces, as well as personnel from other partners' navies, shows the flexibility of our world class Armed Forces.

The Royal Navy and Royal Marines play an important role carrying out Britain's commitment to international maritime security, as well as protecting our own shores.

Several instalments of training and Defence Engagement have taken place as part of this deployment.

This week, UK personnel worked alongside French and Egyptian armed forces when the Jeanne D'Arc task group arrived in Egypt to take part in Exercise Cleopatra. The cross-decking exercise, which saw UK Merlins land on the Egyptian warship ENS Nasser, was the latest in a series of multilateral amphibious exercises that the UK has taken part in throughout the five month deployment.

News story: Technology solutions for gestational diabetes: apply for funding

The <u>Department of Health</u> and <u>Department for Economy</u> in Northern Ireland are to invest in new technology solutions that improve the health of women with gestational diabetes.

Funding of up to £60,000 per project is available for the development of technologies that can:

- enable diabetic pregnant women to take better control of their health
- increase the effectiveness of interventions

- reduce pressure on health care services, (maternity, neonatal and endocrinology services)
- support an ongoing care programme
- improve the lives, well-being and outcomes for maternal and infant health
- enable women to lead as normal a life as possible
- reduce the need for travel to specialist clinics

This is a <u>Small Business Research Initiative</u> (SBRI) competition. It's part of the GEMS project — 'gestational, type 1 and type 2 diabetes empowering mothers through mobile technologies'.

- this competition is open now
- the application deadline is 3pm on 25 August 2017
- SBRI is open to any type of organisation
- successful projects will attract 100% funded development contracts
- phase 1 contracts are worth up to £60,000 and last up to 6 months
- if phase 1 testing is successful, organisations may be able to bid for phase 2 to develop and test their prototypes