

# New UK-wide ambitions to accelerate genomic research and drive innovation in healthcare

- New 'Shared Commitments' set out priority actions for genomics initiatives across the UK
  - Cancer diagnosis, earlier detection of diseases and patient access to clinical trials will improve
  - Plans will advance government's priorities to reform healthcare and make the UK a scientific superpower
- Patients across the UK are set to benefit from faster cancer diagnosis and innovative new treatments thanks to a ground-breaking agreement with the nation's devolved governments.

The UK government, Welsh and Scottish Governments and Northern Ireland Assembly have today (Friday 18 March) agreed a series of commitments to improve outcomes for patients through better genomic testing and access to clinical trials.

The new Shared Commitments for the first time set out priority actions across the UK and are part of wider plans to improve healthcare through genomics – the study of genes and DNA

The Genome UK strategy announced in 2020 builds on innovative work already underway to create the most advanced genomic healthcare system in the world and deliver better healthcare at a lower cost, and forms part of the government's wider commitment to reform healthcare and ensure the UK and the NHS remain at the forefront of cutting-edge treatment. For example, using research to evaluate the use of whole genome sequencing in newborns to screen for rare genetic conditions and diagnose rare diseases earlier, enabling more tailored treatment sooner.

Secretary of State for Health and Social Care Sajid Javid said: > > The pandemic has highlighted the importance of our booming UK life sciences sector and the potential it has to transform health and care services. > > By harnessing the power and innovation of genomic research, we can reduce diagnosis times and use cutting-edge treatments for some of the biggest health challenges we face, including cancer. > > By coming together and agreeing these new shared commitments, we will ensure patients across all four nations of the UK can benefit from these pioneering advancements and cement our place as a world leader in research and genomics.

Genome UK: Shared commitments for UK wide implementation 2022-2025 include working together to:

- Improve cancer diagnosis and treatment by working across the UK to better integrate genomic testing into healthcare and increase access to clinical trials to provide better, personalised treatment.

- Better early detection of disease by establishing a clear, evidence-based approach to Newborn Genome Sequencing, led by Genomics England in partnership with the NHS, alongside the devolved governments, to ensure learning is shared across the UK to benefit newborns and their parents nationwide.
- Build on the successful UK-wide partnership in sequencing of COVID-19 to strengthen collaboration on sequencing of other diseases. As part of this, the UK Health Security Agency will set up a national group on disease genomics with representatives from the four nations.
- Encourage innovative and cutting-edge industry partnerships in research and development across the UK to support implementation of Genome UK by bringing together the UK-wide genomics ecosystem to improve collaboration and maximise investment.
- Produce high-quality research by bringing together genomic data sets across the UK and increasing access to clinical trials as well as ensuring research feeds back into the NHS to improve patient care.

Building on the collaborative and innovative ways of working during the COVID-19 pandemic, these commitments aim to build on scientific successes, tackling future disease challenges and ensure patients can access more tailored treatment.

Minister for Innovation Lord Kamall said:

Clinical research has been vital in our fight against COVID-19 and the UK's innovation is enabling us to transform our health service and ensure it is firmly at the cutting edge of healthcare.

We're continuing to build on our game-changing genomic advances to better detect new diseases and faster diagnose and treat cancer, which will ultimately save lives.

These new shared commitments show a united vision across the nations to ensure we continue to build on the UK's world-leading genomic capabilities and remain at the forefront of genomic healthcare and research.

The commitments will also help cement the UK's position as the leading global hub for life sciences.

Bringing the joint ambition and skills in this field together will help transform the use of genomics in healthcare and place the UK firmly at the forefront of developments in advancements in genomics, as well as demonstrating the UK is a valued partner for international collaboration and an attractive location for investment.

Cabinet Secretary for Health Humza Yousaf said:

There has never been a time when genomics and the benefits it can bring to help revolutionise the way we provide health care has been

more focal.

The past two years showed us just a fraction of what can be achieved in this field and I am pleased that these shared commitments bring together our joint ambitions to deliver genomics healthcare.

Health Minister for Wales Eluned Morgan said:

The UK is at the forefront of the genomics revolution and it is absolutely right that we should be working with other governments across the UK to deliver on our joint vision. We are already working on our own genomics delivery plan through Genomics Partnership Wales, but it makes sense for us to share our expertise and research in order to ensure the best possible outcomes for patients across Wales and the rest of the UK.

Health Minister for Northern Ireland, Robin Swann:

I am pleased today to jointly publish the Genome UK: Shared Commitments with the Health Ministers for Scotland and Wales and the Minister for Technology, Innovation and Life Sciences in England.

These commitments will ensure that all patients across the UK can benefit from the wide range of opportunities offered by genomic healthcare so that the UK remains at the forefront of genomic research in the world.

The future of genomics in Northern Ireland has the potential to be very exciting and far-reaching in its ability to benefit patients and families here, however it is imperative that we lay the proper foundations for the service to develop and thrive. Publication of these Shared Commitments today is the first step, and establishment of a DoH-led Genomics Partnership for NI will allow us to keep step with our UK counterparts and ensure future progress in this exciting field, for the health, wealth and prosperity of the NI population.

Jennifer Harris, ABPI Director of Research Policy said:

Genomics is already transforming lives, helping our scientists create new generations of treatments for many conditions.

To ensure patients can benefit from these new breakthroughs, a coordinated effort across the UK is needed – which these plans demonstrate.

Today's announcement is welcome, and we look forward to further collaboration between the government, the pharmaceutical industry and the research sector to harness the UK's world-class genomics capability.

David Atkins, UK BioIndustry Association representative on the National Genomics Board, said:

SMEs are a vital part of the UK's existing strength in genomics. Fostering the right environment and developing a workforce for these companies is key to achieving the ambition of Genome UK.

The commitments set out in this plan, including enabling industry access to clinical assets, expertise and partnerships are an important step in realising the vision of making the UK the best place to start and scale new genomics companies.

The UK Bioindustry Association welcomes these shared commitments and is looking forward to working with the UK government and devolved governments on the next phase of Genome UK implementation.

Nick Meade, Joint Interim Chief Executive at Genetic Alliance UK, said:

We very much welcome these Shared Commitments. As the largest alliance of organisations supporting people with genetic, rare and undiagnosed conditions in the UK, we wholeheartedly support more coordinated implementation action to progress the vision of Genome UK. We hope that collaboration between devolved administrations will realise the potential of genomic healthcare for the benefit of patients across the UK. We are delighted to see the UK wide-commitments on patient and public engagement and look forward to engaging with the UK and devolved governments on their implementation plans.

## Background

- The Shared Commitments build on the vision outlined in Genome UK in September 2020 and the commitments in the first implementation plan for 2021-2022 in May 2021.
- They will be followed by more detailed implementation plans from each country by the end of 2022.
- The landmark Genome UK vision can be found [here](#)
- The first implementation plan from 2021-2022 can be found [here](#)