<u>Cash boost to get more kids cycling</u> <u>and walking to school</u>

- £2 million announced to help more children to cycle or walk as part of their commute to the classroom
- in-school cycle repair scheme to ensure children's bikes are fit for the road
- comes during Bike to School Week as students and families are encouraged to cycle on the school run

Schools across England are set to benefit from new funding to get more children riding their bike or walking to school, Cycling Minister Chris Heaton-Harris has announced today (28 September 2020), as Bike to School Week gears up across the country.

A new million-pound programme will see cycle repair workshops set up in primary schools and local neighbourhoods to make sure students' bikes are fit for the road.

'Doctor Bike' clinics will be rolled out next month, targeting areas where children, including those with disabilities, are more likely to need support in getting their bikes roadworthy for regular use on the school run.

Being physically active, such as cycling or walking to school, cuts the risk of developing health issues and helps kids to be more alert and ready to learn — positively impacting their health and wellbeing.

A further £1 million has also been announced to boost the number of children walking to school. The Walk to School Outreach Programme — which has already generated 4 million new walking trips — is being extended to roll out further measures to support walking.

This includes tackling the barriers that may prevent children and their families choosing to walk to and from school, as well as providing schools with classroom materials and access to local coordinators who can help schools get new walking initiatives up and running.

Cycling and Walking Minister Chris Heaton-Harris said:

Cycling and walking is good for people and the planet's health, so we want half of all journeys to be cycled or walked by 2030. To do that, we must encourage young people to see cycling and walking as as normal as getting the bus or train.

This funding will support schools and local communities to get more children walking to school, and set up bike surgeries that will help children get their bikes ready to roll, so they can start their day healthy and happy!

We're delighted to be able to run Bike to School Week again this year, after what has been a time of great uncertainty for all families across the country.

Our new research shows that the majority of UK parents support changes that have already been made to the streets and places in their local area to make walking and cycling to school easier. It has also identified that interventions, such as cycle routes separated from road traffic, safer junctions and cycling training would help families travel actively to school more.

It's fantastic that the UK government is recognising the role walking and cycling projects can play in helping families travel in a way that is good for their health and for the environment.

Today's funding comes during Bike to School Week (28 September to 2 October) and ahead of Walk to School Week (5 October to 9 October).

The funding is part of a wider plan to create safer streets for cycling and walking, following the launch of the most ambitious plans yet, backed by £2 billion in government investment, to encourage even more people to choose active travel.

Bikeability training has also recently restarted in schools across England, helping children gain confidence and boost their cycling skills.

NHS COVID-19 app has been downloaded over 10 million times

- 1.5 million venue check-ins on Saturday with the new app receiving positive reviews
- Businesses embrace the new app with 460,000 QR code posters downloaded and printed

People in England and Wales have given an overwhelming response to calls for them to download the new NHS COVID-19 app, with over 10 million people downloading it so far, 6 million of whom did so on its first day (Thursday 24 September).

The app forms a central part of the NHS Test and Trace service in England and the NHS Wales Test, Trace, Protect programme — identifying contacts of those who have tested positive for coronavirus.

On Sunday 27 September at 12pm, there had been over 10 million downloads across compatible Google and Apple devices in England and Wales.

In addition, the app has received a warm reception from those downloading it with reviewers on the Apple app store giving it a 4.5 star review (out of 5) and the Google Play Store giving it 4.1 stars (out of 5).

Health and Social Care Secretary Matt Hancock said:

The enthusiastic response of over 10m people downloading the app in just three days has been absolutely fantastic.

This is a strong start but we want even more people and businesses getting behind the app because the more of us who download it the more effective it will be.

If you haven't downloaded it yet I recommend you join the growing numbers who have, to protect yourself and your loved ones

The app has already been put to use over the weekend with more than 1.5 million venue check-ins recorded on Saturday 26 September. More than 460,000 businesses have embraced the new app by downloading and printing QR code posters that can be scanned by the app to check-in to premises.

The QR codes are an important way for NHS Test and Trace in England and NHS Test, Trace, Protect in Wales to contact multiple people if coronavirus outbreaks are identified in venues.

Businesses are expected to make sure their customers are aware of the rules around QR codes by displaying posters and speaking to customers directly or record and maintain contact details logs for customers, visitors and staff.

Dido Harding, Executive Chair of England's NHS Test and Trace Programme, said:

The level of support for the NHS COVID-19 app is yet another example of how the public and businesses across England and Wales are pulling together to tackle coronavirus.

The integration of contact tracing and venue check-in is a key feature of the NHS COVID-19 app, giving us a easy and straightforward way for us all to help protect one another. I urge any businesses yet to print and display the posts to join this effort and download them now.

A major campaign encouraging downloads of the app launched over the weekend with a new advertisements launching on primetime TV, radio, and billboards across the length and breadth of England and Wales, featuring the strapline 'Protect your loved ones. Get the app.'

Simon Thompson, Managing Director of the NHS COVID-19 App, said:

With 1.5 million venue check-ins recorded on Saturday, the public have already put the NHS COVID-19 app to great use.

Everyone who downloads the app will be helping to protect themselves and their loved ones and I really encourage everyone who can to get it.

The more people who use it, the better it works.

The app launched on Thursday 24 September after positive trials and rigorous testing and is an important new tool to work alongside traditional contact tracing to help reduce the spread of the virus. It is available to those aged 16 and over in multiple languages.

The contact tracing element of the app works by using low-energy Bluetooth to log the amount of time you spend near other app users, and the distance between you, so it can alert you if someone you have been close to later tests positive for COVID-19 — even if you don't know each other.

The app will advise you to self-isolate if you have been in close contact with a confirmed case. It will also enable you to check symptoms, book a free test if needed and get your test results.

Everyone who receives a positive test result can now log their result on the app. If you get a test in a NHS hospital, through a PHE lab — which carry out tests for NHS hospitals — or in a surveillance study, you can request a code from NHS Test and Trace to log a positive result.

The app has been designed with user privacy in mind, so it tracks the virus, not people and uses the latest in data security technology to protect privacy. The system generates a random ID for an individual's device, which can be exchanged between devices via Bluetooth (not GPS). These unique random IDs regenerate frequently to add an extra layer of security and preserve anonymity.

The app does not hold personal information such as your name, address or date of birth, and only requires the first half of your postcode to ensure local outbreaks can be managed. No personal data is shared with the government or the NHS.

Background information

- A press pack is available to download containing images which will be used as part of the marketing campaign.
- Information on the NHS COVID-19 app
- App explainer video
- App privacy video

- Potential users is based on the population of over 16s in England and Wales who have a compatible phone.
- As well as contact tracing, the app has a range of additional, enhanced features that will help to reduce personal and public risk from COVID-19 as part of the wider testing and contact tracing service:
 - alert: letting users know the level of coronavirus risk in their postcode district
 - QR check-in: enabling users to check-in at a venue and alerting them if they have recently visited somewhere they may have come into contact with someone who later tests positive for COVID-19
 - symptoms: allowing users to check if they have coronavirus symptoms and see if they need to order a free test
 - test: helping users book a free test through the app and get results to know whether they have COVID-19 isolate: if a user is told to self-isolate, a timer feature will help count down that period and access will be provided to relevant advice
 - isolate: if a user is told to self-isolate, a timer feature will help count down that period and access will be provided to relevant advice
- Designated venues now have a legal requirement to maintain records of customer contact details and display an official NHS QR code poster ahead of the rollout of the NHS COVID-19 app.
- The regulations will be enforced by Local Authorities, who will have the power to issue fines of up to £1,000 for venues that are failing to comply, or the police as a last resort. Fines will rise to up to £4,000 for repeat offenders.
- Businesses are expected to make sure their customers are aware of the rules around QR codes by displaying posters and speaking to customers directly.

COVID-19 Honours

Doctors, nurses, fundraisers and volunteers who have made outstanding contributions to the UK's coronavirus response will be recognised in the 2020 Queen's Birthday Honours list on Saturday 10 October.

The list, which was due to be published in June, was postponed in order to consider nominations for people playing crucial roles during the first months of the COVID-19 effort.

Now, following approval from Her Majesty the Queen, hundreds of additional people will be honoured for their contributions tackling the virus on the frontline and in their communities. They will appear alongside recipients that were already due to be recognised for a broad range of achievements before the pandemic.

Prime Minister Boris Johnson said:

As we all redouble our efforts to control the virus, protect the NHS and save lives this Winter, I am pleased we have an opportunity to recognise those who have given so much to this country already.

The coronavirus pandemic is the greatest health challenge in our lifetime. We all have to play our part, but the dedication, courage and compassion seen from these recipients, be it responding on the frontline or out in their communities providing support to the most vulnerable, is an inspiration to us all.

We owe them a debt of gratitude and the 2020 Queen's Birthday honours will be the first of many occasions where we can thank them as a nation.

This year's bumper list follows the Prime Minister's call in May for nominations for those going over and above in response to the pandemic.

As the first list to incorporate COVID-19 nominations during the ongoing pandemic, the 2020 Queen's Birthday list has prioritised frontline and community heroes. These recipients, like Captain Sir Tom Moore, are outstanding examples of the contributions which still being made right across the UK, and are symbolic of the ongoing, collective national effort.

The honours system is just one of the ways in which tribute will be paid to people across the country for their efforts in response to COVID-19.

<u>Prime Minister's speech to UN General</u> <u>Assembly: 26 September 2020</u>

Never in the history of our species — not since the almighty felled the tower of babel — has the human race been so obsessed with one single topic of conversation. We have been following the same debates, researching the potential of the same drugs, and time and again we have been typing the same word into our search engines. COVID-19, coronavirus, has united humanity as never before.

And yet the crisis has also been an extraordinary force for division. We have all been up against the same enemy. The same tiny opponent threatening everyone in much the same way, but members of the UN have still waged 193 separate campaigns, as if every country somehow contains a different species of human being. Across the world there has been an infinite variety of curfews and restrictions and closures, and we have fought in a spirit of sauve qui peut.

And the pace has been so urgent and the pressures so intense that each

national government — democracy or otherwise — has decided entirely understandably to put the interests of its domestic population first. We have seen borders spring up between friends and allies, sometimes without consultation. We have seen the disruption of global supply chains with cheque book wars on airport tarmacs as nation has vied with nation for a supply of PPE.

And after nine months of fighting COVID-19, the very notion of the international community looks, frankly, pretty tattered. And we know that we simply can't continue in this way. Unless we get our act together. Unless we unite and turn our fire against our common foe, we know that everyone will lose. The inevitable outcome would be to prolong this calamity and increase the risk of another.

Now is the time — therefore, here at what I devoutly hope will be the first and last ever Zoom UNGA — for humanity to reach across borders and repair these ugly rifts. Let's heal the world — literally and metaphorically. And let's begin with the truth, because as someone once said, the truth shall set you free.

And with nearly a million people dead, with colossal economic suffering already inflicted and more to come, there is a moral imperative for humanity to be honest and to reach a joint understanding of how the pandemic began, and how it was able to spread — Not because I want to blame any country or government, or to score points. I simply believe — as a former COVID patient — that we all have a right to know, so that we can collectively do our best to prevent a recurrence.

And so the UK supports the efforts of the World Health Organisation and of my friend, Tedros, to explore the aetiology of the disease, because however great the need for reform, the WHO, the World Health Organization, is still the one body that marshals humanity against the legions of disease. That is why we in the UK — global Britain — are one of the biggest global funders of that organisation, contributing £340 million over the next four years, that's an increase of 30 percent.

And as we now send our medical detectives to interview the witnesses and the suspects — bats, the pangolins, whoever — we should have enough humility to acknowledge that alarm bells were ringing before this calamity struck.

In the last 20 years, there have been eight outbreaks of a lethal virus, any of which could have escalated into a pandemic. Bill Gates sounded the alert in 2015, five years ago he gave that amazing prediction — almost every word of which has come true — and we responded as if to a persistent Microsoft error message by clicking "ok" and carrying on.

Humanity was caught napping. We have been scrabbling to catch up, and with agonising slowness we are making progress.

Epidemiologists at Oxford University identified the first treatment for COVID-19. They did trials with our national health service and found that a cheap medicine called dexamethasone reduces the risk of death by over a third

for patients on ventilators. The UK immediately shared this discovery with the world, so that as many as 1.4 million lives could be saved in the next six months by this one, single advance.

And as I speak there are 100 potential vaccines that are trying to clear the hurdles of safety and efficacy, as if in a giant global steeplechase. We don't know which may be successful. We do not know if any of them will be successful.

The Oxford vaccine is now in stage 3 of clinical trials, and in case of success AstraZeneca has already begun to manufacture millions of doses, in readiness for rapid distribution, and they have reached agreement with the Serum Institute of India to supply one billion doses to low and middle-income countries.

But it would be futile to treat the quest for a vaccine as a contest for narrow national advantage and immoral to seek a head start through obtaining research by underhand means. The health of every country depends on the whole world having access to a safe and effective vaccine, wherever a breakthrough might occur; and, the UK, we will do everything in our power to bring this about.

We are already the biggest single donor to the efforts of the Coalition for Epidemic Preparedness to find a vaccine. And it is precisely because we know that no-one is safe until everyone is safe, that I can announce that the UK will contribute up to £571 million to COVAX, a new initiative designed to distribute a COVID-19 vaccine across the world. Of this sum, £500 million will be for developing countries to protect themselves.

The UK is already the biggest donor to Gavi, the global vaccine alliance. In June we helped to raise almost \$9 billion to immunise another 300 million children against killer diseases, and Gavi also stands ready to help distribute a COVID-19 vaccine.

But even as we strive for a vaccine, we must never cut corners, slim down the trials or sacrifice safety to speed. Because it would be an absolute tragedy if in our eagerness, we were to boost the nutjobs — the anti vaxxers, dangerous obsessives who campaign against the whole concept of vaccination and who would risk further millions of lives.

And now is the time above all to look ahead and think now about how to stop a pandemic from happening again. How can we stop another virus from coming along and again smashing that precious Ming vase of international cooperation? How can we avoid the mutual quarantines and the brutal Balkanisation of the world economy?

I don't think there is any reason for fatalism: of course, the dangers can never be wholly eliminated, but human ingenuity and expertise can reduce the risk. Imagine how much suffering might have been avoided if we had already identified the pathogen that became COVID-19 while it was still confined to animals?

Suppose we had been able to reach immediately into a global medicine chest and take out a treatment? What if countries had been ready to join together from the outset to develop and trial a vaccine? And think how much strife would have been prevented if the necessary protocols — covering quarantine and data-sharing and PPE and so much else — had, so far as possible, been ready on the shelf for humanity to use?

So we in the UK we're going to work with our friends, we're going to use our G7 presidency next year to create a new global approach to health security based on a five point plan to protect humanity against another pandemic.

Our first aim should be to stop a new disease before it starts. About 60 percent of the pathogens circulating in the human population originated in animals and leapt from one species to the other in a "zoonotic" transmission. The world could seek to minimise the danger by forging a global network of zoonotic research hubs, charged with spotting dangerous animal pathogens that may cross the species barrier and infect human beings.

The UK is ready to harness its scientific expertise and cooperate to the fullest extent with our global partners to this end. Of the billions of pathogens, the great mass are thankfully incapable of vaulting the species barrier. Once we discover the dangerous ones, our scientists could get to work on identifying their weaknesses and refining anti-viral treatments before they strike. We could open the research to every country and as we learn more, our scientists might begin to assemble an armoury of therapies — a global pharmacopoeia — ready to make the treatment for the next COVID-19.

Our second step should be to develop the manufacturing capacity for treatments and vaccines So that the whole of humanity can hold them like missiles in silos ready to zap the alien organisms before they can attack. But if that fails and a new disease jumps from animals to human beings and overcomes our armoury of therapies and begins to spread, then we need to know what's going on as fast as possible.

So the third objective should be to design a global pandemic early warning system, based on a vast expansion of our ability to collect and analyse samples and distribute the findings, using health data-sharing agreements covering every country. As far as possible, we should aim to predict a pandemic almost as we forecast the weather to see the thunderstorm in the cloud no bigger than a man's hand.

And if all our defences are breached, and we face another crisis, we should at least be able to rely on our fourth step, and have all the protocols ready for an emergency response, covering every relevant issue, along with the ability to devise new ones swiftly.

Never again must we wage 193 different campaigns against the same enemy. As with all crises, it is crucial not to learn the wrong lessons. After the harrowing struggle to equip ourselves with enough ventilators — with countries scrabbling to improvise like the marooned astronauts of Apollo 13 — there is a global movement to onshore manufacturing. That is understandable. Here in the UK we found ourselves unable to make gloves, aprons, enzymes

which an extraordinary position for a country that was once the workshop of the world. We need to rediscover that latent gift and instinct, but it would be insane to ignore the insights of Adam Smith and David Ricardo.

We need secure supply chains — but we should still rely on the laws of comparative advantage and the invisible hand of the market. Many countries imposed export controls at the outset of the pandemic, about two thirds of which remain in force. Governments still target their trade barriers on exactly what we most need to combat the virus, with tariffs on disinfectant often exceeding 10 percent, and for soap tariffs for 30 percent.

So I would urge every country to take a fifth step and lift the export controls wherever possible — and agree not to revive them — and cancel any tariffs on the vital tools of our struggle: gloves, protective equipment, thermometers and other COVID-critical products. The UK will do this as soon as our new independent tariff regime comes into effect on 1st January and I hope others will do the same.

Though the world is still in the throes of this pandemic, all these steps are possible if we have the will. They are the right way forward for the world, and Britain is the right country to give that lead. And we will do so in 2021, as we celebrate the 75th anniversary of the founding of this great United Nations in London in January, and through our G7 Presidency, and as we host the world's climate change summit, COP26, in Glasgow next November.

The COVID-19 pandemic has been an immense psychic shock to the human race. Global fears have been intensified by the immediacy of round the clock news and social media. We sometimes forget, we face a virus — a small package of nucleic acid that simply replicates. It is not even technically alive.

Tragic as its consequences have been, it has been nothing like as destructive as other plagues — let alone the influenza of a century ago. It is absurd, in many ways, outrageous that this microscopic enemy should have routed the unity of the human race.

COVID-19 has caused us to cease other vital work, and I'm afraid it made individual nations seem selfish and divided from each other. Every day people were openly encouraged to study a grisly reverse Olympic league table, and to take morbid and totally mistaken comfort in the greater sufferings of others.

We cannot go on like that, we cannot make these mistakes again. And here in the UK, the birthplace of Edward Jenner who pioneered the world's first vaccine We are determined to do everything in our power to work with our friends across the UN, to heal those divisions and to heal the world.

Landmark strategy launched to cement UK's position as global leader in genomics

- New 'Genome UK' strategy launched to cement the UK's status as a global leader in genomics
- Strategy will harness genomics to offer patients personalised treatments, predict the risk of chronic diseases for vulnerable groups and enable earlier interventions
- Announcement comes as Matt Hancock takes part in UK-wide COVID-19 genome sequencing study

Health and Social Care Secretary Matt Hancock has today heralded the launch of a landmark new strategy that will secure the UK's future position as a global leader in genomics.

The new National Genomic Healthcare Strategy — <u>Genome UK: the future of healthcare</u> — will ensure the UK can offer patients the best possible predictive, preventative and personalised care by harnessing the potential of advanced genome sequencing.

The strategy sets out how the UK genomics community — from researchers through to the NHS — will come together to harness the latest advances in genetic and genomic science, research and technology for the benefit of patients, to create the most advanced genomic healthcare system in the world.

It will drive improvements in healthcare for patients, reducing boundaries between clinical care and research, and continue to deliver innovative new research projects in the UK. The strategy will unite the genomics community behind a shared vision for the future of the system.

The strategy focuses on 3 key areas:

- 1. Diagnosis and personalised medicine using genomic technologies to identify the genetic causes of rare diseases, infectious diseases, and cancer and provide personalised treatments to illness. The NHS will embed the latest genomic technologies to benefit patients.
- 2. Prevention genomics will be used to accurately predict the risk of chronic diseases. Subject to validation, national screening programmes could use genomics to identify at-risk populations, including more vulnerable populations and those in harder to reach groups to allow earlier clinical and lifestyle interventions.
- 3. Research we will enable more efficient and improved collaboration between researchers and clinicians to benefit patients, while upholding

the highest standards on the use of data. This includes ensuring that research findings are translated into healthcare settings to benefit patients.

The new strategy builds on the government's existing ambition to analyse five million genomes in the UK by 2023/24, including sequencing 500,000 whole genomes through the NHS Genomic Medicine Service, and 500,000 whole genomes through the UK Biobank.

Health and Social Secretary Matt Hancock:

Genomics has the potential to transform the future of healthcare by offering patients the very best predictive, preventative and personalised care.

The UK is already recognised around the world as a global leader in genomics and this strategy will allow us to go further and faster to help patients right here in our NHS and give them the best possible chance against a range of diseases.

The UK is using its expertise in genomics right now to advance our understanding of COVID-19, develop new treatments and help us protect the most vulnerable.

The launch of the strategy comes as Health and Social Care Secretary Matt Hancock calls on others who have recovered from COVID-19 to join him in donating blood as part of a major new study examining genetic susceptibility to the virus. Matt Hancock, who tested positive for coronavirus in March, is urging people who were not hospitalised for their symptoms to give blood so their genetic blueprint can be sequenced to help scientists better understand why some people may be worse affected by the virus than others.

The UK-wide study, led by the University of Edinburgh as part of the GenOMICC consortium and Genomics England, will sequence the genomes of 20,000 people who were severely ill and in intensive care with COVID-19 and compare those with a further 15,000 individuals who had COVID-19 symptoms but did not need to go to hospital.

The study is being funded by Illumina, UKRI, NIHR Bioresource, and the Department of Health and Social Care. The genomic data from participants will be compared to people of similar backgrounds to help understand the variations in an individual's genetic makeup that may lead to a more severe reaction to the virus. The insights gained will help scientists and clinicians find more effective treatments and could help protect the most vulnerable in future outbreaks.

Chris Wigley, CEO of Genomics England, said:

This is an important moment for genomic healthcare in Britain. With

the launch of Genome UK, we are a step closer to a future where genomics can improve everyone's health and wellbeing, based on the latest scientific discoveries.

Genomics England continues to focus our efforts on enabling genomic healthcare to help doctors diagnose, treat and prevent illnesses, and accelerating genomic research by providing the health data and advanced technology researchers need to make new discoveries and create more effective medicines.

The speed at which everyone has come together to work collaboratively on this study demonstrates how significant genomic sequencing is in population health today. We now have a team of the best scientific minds and tech experts all working together at tremendous pace, to analyse the genomic data we have gathered. This work will help us to understand why the virus affects people in different ways, which will potentially allow us to personalise treatment, discover new therapies, save lives — and even prevent future outbreaks.

Life Sciences Minister Lord Bethell said:

The UK has a proud history as a world leader in genomics.

As we face the single biggest global health emergency in our lifetimes, now more than ever, it is paramount that we harness the potential of genomics, to support earlier detection and faster diagnosis of disease, tailor and target treatments and protect against threats to public health.

I am confident that the launch of Genome $UK-our\ National\ Genomic\ Healthcare\ Strategy-will help us achieve this.$

Professor Sir Mark Caulfield, Chief Scientist at Genomics England, said:

We do not yet fully understand why some people are more likely to become very ill with this virus and others have little or no symptoms. It is possible that the answer could lie in an individual's genome and therefore we need people of all ages and ethnic backgrounds affected by COVID-19 to volunteer so we have the broadest representation across the UK.

This will give us the very best chance of discovering whether a person's response to COVID is influenced by their genetic make-up and if this could identify novel therapies that could help us save lives.

To successfully compare and analyse the data of participants, the study is

looking for volunteers who closely match the age and ethnicities of those who were hospitalised.

The study is particularly keen to hear from members of ethnic minority groups and people who are over 68, who research suggests are the most severely affected groups.

Dr Kenneth Baillie from the Roslin Institute, at the University of Edinburgh, who is leading the study, said:

When we see patients dying of Covid-19, doctors and nurses in intensive care units often ask — why them? Why did this person become desperately sick, while other similar people are relatively unscathed? We know that this is partly due to genetics. More importantly, we know that if we can find the specific genes that are responsible, in some cases, that can lead us to new treatments.

The GenOMICC study was built with funding from patients and their relatives (the FEAT charity), and it owes everything to the patients and their relatives who decide to participate in research to help others, at one of the most difficult times in their lives.

Dame Sue Hill, Senior Responsible Officer for Genomics in England, said:

The NHS will play a key role in delivering the ambitious vision set out in the National Genomics Healthcare Strategy through the NHS Genomic Medicine Service (GMS). The seven GMS Alliances across England will ensure cutting edge genomics drive improvements in prevention, diagnosis and treatment and deliver faster and improved outcomes for patients. Clinical care will be aligned to enable the broader data and research ambitions to realise the full potential of the NHS and this new strategy allows the UK to continue to be a world-leader in genomics.

Lord Prior, Chairman of NHS England, said:

Genomics is the new frontier for the prevention, early diagnosis and treatment of inherited disease. It has the potential to change fundamentally the traditional model of healthcare delivery.

Professor Sir Rory Collins, Principal Investigator and Chief Executive of UK Biobank, said:

I'm delighted to join the National Genomics Board and to help enhance the UK's position as a global leader in genomics. Genetic analysis of all 500,000 volunteers in the UK Biobank project has enabled researchers to show just how important genetic information

can be for identifying individuals at increased risk of the most common chronic diseases, in particular cardiovascular disease and different types of cancer.

This information is already starting to be used to help improve prevention and treatment strategies within the NHS. I'm confident that the genetic data in UK Biobank will identify many more ways to improve the health of the public as part of the National Genomic Healthcare Strategy.

Jillian Hastings Ward, Chair of the Genomics England Participant Panel, said:

I hope that many patients and families who have been involved in the 100,000 Genomes Project, like mine, will be excited to see this new strategy. It sets out a vision for the future that makes our health data more useful to researchers and academics, and embeds genomic research into everyday healthcare, while aiming to maintain public and professional trust. It rightly emphasises the importance of engaging with patients, the public, experts and the wider healthcare workforce in the next stages of this journey, as genomic research improves our ability to diagnose, treat and prevent illnesses such as rare diseases, cancer, and COVID-19.

Anyone who tested positive for COVID-19 and has recovered can <u>sign up for the GenOMICC COVID study</u>.

About the National Genomic Healthcare Strategy — Genome UK: The future of healthcare

The National Genomic Healthcare Strategy was commissioned by the National Genomics Board (NGB).

The National Genomics Board was established to oversee the implementation of the Chief Medical Officer's 2016 report, Generation Genome, and the genomics elements of the Life Science Sector Deal. It brings together delivery partners, patient advocates, representatives from research and industry, and civil servants. The new strategy sets out our plan to extend our leadership in the field and deliver world-leading, genomics-driven healthcare to patients.

The strategy follows the structure of 3 core pillars

- diagnosis and personalised medicine
- prevention
- research

The pillars are underpinned by 5 cross-cutting themes:

 engagement and dialogue with the public, patients and healthcare workforce

- workforce development and engagement with genomics
- delivering scaled analytics, AI-assisted informatics, and nationally coordinated approaches to data
- supporting industrial growth
- maintaining trust

About Genomics England

Genomics England works with the NHS to bring forward the use of genomic healthcare and research in Britain to help people live longer, healthier lives. Genomics is a ground-breaking area of medicine that uses our unique genetic code to help diagnose, treat and prevent illnesses. It is already being used in the fight against COVID-19.

Established in 2013, Genomics England launched the world-leading 100,000 Genomes Project with the NHS, demonstrating how genomics insights can help doctors across the NHS, and building a foundation for the future by assembling a unique dataset. The project was achieved thanks to patients and participants helping to shape it and guiding decisions on data and privacy.

Genomics England is now expanding its impact. Our next chapter involves working with patients, doctors and scientists to improve genomic testing in the NHS and help researchers access the health data and technology they need to make new medical discoveries and create more effective, targeted medicines for everybody.

About GenOMICC

GenOMICC stands for <u>Genetics Of Mortality In Critical Care</u> and began in 2016 as an open, global consortium of intensive care clinicians to understand genetic factors that influence outcomes in intensive care from diseases such as SARS, influenza and sepsis. When COVID-19 hit, GenOMICC was already recruiting and has now obtained DNA samples from 4,000 cases already.

The study is led by Dr Kenneth Baillie at the Roslin Institute, University of Edinburgh. Across the UK, the set-up of GenOMICC has been funded by a UK charity, Sepsis Research (FEAT), by the Intensive Care Society, and by the Wellcome Trust, UKRI(MRC) and the Chief Scientist Office.

Within the UK, GenOMICC is currently actively recruiting in 208 intensive care units, covering more than three-quarters of the ICU capacity of the nation. Together with our international partners, we aim to provide genetic evidence to help find new treatments for critically-ill patients.

Genetics gives us an extremely powerful tool to help us find new approaches to complex disease processes, but getting solid answers requires us to study very large numbers of people. Ultimately, the global GenOMICC consortium aims to obtain 100,000 DNA samples from critically-ill patients. This could have important implications for both the COVID-19 outbreak, and for critical illness in general.