## Next phase of NHS coronavirus (COVID-19) app announced

This next phase will bring together the work done so far on the NHS COVID-19 app and the new Google/Apple framework.

Following rigorous field testing and a trial on the Isle of Wight, we have identified challenges with both our app and the Google/Apple framework.

This is a problem that many countries around the world, like Singapore, are facing and in many cases only discovering them after whole population roll-out.

As a result of our work, we will now be taking forward a solution that brings together the work on our app and the Google/Apple solution. This is an important step, allowing us to develop an app that will bring together the functionality required to carry out contact tracing, but also making it easy to order tests, and access proactive advice and guidance to aid selfisolation.

NHS Test and Trace is already working to stop the spread of coronavirus and save lives. Building on our previous work, data published today (18 June) shows that tens of thousands more people who may have otherwise unwittingly spread the virus are now remaining safely at home.

Joint statement from Baroness Dido Harding, Executive Chair of NHS Test and Trace and Matthew Gould, CEO, NHSX:

3 weeks ago we launched NHS Test and Trace as a brand new, end-to-end service, to help control the spread of COVID-19 and we are hugely grateful for the way the public have responded to protect those around them.

Our ambition is to develop an app which will enable anyone with a smartphone to engage with every aspect of the NHS Test and Trace service, from ordering a test through to accessing the right guidance and advice. This will support our vision of helping more people get back to the most normal life possible at the lowest risk.

Our response to this virus has and will continue to be as part of an international effort. That is why as part of a collaborative approach we have agreed to share our own innovative work on estimating distance between app users with Google and Apple, work that we hope will benefit others, while using their solution to address some of the specific technical challenges identified through our rigorous testing.

We will also draw on the invaluable insight from all of those who

trialled the app on the Isle of Wight — and the brilliant teams who have worked on it to date — to build an app that can form part of the end-to-end NHS Test and Trace service, and this insight will be integral to the next phase of development.

Crucially, NHS Test and Trace is already playing a vital role in helping us stop the spread of the virus. We will keep learning, improving and refining to build a high-quality service on which all of us can depend and to have the right technology in place.

Health and Social Care Secretary Matt Hancock said:

Our approach to the virus, whether that's on vaccines, testing, treatments or cures, has been that we are willing to back innovative solutions and to be ambitious.

We knew from the start that we would need to test and learn as we developed this new technology. The NHS COVID-19 app has undergone some of the most rigorous testing in the world — utilising a real world trial on the Isle of Wight pilot and in a series of field tests — and I want to thank all of those involved.

As we enter this next phase of research and development we remain determined to continue in our ambition to develop an app which meets the technical, security and user needs of the public and which can complement the NHS Test and Trace service.

Countries across the globe have faced challenges in developing an app which gets all of these elements right, but through ongoing international collaboration we hope to learn, improve and find a solution which will strengthen our global response to this virus.

International evidence shows the importance of a comprehensive human contact tracing service underpinned with a huge, nationwide testing capacity which is now available through the NHS Test and Trace service. Any future app would complement this service.

Alongside the launch of this end-to-end service, extensive testing of a new contact tracing app has been undertaken, building on the initial trial phase on the Isle of Wight with a series of field tests to develop a viable product which could be introduced nationally.

Rigorous field testing is an integral part of any project of this scale and ambition and the focus has been on identifying solutions to the issues which have emerged.

Through the systematic testing, a number of technical challenges were identified — including the reliability of detecting contacts on specific operating systems — which cannot be resolved in isolation with the app in its current form.

Google/Apple's announcement that they would make their application programming interface (API) available, if a number of conditions were met, allowed exploration of how our technology could work alongside their solution to begin, while also closely following the latest international evidence.

While it does not yet present a viable solution, at this stage an app based on the Google/Apple API appears most likely to address some of the specific limitations identified through our field testing. However, there is still more work to do on the Google/Apple solution which does not currently estimate distance in the way required.

Based on this, the focus of work will shift from the current app design and to work instead with Google and Apple to understand how using their solution can meet the specific needs of the public.