Witness Name: Matthew Gould
Statement No.: 1
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Dated: 28/3/25

UK COVID-19 INQUIRY

WITNESS STATEMENT OF MATTHEW GOULD

I, Matthew Gould, Former Chief Executive Officer of NHSX, will say as follows:

INTRODUCTION

1. I make this Witness Statement in response to a request from the Inquiry dated 15 November 2024 made under Rule 9 of the Inquiry Rules 2006 ("the Request") asking for a witness statement in connection with Module 7 of the Inquiry.

2. This statement is to the best of my knowledge and belief accurate and complete at the time of signing. The Department of Health and Social Care ("the Department") continues to work on its involvement in the Inquiry, and should any additional, relevant material be discovered I will of course ensure that this material is provided to the Inquiry and I would be happy to make a supplementary statement if required.

ROLE, FUNCTION AND RESPONSIBILITES

3. I was appointed Chief Executive Officer of NHSX in May 2019 following the announcement of its establishment on 19 February 2019 by the Department [MG/1 - INQ000561585]. NHSX was a joint unit of NHS England and Improvement and the Department encompassing both NHS and Department functions that was set up to drive digital transformation of health and care to bring the benefits of modern technology to every patient and clinician. As Chief Executive Officer I had strategic responsibility for setting the national direction on technology and was accountable to

the Secretary of State for Health and the chief executive of NHS England ("NHSE") and NHS Improvement ("NHSI"). I officially held the role until 31 January 2022 when NHSX's functions were subsumed into other directorates within the Department and NHS. Before its functions were subsumed, NHSX sponsored NHS Digital.

4. NHSX's responsibilities included the following:

    a. setting national policy and developing best practice for NHS technology, digital and data - including data-sharing and transparency;

    b. setting standards – developing, agreeing and mandating clear standards for the use of technology in the NHS;

    c. ensuring that NHS systems could talk to each other across the health and care system;

    d. helping to improve clinical care by delivering agile, user-focused projects;

    e. supporting the use of new technologies by the NHS, both by working with industry and via its own prototyping and development capability;

    f. ensuring that common technologies and services, including the NHS App, were designed so that trusts and surgeries don't have to reinvent the wheel each time;

    g. making sure that all source code was open by default so that anyone who wants to write code for the NHS can see what we needed;

    h. reforming procurement – helping the NHS buy the right technology through the application of technology standards, streamlined spend controls and new procurement frameworks that support our standards;

    i. setting national strategy and mandating cyber security standards, so that NHS and social care systems had security designed in from the start;

    j. championing and developing digital training, skills and culture so our staff were digital-ready; and

k. delivering an efficient process for technology spend, domain name management and website security.

5. The focus of NHSX was internal, i.e., it focussed on transforming the systems and processes within the NHS in England. There was therefore minimal, as the Inquiry asks, working or collaboration with other sovereign nations because the ability to connect to other systems was not a priority at that time. To the extent that NHSX looked to other nations in assisting in the response to Covid-19 I cover this below.

6. In order to fulfil my role as Chief Executive Officer of NHSX I was the National Director for Digital Transformation in NHS England and Director General for Digital Transformation in the Department. Given NHSX was Joint Unit but not a legal entity in its own right, I exercised the powers of the Department and NHS England in order to fulfil my responsibilities as CEO of NHSX. I continued briefly in both those roles once the Chief Executive role ended.

7. The NHSX brand was 'retired' following the 23 November 2021 report from Laura Wade-Gerry, recommendation six of which was to, 're-align organisational responsibilities to ensure delivery of the new operating model', requiring the Government to:

> *"Create a new Transformation Directorate at the heart of the NHS to drive transformation, including the establishment of a 'Transformation Factory'.*
>
> *Evolve NHSX into the strategy function of the new Transformation Directorate, with NHSX's delivery teams integrating into the wider technology and transformation teams. Having successfully advocated for the integration of digital into the whole, NHSX no longer needs a separate identity, and can become a key, integrated driver of the new approach to transformation ..."* [MG/2 - INQ000193997_pg14]

8. I would invite the Inquiry to consider the whole of the Wade-Gerry report, which sets out the detailed reasoning behind the retirement of the NHSX brand. I had worked closely with Laura and supported her conclusions.

9. The then Secretary of State for Health accepted the recommendations made in the Wade-Gerry report and NHSX was disestablished, with most of its functions taken over by the Transformation Directive of NHS England, or the Joint Digital Policy Unit, which continues as a joint entity. I formally left the roles of National Director for Digital

Transformation in NHS England and Director General for Digital Transformation in the Department in September 2022 to become the Chief Executive Officer of the Zoological Society of London.

SYSTEM READINESS

10. The Inquiry has asked about system readiness; having considered the questions posed, I am afraid that I am unable to assist.

DEVELOPMENT OF POLICIES AND STRATEGIES FOR TEST, TRACE AND ISOLATE

11. The involvement of NHSX in the development of test, trace and isolate policies and strategies during the period between 1 January 2020 and its merger with NHSE was, from my perspective, (1) in the creation of the NHS Covid-19 contact tracing app, (2) in the creation and deployment of the NHS CovidPass on the NHS App. To the extent that I am able to assist by answering the Inquiry's questions, I do this in detail below.

12. Insofar as the Inquiry asks about any reliance on expert, independent expert or academic opinions and guidance in informing NHSX's work, I can confirm that at every stage NHSX placed a great deal of reliance on suitable expert opinion. This is addressed in further detail below.

NHS COVID-19 APP

13. By way of introductory, summary remarks, I consider that it is important for the Inquiry to understand that the initial Covid-19 App was developed at very significant speed over a period of around two-three months (March-May 2020). The app was substantively new technology, seeking to use the Bluetooth function on mobile phones for a purpose for which it was not designed or configured. This combination of intense speed and novel technology meant that it was always a difficult project that was unlikely to run without incident or setback (as is the case with almost any technology deployment or development).

14. The sequence of events is important in understanding what happened in the development of the App. The project started in March 2020 before most Western countries did the same, and before 10 April 2020, when Google/Apple announced that they were developing an Application Programming Interface ("API") to allow for contact

tracing through mobile phones but only for 'decentralised' apps in which the contact data was kept on individual phones rather than loaded to a central repository. By the end of May 2020, we had working prototypes of both variants (the original 'centralised' version, and the subsequent 'decentralised' version based on the Google/Apple API) undergoing testing, which provided a good deal of the technical basis for the model that was eventually adopted and demonstrated the degree of technical capacity developed and deployed at speed in the first two months of the project.

15. The eventual Covid-19 App that was rolled out in September 2020 was a decentralised model based on the Google/Apple API, which we started to develop as soon as we received access to the API.

16. It follows that there were two main versions of the App;[1] the initial version developed by NHSX before the Google/Apple API was either hypothesised or developed and tested on the Isle of Wight, and the version eventually adopted that was based on the Google/Apple API.

17. The Inquiry should appreciate that everyone involved in the development of the Covid-19 App, both the initial version and the eventual decentralised version that was deployed, worked extremely hard and under immense pressure to deliver a novel technology to be used in combatting the pandemic. Below I have set out a timeline of how the initial Covid-19 App was developed, which was the extent of my involvement.

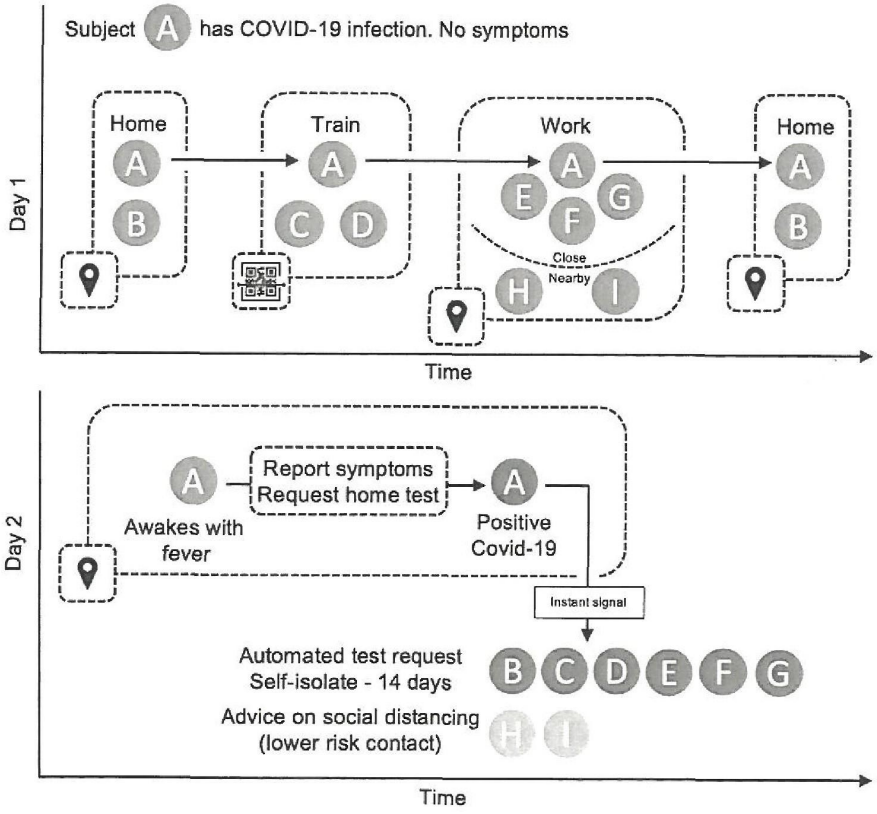
18. NHS Digital was asked to assist with the initial work to develop a method of identifying vulnerable people who might need to self-isolate to reduce their chances of exposure to Covid-19 in early March 2020 [MG/3 - INQ000564674]. I invited those involved to ensure that Simon Eccles, the national Chief Clinical Information Officer and Deputy CEO of NHSX, was kept in the loop as he was leading the NHSX coordination cell for the digital side of the response.

19. This followed initial work on 3-4 March 2020 to establish a 'Digital Cell', that Simon Eccles led (please see an email from 4 March 2020 referencing the establishment of the Cell and attaching a supporting background paper) [MG/4 - INQ000564672; MG/5

[1] The Inquiry has asked how many versions of the Covid-19 App were created and when; as indicated, there were two main versions of the App but, as the Inquiry will perhaps appreciate, there were many versions of each as the underlying code was updated and patches were released. I am not in a position to provide the Inquiry with a complete list of all of the thousands of small amendments that were made to each version.

- INQ000564673], with the aim of finding opportunities to deploy the latest data science techniques and new technologies to optimise the operational response to Covid-19. Colleagues within the NHS were sent a letter from me on 10 March 2020 notifying them that the Digital Cell had been established [MG/6 - INQ000564680; MG/7 - INQ000564681]. Should the Inquiry wish for more information about the work of the Digital Cell and its impact on the development of policies for test, trace and isolate, those are questions that are best posed to Simon Eccles.

20. On 6 March 2020 a meeting was held to start considering contact tracing [MG/8 - INQ000564675]. Appendix 1 to the agenda/paper for that meeting was an overview paper from the University of Oxford titled, *'Sustainable containment of COVID-19 using smartphones in China: Scientific and ethical underpinnings for the implementation of similar approaches in other settings'*. The paper contained a figure to illustrate how an algorithm could underpin an App to assist in infection control that I produce below:



21. That meeting led to a workshop that I chaired held on Saturday 7 March 2020 at the Department with a number of members of Public Health England, expert scientists, technologists and academics in attendance where proposals for a smartphone app to

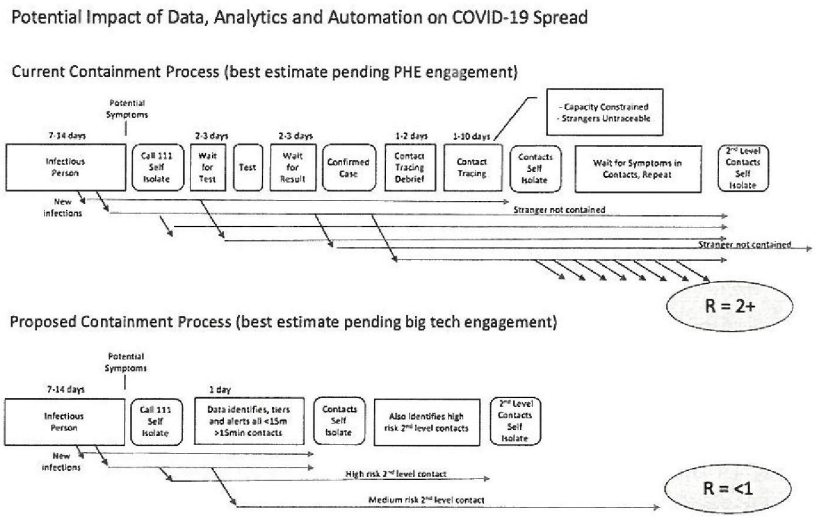
assist in contact tracing were discussed [MG/9 - INQ000564676; MG/10 - INQ000564677]. During that meeting I raised that it would be advantageous to connect with international partners who may have been having similar conversations; this followed the apparent success of the Chinese government, which had been using similar technology. The meeting concluded by setting out the workstreams that would be taken forward on the Monday (9 March 2020). In terms of the connections with international partners, this was episodic in nature: I initially coordinated with the Foreign Commonwealth and Development Office to use the embassy network to understand what other countries were doing to develop a contact tracing application. The work in speaking to those based in other countries was mostly done by others, although I had a conversation with the French authorities on 30 April 2020 [MG/11 – **INQ000576049**]. I also met with the French Digital Minister, Cédric O on 25 May 2020 [MG/12 – **INQ000576051**]. We used the opportunity to compare notes on the plans and progress in both countries on this front.

22. It is important to recognise that the country was very much one of the first Western democracies to start developing a contact tracing application; as set out below, my involvement in the development of it ceased relatively early, and therefore to the extent that the Inquiry asks about significant discussion about best practice in other countries, this is best directed to those who were involved after that initial testing phase.

23. The purpose of the App was explained in that meeting by the academic representatives from the University of Oxford in the following terms:

> *"...an application that would allow for geolocation and proximity information to be analysed in order for individuals who have been exposed to Covid-19 to be identified, informed of the risk and given correct advice as to how to proceed.* [The academics] *asserted that this would greatly reduce the risk to vulnerable individuals and reduce the burden on the system by creating a seamless digital pathway with on-ramp for people to be assessed. This would allow people who should self-isolate to be identified at scale and be given information as well as a risk assessment. The application could also support strategic decision making, as well as the creation of a dataset for potential research and analysis."* [MG/9 - INQ000564676_pg1]

24. That was in addition to the hope, as set out at the earlier meeting, that an effective contract tracing solution involving 'big tech' would have the benefit of reducing the R number (as reproduced below, see [MG/8 - INQ000564675]):



25. On 9 March 2020 I sent the Secretary of State a joint submission (from myself and Anthony Finkelstein, the Chief Scientific Adviser, National Security) outlining NHSX plans to rapidly investigate the viability of an App to support the response to Covid-19 [MG/13 - INQ000564678; MG/14 - INQ000279898]. Professor Finkelstein was assigned by (then) Sir Patrick Vallance to be the Chief Scientific Adviser involved in the project. He was there in an advisory and supportive capacity, providing both scientific expertise and a link into the wider Chief Scientific Adviser network. His role was advisory, as opposed to mine, which was executive.

26. From the very earliest stages of its development the potential dangers of the Covid-19 App as regards the use of data were considered. This is reflected in the agenda for an initial meeting on the issue of contact tracing that took place on 6 March 2020 [MG/8 - INQ000564675].

27. The initial Covid-19 App was created by a small development consultancy (VMware Pivotal Labs, with support from Zühlke Engineering) because NHSX did not have appropriate in-house development capability for a task of such technical complexity.

28. On 17 March 2020 the first meeting of the Covid-19 Contact Tracing Board Meeting took place, I exhibit an email confirming the date (and invitees) and the slides setting out the content of the meeting [MG/15 - INQ000564685; MG/16 - INQ000564686]. This confirmed that the purposes of the App would be to: (i) make personal recommendations to people on their recommended degree of self-isolation based on who they had been near; and (ii) to generate data for use by the NHS planners and

epidemiologists. The paper for the meeting makes an important point about the potential use of global positioning systems ("GPS"): *"GPS used but only in countries with authoritarian regimes where it* [is] *used to enforce isolations."* [MG/16 - INQ000564686_pg8] It was quickly agreed that the App we were developing should use Bluetooth rather than GPS, primarily because it was a more accurate technology in terms of both location and time. This decision was vindicated by almost every other contact tracing app going down the same route. I am fairly sure, although cannot be certain, that the meeting would have been led by me, but I have not been able to locate any readout or minutes from the meeting that would confirm as such/what was discussed or decided beyond that which I have set out above.

29. The initial version of the (Bluetooth-powered) Covid-19 App was 'centralised', meaning that the contact data would be uploaded from phones to a central location, with numerous protections around privacy in place including the anonymisation of all the data. This anonymised data would have been of enormous value in tracking the progression of the virus and understanding the impact of different interventions and policy changes. The key privacy protection was the anonymisation of the data, a paper written by Dr Ian Levy on 3 May 2020, *'High level privacy and security design for NHS COVID-19 Contact Tracing App' [MG/17 - INQ000564704]*, contains detail on this.

30. The version of the App that was eventually deployed was by contact decentralised, meaning that registers of contacts were stored on the phone. As I describe below, the decision to go with this version of the App was based on the greater technical accuracy of the App based on our repeated field tests between the two versions. Privacy concerns would have been considered as part of the selection process, but these were secondary to the technical performance.

31. For more information about the design of the initial Covid-19 App and the privacy and security aspects, I would invite the Inquiry to consider the 3 May 2020 report by Dr Ian Levy, Technical Director at the National Cyber Security Centre, UK: *'High level privacy and security design for NHS COVID-19 Contact Tracing App' [MG/17 - INQ000564704]* and the Information Commissioner's Office ("the ICO") 1 May 2020 paper, *'COVID-19 Contact tracing: data protection expectations on app development'* (provided as part of a submission to the Joint Committee on Human Rights) [MG/18 - INQ000564706; MG/19 - INQ000571265].

32. Dr Levy's report may also assist the Inquiry in understanding whether the initial Covid-19 App could collect information to help track the virus, identify clusters and outbreaks and provide demographic and other data to assist in understanding the virus. Whilst I am not best placed to answer detailed questions on this topic, in short the answer is that the App could have done if based on a centralised model, which the eventual Covid-19 App was not. The initial version of the App allowed the Government to see an anonymised map of virus propagation.

33. The issues as to privacy raised by Dr Levy's paper, and the 1 May 2020 ICO paper, were considered as part of the development of the initial Covid-19 App and addressed accordingly. The Inquiry may wish to note that the ICO had, in March 2020, published guidance reassuring care providers that it would take a pragmatic approach to its regulatory powers for the duration of the pandemic to support sharing data as needed, which the Secretary of State was briefed on [MG/20 - INQ000564683; MG/21 - INQ000564684].

34. On 19 March 2020 I circulated a review of the 'International best practice on tech responses to Covid-19' [MG/22 - INQ000564688; MG/23 - INQ000564689], which included a review of what other countries were doing to use technology in terms of information for citizens, controlling and monitoring public movement, testing, contact tracing, research, remote consultations and working and patient follow and procurement.

35. An Oversight Board meeting for the development of the initial Covid-19 App was held on 19 March 2020 [MG/24 - INQ000564687]. I cannot now recall if the meeting included discussion of international best practice on tech responses to Covid-19 and have not been able to locate any minutes of the meeting to confirm either way. The Oversight Board continued to meet as the App was developed [24 March 2020, MG/25 - INQ000564692; 31 March 2020, MG/26 - INQ000564695; 2 April 2020, MG/27 - INQ000564697; 28 April 2020, MG/28 - INQ000564703]. The Inquiry has asked whether the Oversight Board met on 21 May 2020; I believe that it did [MG/29 – **INQ000576050** but I have not been able to locate any minutes of the meeting and cannot now recall what was discussed.

36. The proposal for the Covid-19 App was discussed at a meeting with the Secretary of State on 20 March 2020 with a paper circulated in advance [MG/30 - INQ000564690; MG/31 - INQ000564691]. The paper summarised the aims of the Covid-19 App as: (1)

stop or flatten the epidemic by reducing the average number of people that each new case of Covid-19 infects (R_0); (2) control the flow of patients who will require hospital treatment in the near future; (3) help return people to normal life more rapidly thereby preserving the local economy; (4) gather critical data for NHS and strategic leaders.

37. The paper indicated that Bluetooth would be used to record phones that the user came into contact with. This allowed the digital contact tracing with phone-to-phone notifications, which was the primary function of the App.

38. Dr Geraint Lewis, who was the Senior Responsible Officer for the development of the initial Covid-19 App, provided input into a briefing for No. 10 on 21 March 2020 [MG/32 - INQ000564711].

39. On 23 March 2020 I was sent an updated report by Professor Christophe Fraser, one of the University of Oxford academics who had originally proposed a contact tracing App, setting out what progress had been made on the modelling and simulation of a contact tracing smartphone app to control the Covid-19 epidemic [MG/33 - INQ000564712].

40. The eventual version of the Covid-19 App that was rolled out nationwide allowed users to self-report symptoms and provided advice on whether to test and isolate (albeit these functions came at different times) and it was supported by testing (rather than the other way round) in that following notification of a positive test, that data could be inputted into the App and then other users who had been in close proximity of the positive user notified. I am not aware as to when the App was connected to the national test booking portal.

41. On 24 March 2020 a meeting was held with the Devolved Administrations to inform them of the work being undertaken by NHSX. In the end the Welsh joined in with the adoption of the Covid-19 App that was rolled out in September 2020 whilst the Northern Irish adopted an alternative measure that allowed it to take advantage of its geography with the Republic of Ireland. Scotland developed its own application. To the extent that the Inquiry asks about what consideration was given to interoperability and mitigation of any barriers, I would highlight that the entirety of the code for the initial Covid-19 App was published in May 2020. I am not aware whether the Northern Irish, Scottish and Welsh apps were based on the initial Covid-19 App code that was published in May 2020.

42. On 25 March 2020 a meeting with the Centre for Data Ethics and Innovation and the National Data Guardian took place; I have not been able to locate any minutes of the meeting and cannot recall the detail of what was discussed although, considering the date of the meeting, I anticipate we took them through the basis for the decentralised model of the App. This followed the establishment of an Ethics Advisory Board, chaired by Professor Sir Jonathan Montgomery of University College London, to provide independent and constructive challenge to the development and rollout of a contact tracing application. The Board assisted in drafting a letter for myself and the Secretary of State, which I was sighted on the draft of [MG/34 - INQ000564700; MG/35 - INQ000564701].

43. Following the meeting the Secretary of State was briefed on the development of the initial Covid-19 App [MG/36 - INQ000564693; MG/37 - INQ000564694], which included consideration of a probity statement on ethics and privacy. This invited the Secretary of State to indicate his preference on: (i) the voluntary basis of the App; (ii) the privacy protections in place; (iii) the types of data that would be made available from the App to analysts for secondary uses; and (iv) the safeguards the App had in place.

44. I was provided with updates as the Covid-19 App was developed by VMware Pivotal, for example [MG/38 - INQ000564696] provided on 31 March 2020.

45. On 2 April 2020 the Chief Medical Officer was briefed by me, Professor Finkelstein, Geraint Lewis, Tim Crayford and Peter Whawell with a slide deck provided in advance [MG/39 – **INQ000576047**; MG/40 – **INQ000576048**]. Beyond the contents of the slide deck, I do not recall the specifics of what were discussed, but I note that the purpose of the meeting was to seek his support for a new model of epidemic management through app-based contact-tracing.

46. On 10 April 2020 Google/Apple approached the Department with a proposal to work together in developing a contact tracing application. The ICO produced an 'Opinion' on the proposal on 17 April 2020 [MG/41 - INQ000571266]. A technical 'spike' team was stood up to create a version of the App based on the Google/Apple API on 6 May 2020 with the framework being provided on 9 May 2020. Following the decision to proceed with the version of the App based on the Google/Apple API, this work was subsequently taken forward by Simon Thompson as part of Test and Trace and led to

the application that was rolled out in September 2020; questions about its development following the start of his leadership of the programme are best directed to him. The Inquiry has asked whether I recall receiving a report by the Pathogen Dynamics Group in collaboration with Professor Finkelstein; whilst I do not recall this paper, I have no reason to doubt that I saw it at the time, but I have no memory of it.

47. On 24 April 2020 there was a meeting with the Secretary of State to discuss the App [MG/42 - INQ000564702] and the Isle of Wight testing phase. I have not been able to locate any minutes/readout of the meeting, but I believe that I would have participated in it. The purpose of the testing was explained in that meeting as building confidence in the integration of the three key elements of the Test and Trace programme: (i) the initial Covid-19 App, described as an automated system for rapid symptom reporting, ordering of swab tests and the sending of tailored and targeted alerts to other App users who had had close contact; (ii) standard contact tracing, to test updated methods of classic contact tracing, particularly for those not identified through the App; and (iii) virology swab testing by widespread and rapid access to swabs to ensure confirmed cases remained in isolate and to support the rapid detection and isolation of higher-risk contacts.

48. On 4 May 2020 the trial on the Isle of Wight was launched. The purpose of the trial was to understand and improve the user experience and effectiveness of the programme ahead of the full roll-out to the rest of the UK: success was to be measured in terms of the number of residents that installed the App, the ease with which the App enabled it, the effectiveness it demonstrated in detecting contact events and warning of potential infections and the confidence it instilled in the community. It is important to recognise that the pilot was not a 'technical' test, by which I mean that it was intended to see how the initial App work, not whether it worked (which was established through tests in controlled environments where the App's accuracy could be properly assessed). Data on 'how' it worked was what NHSX took away from the pilot. It is also important to remember that the pilot was a test event conducted at extreme speed to see how the initial App would function.

49. The Isle of Wight was chosen because it is a geographically defined area with a population of a size that enabled us to evaluate the contact tracing and testing services effectively before wider rollout. It also had the benefit of having a single health NHS Trust delivering all NHS services, which made it more straightforward to coordinate.

50. A user journey for the App was available as a printed document. The uptake of it exceeded our expectations.

51. The data collected during the Isle of Wight pilot was shared with: (i) the local area; (ii) the public; (iii) Ministers; and (iv) technical teams. The purpose of sharing it with each group was different, but was, in essence, either for transparency purposes (to build confidence in any eventual rollout across the country) or for development purposes (to analyse how the initial App had performed).

52. The Inquiry has asked whether the following quotation is consistent with the findings made after the Isle of Wight pilot:

> *"The launch of TTI on the Isle of Wight was followed by a short phase in which case numbers increased, as expected with increased testing. However, the inferred incidence of new infections and the reproduction number R declined sharply to below the English average, and below predicted levels for a synthetic control, immediately upon introduction of TTI. This finding is consistent across our analyses of Pillar 1, Pillar 2 and the combined pillar datasets, and in both our Bayesian and Maximum-Likelihood analyses."*

The evidence gathered showed that there was a statistically significant reduction in the R-number. Given the extremely unusual circumstances of the test, it remains impossible to know whether the impact on the R-number was the direct effect of the App, the indirect effect of the Isle of Wight population taking part in the test, or something else entirely.

53. On 7 May 2020 I received a letter from the Chief Executive Officer of the Equality and Human Rights Commission, Rebecca Hilsenrath, welcoming the opportunity to better understand the governance arrangements for the initial Covid-19 App. Her letter noted the undoubted pressures of developing the App at pace and noted the significant measures that NHSX had already put in place in respect of transparency, ethics and compliance with the law, including the establishment of the Ethics Advisory Board and the involvement of the Centre for Data Ethics and the Information Commissioner [MG/43 - INQ000564707]. A response was sent on 24 May 2020 [MG/44 - INQ000564708]. My role in working with the Equality and Human Rights Commission did not go further than establishing the contact as set out; I anticipate there would have been continuing contact at a working level, but I do not recall personally doing so.

54. Towards the conclusion of the Isle of Wight trial, on 17 May 2020, I was instructed (along with Dido Harding) by the Secretary of State, to prepare a 'pre-registration'

scheme for the initial Covid-19 App, the intention being to enable citizens to sign up to receive the App ahead of general release to drive uptake of it. The Secretary of State was sent a submission about the proposal dated 19 May 2020 [MG/45 - INQ000564709].

55. The Isle of Wight pilot was analysed following its conclusion and a report was produced in April 2021, *'NHS COVID-19 app: Isle of Wight pilot evaluation report' [MG/46* - INQ000533166]. I would invite the Inquiry to consider that report, which includes the evaluation undertaken by NHSX. The report also sets out the limitations of the trial, as well as what it revealed of the efficacy of the App. I cannot think of any unforeseen impacts revealed by the pilot and cannot assist as to what decisions, if any, the data gathered informed in respect of the test, trace and isolate system.

56. Following the Isle of Wight trial, I instigated and oversaw the standing up of the version of the Covid-19 App based on the Google/Apple API, and then rigorous and repeated testing between the initial version that had been piloted on the Isle of Wight and the new version. That testing revealed that the initial, homegrown version of the App did not integrate well with iOS (i.e., Apple) systems and therefore the decision was taken to concentrate on the development of the Google/Apple App on 18 June 2020. After that decision was announced, I stood back from the further development of the Google/Apple App prior to its launch in September 2020; questions about it are, as indicated above, best directed to Simon Thompson.

57. The Inquiry has asked me to comment on inequalities and whether decision-makers considered the impact of policy decisions on groups with protected characteristics. To the extent that my involvement in the subject matter of Module 7 was limited to the early development of the Covid-19 App, I consider that decision-makers did consider the impact of inequalities, and this is why the App was available in a number of different languages, for example. There is an inherent inequality created by the development of an application that is to be used on a smartphone, (because necessarily those without one will be unable to use it,) but that is, I am afraid, simply a corollary of the use of technology in developing a contact tracing tool. The mitigation that was adopted was a reversion to manual contact tracing; I am not able to assist with what research or data collection exercises were undertaken in order to ascertain the impact of the App on those with protected characteristics or other vulnerabilities. We were focussed on the development of the App, which provided a communal benefit to all by, it was hoped, causing those who might infect others (irrespective of protected characteristics or

vulnerabilities) to stay at home. To the extent that the Inquiry has asked about examples of further mitigations, such as the App being available in different languages, this is a question best directed to Simon Thompson who took the App forward after the initial testing phase. I would, however, highlight that later on in the pandemic when NHSX developed the Covid Pass, there was a non-digital element available, which was actually launched before the digital version, to ensure that those without access to a smartphone were able to use the scheme. I am unable to say whether the decisions taken were adequate in mitigating the impact of the pandemic on these groups because I was not involved after the initial development phase and am unaware as to the contents of any impact assessments.

58. More widely, I am proud of the work NHSX did to deploy technology solutions to support those who most required it, including via the Vulnerable, Isolated, and Social Care Covid-19 Response Cell, part of the wider NHSX Digital Cell.

59. I am aware from publicly available figures published by the National Audit Office that the 2020-21 spend on the App was £35m, but I am unable to assist with any breakdown of those costs in terms of creation, its rolling out and/or its maintenance/running. I anticipate the Department will be able to assist the Inquiry with more precise figures.

60. The Inquiry has asked how the adopted Covid-19 App helped track false positives; this is, I am afraid, not a question that I am able to answer. Professor Christophe Fraser would be best placed to assist the Inquiry in answering this question.

61. The Inquiry has also asked a number of technical questions such as at what distance the Covid-19 App could identify another device; I am afraid that I am unable to assist the Inquiry in answering such technical questions, which are best posed to Simon Thompson in the first instance. He would also, I believe, be able to assist the Inquiry with the questions it asks about: (i) the functionality of the App; (ii) the launch of the App on 24 September 2020 (as the project was then under his control); (iii) any data collected via the App; (iv) any international comparisons beyond those identified above; (v) any technology and user issues identified; (vi) adherence (compliance) with instructions via the App; and (vii) the efficacy of the App [MG/47 - INQ000561521].[2]

[2] In relation to the efficacy of the Covid-19 App, whilst I am not best placed to speak to this topic, I would highlight that the scientific journal Nature considered it and found that digital contact tracing played an important role in reducing transmission.

LESSONS LEARNED

62. Insofar as I left the Civil Service in April 2022, the Department is best placed to provide a chronological list of any internal or external reviews, lessons learned exercises or similar produced or commissioned by NHSX relating to any of the issues identified in the Provisional Outline of Scope for Module 7 since January 2020. Similarly, I do not feel well placed to comment on the legacy of Covid-19 on infrastructure, policy and resources for responding to another pandemic.

63. I would, however, offer the Inquiry a few reflections on what lessons I take from responding to Covid-19 during my time as Chief Executive Officer of NHSX (and in my other roles in the Department/NHSE) to the extent that it may assist in considering recommendations for future pandemics:

    a. it is important for maintaining public trust that realistic timelines and expectations be set for the development of new capability, particularly the development of new technology. There is always a pressure during crises to announce optimistic timescales around future capabilities, as public concern rises. However, in practice new capability almost always takes longer than an optimistic scenario would suggest, and the more novel the technology the more difficult it is to predict with confidence when it will work. So, leaders in a future pandemic would be well advised not to create unrealistic timescales or expectations, but rather to be level with the public about the risks and hurdles; and

    b. on a similar basis, my advice would be that in a pandemic – as more generally – project briefs need to be as clearly defined as possible prior to development commencing, and then senior leaders need to protect their development teams from the system's tendency to want to amend the brief, inserting new and varying requirements. Changes to scope whilst a project is ongoing are unavoidable, particularly during a pandemic when the policy context is shifting so fast but should be kept to a minimum. This would, I hope, have the effect of protecting the development team so that it can concentrate on delivering.

64. I would observe that we applied these lessons during the development of the NHS CovidPass in early 2021, which NHSX delivered successfully, on time and to budget.

65. As a final reflection, unrelated to technology or to the subject of Module 7. One of the most impactful steps I took during the pandemic was to broker and then issue a joint statement with the National Data Guardian and the Information Commissioner (for which there was a meeting on 26 March 2020, the supporting documents for which I exhibit) [MG/48 - INQ000564669; MG/49 - INQ000564670; MG/50 - INQ000564671; MG/21 - INQ000564684; MG/51 - INQ000564682; MG/52 - INQ000564698], making clear that health professionals sharing patient data with common sense would not be subject to sanction. This was an important step in giving health professionals the cover and reassurance they needed to share patient data appropriately and had an immediate and helpful impact across the system.

STATEMENT OF TRUTH

I believe that the facts stated in this witness statement are true. I understand that proceedings may be brought against anyone who makes, or causes to be made, a false statement in a document verified by a statement of truth without an honest belief of its truth.

Signed: **Personal Data**

Dated: 28/3/2025