Witness Name: Sir Christopher Stephen Wormald

Statement No.: 2

Exhibits: CW2/1-CW2/42

Dated:

UK COVID-19 INQUIRY

SECOND WITNESS STATEMENT OF SIR CHRISTOPHER STEPHEN WORMALD

I, Sir Christopher Stephen Wormald, of the Department of Health and Social Care ('the Department'), 39 Victoria Street, London SW1H 0EU, will say as follows:

1. I make this supplementary statement in response to the rule 9 request from the UK Covid-19 Public Inquiry ('the Inquiry'), dated 18 August 2022. Save for where it is stated otherwise, the contents of this statement are within my own knowledge. This statement is to the best of my knowledge and belief accurate and complete at the time of signing. For the purposes of this statement, any reference to 'the pandemic' is shorthand for 'the COVID-19 pandemic'. Where I am referring to other pandemics, I will explicitly refer to them by name.

2. This statement addresses topic six in the provisional outline of scope for module 1 and section E of the rule 9 request. Both of these concern lessons learned exercises that the Department has undertaken, is undertaking, and plans to undertake, into planning for future pandemics.

3. The Department undertook its lessons learned exercises by an iterative process, often involving the Department, its ALBs and Parliamentary institutions such as the National Audit Office (NAO) and the Public Accounts Committee. In order to assist the Inquiry with evidence about these exercises and provide the necessary context, it is necessary for me to make reference to that process as reflecting matters of historical fact. In particular, the Department developed its lessons learned analysis by preparing and submitting material and evidence to Parliamentary committees as part of their investigations, as well as by considering the content of such committees' reports and recommendations. This enabled the Department to reach reasoned conclusions about

what it considered to be the right lessons to learn from the pandemic. I do not make reference to the evidence provided to any Parliamentary committees, or the reports of such committees or other bodies protected by Parliamentary privilege, in order to rely on the truthfulness of the content of that material or the accuracy of the opinions expressed, but because it is impossible for me to explain, or for the Inquiry to understand, the Department's lessons learned exercises and outcomes without reference to it.

4. The single most important information that we have available is the "Technical report on the COVID-19 pandemic in the UK, *A technical report for future UK Chief Medical Officers, Government Chief Scientific Advisers, National Medical Directors and public health leaders in a pandemic",* published on 1 December 2022 (CW2/1). As the title suggests, it is a technical report written by the UK Chief Medical Officers (CMOs), Government Chief Scientific Adviser (GCSA), UK deputy CMOs (DCMOs) most closely engaged with the COVID-19 response, NHS England National Medical Director, and the UKSHA Chief Executive. It is written for their successors, who were not part of the public health response to COVID-19, facing a new pandemic in the UK. Its comprehensive content is divided into chapters such as understanding the pathogen and the disease, research, modelling, testing, tracing, non-pharmaceutical interventions and pharmaceutical interventions. Each chapter sets out what the scientific questions were and how these were answered with reflections and advice for the future. It does not offer a definitive narrative of the COVID-19 pandemic, including policy decisions taken and why, rather the relevant issues on science and public health that might be useful in the future.

5. Pursuant to the Inquiry's request, I summarise below the points that I and the Director General for Global Health and Health Protection made to the Public Accounts Committee on 12 January 2022. These constitute a list of the Department's reflections in connection with lessons learned from the pandemic, but prompted by the particular questions put to us by the Committee.

    i. In connection with Government preparation having been focused on influenza as opposed to Coronaviruses such as SARS and MERS, one of the biggest differences was not between influenza and Coronaviruses but between viruses that do not have significant asymptomatic transmission and those that do. The former included SARS, MERS and influenza whereas Covid 19 was in the latter category. A virus with significant asymptomatic transmissions put pressure on two areas in particular which were the levels of demand for PPE beyond clinical

settings and diagnostics where a greater level of testing was required than for SARS, MERS or influenza.

ii. When considering Exercises Winter Willow, Cygnus, Valverde and Alice and whether the exercises for influenza were more prominent than those relating to Coronaviruses, the National Risk Register (2017 edition) identified both the risk of pandemic influenza and of a severe new emerging infection of a SARS or MERS-type. On that basis Government prepared for both in terms of their likelihood and their impact. Exercises Willow and Cygnus were very large, whole-system exercises because of the larger potential for an influenza pandemic. Whilst mortality rates were at 35% and 10% respectively for SARS and MERS, the expert advice at the time was that the Coronaviruses did not have the same level of pandemic potential. COVID-19 has a lower mortality, but it has the pandemic effect. In terms of other, non-pandemic influenza exercises, Exercise Alice considered MERS and learned from Ebola. The broad pandemic preparedness system needed to take lessons from those all those exercises and reports and prepare for a range of different risks.

iii. Looking back at the preparation for a pandemic, large parts of the influenza plan were used in the response to Covid. Some of the most vital things done prior to the pandemic were the investments that NIHR made in vaccines, and the UK vaccines network which provided the foundations for creating new vaccines at speed. The same applied to therapeutics. Also, pandemics test national resilience not just planning. Resilience includes the capacity to create vaccines and therapeutics, where the UK performed exceptionally well, while in other areas the virus put a spotlight on the domestic capability to make PPE and on our diagnostic capacity where we were not as strong as we were on vaccines and therapeutics.

iv. Turning to social care, there are obvious weaknesses in the care system that have been debated many times. One of the areas we struggled with early in pandemic and where we have made some of the biggest improvements was in data from the care system. Adult social care providers are often small private businesses. Going forward, there will be questions about how much of this data architecture it will be appropriate to keep post pandemic.

v. As to the government's risk appetite, in terms of pandemic preparedness money spent on research and development and science was money well spent as it created the science that meant we could create capabilities when we needed them. Risk appetite had evolved over the course of the pandemic. At the

beginning of the pandemic where there was very little information then a lot was down to judgement. Over the two years of the pandemic the Government became more and more specific about what the triggers for action would be. There were however limits as for example it was very difficult to estimate the likely economic impact of particular NPIs and the virus continues to change and surprise. Therefore, while we have become much more sophisticated, we are always dealing with two variables where there are considerable unknowns which means elements of judgement remain and these types of decisions cannot be made by algorithm.

External reviews

6. A number of external reviews have been conducted, examining the UK Government's preparedness for a pandemic, published during the COVID-19 pandemic. Reviews that the Department has submitted evidence to, or been an active participant in, include the Boardman Review of Government COVID-19 Procurement in December 2020. This report informed a review of the countermeasures that the Department should hold (or otherwise have ready access to) for disease outbreaks and pandemics (CW2/2).

7. Of particular note are reviews undertaken by the NAO and the PAC. When the Department is made aware the NAO and the PAC are conducting a review into a particular area of Departmental responsibility, the Department will generally avoid conducting a similar review to prevent duplication, as it would not be a good use of taxpayer's money to replicate a review the NAO and PAC were conducting. Instead, the Department feeds into these reviews and provides an assessment of the evidentiary basis of NAO reports. The Department then considers the findings of, and formally responds to, any such review, setting out its own view of the issues arising and appropriate consequences in policy terms. Departmental responses to these reviews should be taken as reflective of the Department's view which is informed by, but not replicated from, such reviews.

8. In the context of Module 1, the NAO's Value for Money report on "The government's preparedness for the COVID-19 pandemic: lessons for government on risk management" is the most relevant review. This report was published on 19 November 2021 and is available on the NAO website. Following the NAO report, there was a PAC hearing in January 2022 which made a series of recommendations. Government preparedness for the COVID-19 Pandemic: Lessons for government on risk (parliament.uk). In this instance, the PAC recommendations were for the Cabinet Office, who consequently responded to the recommendations via Treasury Minutes.

However, the Department, in its role as co-chair of the Pandemic Diseases Capability Board (PDCB), led on work responding to a recommendation that '*the Cabinet Office should work with government departments to ensure that their risk management, business continuity and emergency planning are more comprehensive, holistic and integrated.*' It was the view of the Department, and Government more widely, that this recommendation be implemented; it coincided with the Department's own view of how matters could be improved for the future. This was done through a cross-Government review of capabilities built to address COVID-19 and an analysis of the impacts caused by behavioural change during a pandemic. Furthermore, this built on similar recommendations made by the 2012 Blackett Review (as mentioned in my first Module 1 statement). More on this is below (paras 20-22).

9. There have been numerous other reviews for which the Department provided evidence and responses. As a matter of historical fact and context, the further reviews are:

   i. A Public Accounts Committee ('PAC') hearing on the findings of the NAO report of 19 November 2021. This was conducted on 12 January 2022 and attended by myself and the Director General for Global Health and Health Protection, as well as colleagues from the Cabinet Office.

   ii. The PAC produced a follow-up report: "Forty-Sixth Report Government preparedness for the COVID-19 pandemic: lessons for government on risk", published 23 March 2022.

   iii. The Department, alongside the Civil Contingencies Secretariat in Cabinet Office, responded to the PAC's report via Treasury Minutes on 27 May 2022.

   iv. The Health and Social Care and Science and Technology Committees published a report, "Coronavirus: Lessons Learned to Date" in October 2021. On 30 November, Minister O'Brien gave evidence to the Committees on lessons learned.

   v. The NAO report "Overview of the UK government's response to the COVID-19 pandemic", published 21 May 2020. The PAC report that followed: "Thirteenth Report: Whole of Government Response to COVID-19", published 23 July 2020 concerning the Government's overall preparedness for the pandemic including procurement and distribution of essential supplies, support for business and local Government funding.

   vi. The NAO report "Readying the NHS and adult social care in England for COVID-19", published 12 June 2020. The PAC report that followed: "Fourteenth Report:

Readying the NHS and social care for the COVID-19 peak", published 29 July 2020 concerning the NHS and adult social care response to the pandemic, how to resume services and preparing for the future.

vii. The NAO report: "Investigation into how government increased the number of ventilators available to the NHS in response to COVID-19", published 30 September 2020. The PAC report that followed: "Twenty-seventh Report - Covid-19: Supply of ventilators", published 25 November 2020 concerning the Government's approach to securing ventilators and their preparedness for the pandemic.

viii. The NAO report: "Investigation into government procurement during the COVID-19 pandemic", published 26 November 2020. The PAC report that followed: "Forty-Second Report - COVID-19: Government procurement and supply of Personal Protective Equipment", published 10 February 2021 concerning the Government's approach to procurement and its supply of PPE during the pandemic.

ix. The NAO report: "Investigation into preparations for potential COVID-19 vaccines", published 16 December 2020. The PAC report that followed: "Forty-Third Report - COVID-19: Planning for a vaccine Part 1", published 12 February 2021 concerning securing the UK's access to the deployment of and public confidence in potential vaccines.

x. The NAO report: "The government's approach to test and trace in England – interim report", published 11 December 2020. The PAC report that followed: "Forty-Seventh Report - COVID-19: Test, track and trace (part 1)", published 10 March 2021 concerning the operational performance of test, track and trace and subsequent lessons learned.

xi. The NAO report: "Protecting and supporting the clinically extremely vulnerable during lockdown", published 10 February 2021. The PAC report that followed: "Fifty-Third Report - Covid 19: supporting the vulnerable during lockdown", published 21 April 2021 concerning the identification of, support for and communication with vulnerable people during lockdown.

xii. The NAO report: "Initial learning from the government's response to the COVID-19 pandemic", published 19 May 2021. The PAC report that followed: "Thirteenth Report - Initial lessons from the Government's response to the COVID-19 pandemic", published 25 July 2021 concerning lessons from the Government's health and social care response and the Government's wider pandemic response.

xiii. The PAC report: "Twelfth Report - COVID 19: Cost Tracker Update", published 25 July 2021 concerning HM Treasury's understanding of COVID-19 costs and management of risks to public finances through the pandemic, based on the NAO's "COVID-19 Cost Tracker".

xiv. The NAO report: "Test and trace in England – progress update", published 25 June 2021. The PAC report that followed: "Twenty-Third Report - Test and Trace update", published 27 October 2021 concerning the chains of COVID-19 transmission, protecting taxpayers' money and developing an effective operating model.

xv. The PAC report: "Thirty-Eighth Report - COVID-19 cost tracker update", published 23 February 2022 concerning the costs of the pandemic to the taxpayer, fraud and error within pandemic spending and lessons learned from the Government's response to COVID-19. This was again based on the NAO's "COVID-19 Cost Tracker".

xvi. The PAC report: "Sixth Report – Department of Health and Social Care 2020–21 Annual Report and Accounts", published 10 June 2022. This report includes conclusions and recommendations on the financial impact of COVID-19, covering unusable and surplus PPE, PPE procurement and contracting capability and establishing a future stockpile.

xvii. The NAO report: "The rollout of the COVID-19 vaccination programme in England", published 25 February 2022. The PAC report that followed: "Eleventh Report – The rollout of the COVID-19 vaccine programme in England", published 13 July 2022. This report covers lessons learned and maximising uptake and future planning of the vaccine programme.

xviii. The NAO report: "Investigation into the management of PPE contracts", published 30 March 2022. The PAC report that followed: "Twelfth Report – Management of PPE contracts", published 20 July 2022. This report covers the management of PPE stock, managing issues with contracts and the future of the PPE programme.

xix. The NAO report: "Managing cross-border travel during the COVID-19 pandemic", published 21 April 2022. The PAC report that followed: "Sixteenth Report – Managing cross-border travel during the COVID-19 pandemic", published 26 July 2022 concerning the implementation of and impact of cross-border travel measures and protecting taxpayers' money.

xx. The NAO report: "Investigation into the government's contracts with Randox Laboratories Ltd", published 24 March 2022. The PAC report that followed: "Seventeenth Report – Government's contracts with Randox Laboratories Ltd", published 27 July 2022 concerning the record-keeping and transparency of the Government's contracts with Randox Laboratories Ltd for testing services and goods and wider procurement issues.

xxi. The ongoing House of Commons Science and Technology Committee inquiry into the Government's preparedness for emerging diseases and learnings from COVID-19.

10. It was for the Department to reflect upon and consider the findings and observations from the reviews listed above. Much of the contents of those reviews were targeted at the Department's ongoing COVID-19 response, and so will be covered in future modules. An example of this activity is set out below.

11. The vast majority of DHSC's lessons learned activity was done in 'real time' and applied to its COVID-19 response. These issues were reflected in advice to Ministers. Examples of some of the ways learnings were applied during the pandemic response include:

    i. **NHS resilience and recovery:** Initially, the NHS prioritised extra support for critical or ventilated care. For example, increasing ventilation capacity through the joint NHSE and DHSC National Covid Oxygen, Ventilation, Medical Devices & Clinical Consumables (O2VMD&CC) Programme. As the pandemic progressed, the NHS responded quickly to breakthrough research in hospital settings, such as the oximetry @home pathway virtual covid wards. As early as April 2020, it focussed on increasing access to healthcare including the 'Help Us Help You' public awareness campaign, highlighting that services are and have been open through the pandemic. As evidence on 'long COVID' emerged, it responded rapidly with specialist care, establishing a new service. In addition, hospitals responded to workforce capacity by adjusting ratios, redeploying staff into patient-facing roles and deploying trainees and returnees where appropriate.

    ii. **Social Care Resilience and Minimising Transmission:** Sir David Pearson's Social Care Sector Covid-19 Support Taskforce made 52 recommendations in autumn 2020, 39 of which were either incorporated within the Adult Social Care Winter Plan 2020/21 or implemented subsequently. The Winter Plan produced 123 commitments to apply lessons from the first wave of the pandemic. 113 or 92% of these commitments were implemented in full by May 2021. For example,

the development of a capacity tracker collecting data on capacity, infections, testing and other metrics in care homes and home care (CW2/3-CW2/5).

iii. **Protecting the most vulnerable:** Professor Kevin Fenton led a PHE review into factors, including ethnicity, gender and obesity, that affected outcomes from COVID-19, during the first wave of the pandemic. Published in July 2020, this rapid review found that individuals in Black, Asian, and minority ethnic groups (BAME) are at increased risk of mortality due to COVID-19. Those from Black African or Black Caribbean backgrounds appear to be at greatest increased risk. The review also found that underlying health, social and structural inequalities affecting BAME communities in England may have increased the risk of transmission and acquisition of infection (for example, overcrowded housing, working in roles with increased likelihood of contact with the general public or potentially infected individuals, or reliance on public transport) and the risk of mortality (high underlying risks of co-morbidities) (CW2/6, CW2/7).

iv. In order to be assured of efficacy, FFP3 masks are required by HSE to be fit tested on an individual basis. This ensures that the person wearing the mask has one that fits appropriately and provides the right level of protection (there are different mask sizes for larger or smaller faces for example) and that they know how to get the best fit when putting the mask on. Protection of the workforce is an employer competency under HSE legislation. If a person fails "fit testing" then other mitigations must be applied to make the working environment safe, or the worker must not be exposed to that unsafe working environment. DHSC worked hard to overcome inequalities in fit testing results through purchasing a broader range of differently fitting masks (more than 16 different types) and funding a national fit-testing programme. The centralised fit-testing program ensured that a large number of staff have been successfully fit-tested (CW2/8).

v. **Vaccines/Treatments:** The NHS has led on deployment of vaccines, and monitors variation in demand between local areas and for different groups of eligible people. Work to identify and pre-emptively address inequalities in COVID-19 vaccine uptake was undertaken from the start of the vaccination deployment programme in December 2020. This drew on critical insight pre-dating the pandemic and the development of a vaccine, from within the NHS and from trusted stakeholder organisations including Local Government. This included:

    - information-gathering about the historical uptake of other NHS-led services

- variation in awareness and trust levels related to the NHS and wider public sector services
- historical and emerging evidence about attitudes to vaccination (and the new COVID-19 vaccines) in different groups of the population, and about different behavioural drivers of uptake.

The approach evolved rapidly during the earlier stages of vaccine deployment with further new insight from citizens and feedback from trusted stakeholders. The programme drew on the World Health Organisation's '3Cs' model of vaccine hesitancy (barriers pertaining to confidence, complacency, and convenience). To increase accessibility, flexible and mobile delivery models were employed. Local community champions were also supported to build trust within their communities. We continue to monitor data to identify low-uptake geographies and communities and provide targeted support (CW2/9).

vi. **Legislation:** In response to concerns over scrutiny of lockdown Regulations, on 30 September 2020 the Secretary of State for Health and Social Care committed "that for significant national measures with effect in the whole of England or UK-wide, we will consult Parliament; wherever possible, we will hold votes before such regulations come into force". An example of the Government seeking Parliament's approval of a lockdown regulation before it entered into force was the Local Covid Alert Level (or tiering) Regulations, which were made and laid on 12 October 2020, debated and approved by the House of Commons on 13 October, and came into force on 14 October.

vii. **Global Threats:** DHSC and other Government departments drew on the already strong international relationships, for example through the G7, G20 and global health security programmes, to progress battle plan actions with international implications or dependencies. The pandemic demonstrated that important areas within the Global Health architecture needed strengthening. Work since the pandemic has focussed on strengthening the International Health Regulations (2005) (IHR) (see Module 1 Corporate Statement, paragraph 305). A series of amendments are currently being discussed to strengthen global health security. The UK is also supporting the development of a new legally-binding Pandemic Instrument, which (subject to negotiations) will place various obligations on member states designed to strengthen global pandemic prevention, preparedness, and response. The Conceptual Zero Draft is exhibited at (CW2/10).

viii. **Operational Response:** The Department's Operational Response Centre undertook an internal and rapid lessons learned review in 2020 to evaluate how the Department had led the health and care sector response between January and June 2020 (CW2/11). The findings of the Review were shared with the Secretary of State as policy advice rather than a formal review. The findings of the Review were also turned into a list of actionable recommendations focused on eight key lines of enquiry. In late 2020 to early 2021, a review of the implementation of the recommendations was undertaken. This exercise was assessed by the Government Internal Audit Agency (GIAA) as part of a follow up review on COVID-19 Advisory work in 2022 (CW2/12).

Current reviews

12. The Department, in collaboration with agencies such as the UK Health Security Agency (UKHSA), has completed, or is in the process of conducting, a number of reviews into our preparedness for a pandemic:

    i. **Pandemic and Emerging Infectious Diseases capabilities review** (complete): following the decision to expand the scope of pandemic preparedness to address a broader range of public health hazards, a capabilities review was conducted by DHSC to identify pandemic and emerging infectious disease preparedness and response capabilities across the health and social care sector. The final review is exhibited at (CW2/13).

    ii. **Portfolio scope and governance** (ongoing): based on the outputs of the capabilities review, the Department is designing a new pandemic preparedness portfolio for the health and social care sector and is reviewing governance arrangements for emerging infectious disease preparedness. Relevant portfolio and governance papers are exhibited at (CW2/14-CW2/17).

    iii. **Review of Clinical Countermeasures** (ongoing): clinical countermeasures were previously held for an influenza pandemic and pandemics caused emerging infectious disease outbreaks. Building on the lessons of COVID-19, the review of clinical countermeasures has sought advice on the products that should be held, or otherwise contracted for, to expand UK preparedness for a wider range of infectious disease risks. Relevant governance papers regarding the clinical countermeasures review are exhibited at (CW2/18-CW2/21).

13. Most recently, the Cabinet Office led 2022 National Security Risk Assessment (NSRA) on the impacts of a future Pandemic which is based on a pathogen-agnostic Reasonable Worst-Case Scenario (RWCS) rather than the impacts that might result

from an influenza pandemic as in previous editions, as I discussed in my first statement. The assessment includes details of possible variations including a contact-based pandemic and a novel coronavirus type pandemic. The assessment continues to highlight the significant risks posed by an influenza pandemic, which experts still consider to be the most reasonable and impactful manifestation of a future pandemic and, as such, an influenza type underpins the pathogen agnostic RWCS for Government pandemic preparedness planning.

14. Through the Pandemic Diseases Capability Board (PDCB), which is the successor to the Pandemic Flu Readiness Board (PFRB), the Department is also working with UKHSA, the Cabinet Office, and other departments and agencies across the UK Government and the Devolved Governments to supplement the unmitigated pandemic RWCS within the 2022 NSRA with an additional review of the risks posed by substantial public behaviour changes. This will help to enhance the Government's view of the risks posed by mitigated pandemic scenarios where non-pharmaceutical interventions are deployed to reduce the transmission of the virus. This review is ongoing and anticipated to conclude later this year.

15. As part of this move to a pathogen-agnostic approach, in December 2020 the Pandemic Influenza Preparedness Programme (PIPP) took the decision to expand its remit to cover a broader range of pandemic threats (CW2/22) and has now been renamed the Pandemic Preparedness Portfolio (PPP). UKHSA, NHS England and the Department are working with partners across the health and social care system and wider Government to coordinate delivery of the new pandemic preparedness portfolio. This included work to undertake a review of historical pandemic exercise recommendations, and work to review and ensure the consistency and productivity of the programme's risk management system (CW2/23, CW2/24). DHSC has now refreshed the PPP risk register following consultation with NHSE and UKHSA and revisited all recommendations made for pandemic influenza planning through national level exercises since 2007. With the exception of a handful of recommendations on NHS and Adult social care surge and triage arrangements, which are subject to ongoing consideration, we have assessed the work in response to these recommendations to be concluded. Furthermore, the context has changed significantly since the surge and triage work was originally commissioned by PIPP in [insert date]; the COVID-19 response has demonstrated that HMG is able to deploy a range of mitigations to avoid a reasonable worst case scenario materialising and services being overwhelmed.

16. New work advanced by PPP since December 2020 includes the review of clinical countermeasures, including PPE, antivirals and other clinical consumables that may require specific stockpiling or be subject to other commercial procurement arrangements for emergencies. As part of this review, expert advisers have produced a range of RWCS pandemic and High Consequences Infectious Disease threats including different transmission modes. This review is also considering the products, volumes and storage and governance arrangements required for a broader set of future pandemic and infectious disease risks, in addition to pandemic influenza. It will also address some of the relevant findings and recommendations contained in the Boardman Review and the NAO report as described above. The PIPP papers from October 2022 are exhibited at (CW2/25-CW2/28).

17. As an example of how the review of clinical countermeasures has already enhanced our preparedness for future infectious disease outbreaks, a procurement of the Imvanex smallpox vaccine (that can be used to treat cases of Monkeypox) to serve as a strategic stockpile was almost complete when the Monkeypox outbreak started in May 2022, supporting a rapid vaccination response and additional procurements.

18. The Antivirals and Therapeutics Taskforce (ATTF) has been gathering learning from the pandemic, collaborating with industry, academia, and trade bodies on the role of antivirals and therapeutics for future pandemic preparedness (CW2/29). Among other objectives, the Vaccines Taskforce (VTF) aimed to strengthen the UK's onshoring capacity and capability in vaccine development, manufacturing, and supply chain to provide resilience for future pandemics. This included a 10-year partnership with Moderna to invest in mRNA research and development (R&D) in the UK, and build a state-of-the-art vaccine manufacturing centre with the ability to produce up to 250 million vaccines a year. A proposed strategic review of the National Pandemic 'Flu Service (NPFS) will explore the feasibility of developing a flexible, cost-effective and adaptable platform for mass medicine distribution, which could be rapidly configured to different pandemic risks and medicines.

19. Further to the external Boardman Review findings detailed above, a Government Internal Audit Agency (GIAA) report was also commissioned specifically on the purchase, storage, and issue of PPE (CW2/30).

20. Finally, in 2022, the Department, via the PDCB, conducted a cross-Government review of new response capabilities built to address the COVID-19 pandemic. The review was based on returns from 16 UK Government departments and their arms' length bodies and identified over 190 response capabilities that organisations had built for COVID-

19. The Department subsequently conducted a review of these capabilities and identified 7 key areas of cross-Government capability that could be enhanced by the PDCB over the following months and years. The results of this review and subsequent recommendations are detailed in the 10 May 2022 PDCB Board Papers (CW2/31-CW2/37). At this meeting of the PDCB, it was recommended that all UK Government departments formally conduct working-level lessons learned activities that cover relevant COVID-19 response capabilities owned within their departments.

21. So far, DLUHC has formally shared its lessons learned in relation to Local Resilience Forums (LRFs) in England with the PDCB due to the cross-cutting relevance of these lessons for many departments and other emergency scenarios beyond pandemics (CW2/38). As I mentioned earlier in the statement, the PDCB board of 10 May 2022 also included an update on the work to identify the impacts of pandemic behaviour change on different departments and sectors (CW2/39-CW2/42). Work on this impact assessment continues with a view to concluding in summer 2023. It is important to note that the Department is not responsible for assuring the preparedness of other Government departments. Lessons learned activities relating to the emergency response of another Government department may be, but are not necessarily, relevant to the Department.

Future and ongoing exercises and plans for resourcing and prioritising the UK's pandemic readiness

22. The Department has continued to test and exercise our emergency response plans and capabilities throughout the COVID-19 pandemic and lessons from these exercises have been applied to strengthen our ongoing pandemic response and preparedness for future incidents.

23. After the success of the Global Health Security Initiative Sample Sharing Framework during the pandemic, work is ongoing to develop the Clinical Trials Framework in collaboration with international partners. This will enable GHSI countries to work more closely in emergency situations, including on sharing of pathogens, data, methods, and results clinical trials, to support progression of principles 6 and 7 of the G7 Clinical Trials Charter.

Future plans for resourcing and prioritising the UK's pandemic readiness.

24. Throughout the COVID-19 pandemic, work has continued within the Emergency Preparedness and Health Protection Directorate to prepare for the impacts of a future novel pandemic scenario. This work has prioritised the delivery of our ongoing pandemic preparedness programme including delivery of risk assessments, key

clinical countermeasures including PPE, and the work necessary to drive forward delivery and accountability for pandemic preparedness across the Health and Social Care sectors and broader Government. As we move out of the pandemic phase, the Department will advice Ministers as appropriate on areas that require Ministerial decision or Cross-Government agreement.

25. As COVID-19 Battleplan functions are closed down, the pandemic preparedness team is working closely with the Battleplan leads and the Centre for Pandemic Preparedness in UKHSA to agree which legacy functions need to be embedded within our ongoing pandemic preparedness function to provide resilience for future pandemic responses.

Reflections

26. For high-level reflections, I point the Inquiry to my first Module 1 statement (paragraphs 433-436).

27. This statement has set out what lessons learned exercises have, are, and will be, conducted concerning the Department's preparedness for future pandemics. This is necessarily a snap-shot in time. The Department is continuously seeking to learn lessons from its own, and others' experiences and to put those lessons into best practice. As such, I reserve the right to add further content to this statement on lessons learned in the future. The Department and I attach a high priority to making a thorough and mature assessment of what we have learned about preparing for pandemics when we think they will be of most assistance to the Inquiry.

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**

10.05.2023

Dated: _____