Witness Name: Sir Frank Atherton

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UK COVID-19 INQUIRY

WITNESS STATEMENT OF SIR FRANK ATHERTON

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I, Frank Atherton, will say as follows: -

Preface

1. The purpose of this statement is to assist the Inquiry to investigate the healthcare decisions made during the pandemic, the reasons for them and their impact, so that lessons can be learned, and recommendations made for the future.

Background

2. I was appointed as Chief Medical Officer for Wales ("CMO(W)") on the 1 August 2016 and remain in that post.

3. I studied medicine at Leeds University following which I worked in a broad range of medical areas, in particular pediatrics, and then completed my training in General Practice. After training as a General Practitioner ("GP") I joined the Voluntary Service Overseas as a District Medical Officer in Malawi between 1 August 1988 and 1 May 1990 where I formed a keen interest in public health. I went on to undertake specialist training and then to practice in public health, travelling to a wide range of different countries including former Yugoslavia, Tanzania, and Bangladesh. I worked as a Director of Public Health in Lancashire and Cumbria for a decade between 1 August 2002 and 1 May 2012 and I have served a term as President of the Association of Directors of Public Health (ADPH) between 1 August 2008 and 1 May 2012. My last job before moving to Cardiff to take up the post as CMO(W) was as deputy Chief Medical Officer for Health in Nova Scotia between 1 May 2012 and 1 August 2016.

Role of the Office of the Chief Medical Officer for Wales

Chief Medical Officer for Wales

4. There has been a separate Chief Medical Officer for Wales since 1969. Prior to that, there was one Chief Medical Officer covering both England and Wales.
5. The role of the CMO(W) is as a member of staff of the Welsh Government. As such the CMO(W) is bound by the Civil Service Code like any other member of the civil service in Wales. There is a difference, however, between the generally understood position of a civil servant which is often summarised as 'advise fearlessly, implement loyally' and the role of Chief Medical Officer. The Chief Medical Officer must retain a high degree of independence and separation from the concerns of the government. Whilst this is not set out in statute or in the job description it is well established by custom and practice. I am

free to provide advice without regard to government policy or direction. The best example of how this independence manifests itself is the writing of the Chief Medical Officer annual reports. In these reports I set out my concerns for the health of the nation and encourage the Welsh Government to respond and the people of Wales to take heed. These annual reports are not subject to vetting by special advisors or clearance by ministers. In my experience ministers have understood and respected the role that I, as an independent medical advisor, serve and they translate my independent advice, along with advice from others, into decisions which affect the people of Wales. This remained the case during the pandemic.

6. Prior to the pandemic I used my annual reports as a way of bringing important public health issues to the attention of the Welsh Government and the public. For example, my annual report for 2016/2017 included a discussion about the public health concerns associated with gambling – "Gambling with our Health" (exhibited in **FAM3CMOW/01 – INQ000066188**). The 2018/2019 Annual Report – "Valuing our Health" considered threats to the health of the people of Wales. In the introduction I noted that "We live in an inter-connected world and recent events, such as the rise in cases of measles across Europe, new and importable diseases such as Ebola and Monkeypox, and the use of chemical agents all serve to remind us that we ignore health protection arrangements at our peril. I will be looking further at ways in which we need to strengthen this aspect of our public health system" (exhibited in **FAM3CMO01/02**– **INQ000066189**).

7. The Chief Medical Officer post in Wales is a Director level post. I report to the Director General of the Health and Social Services Group ("HSSG") who in turn reports to the Permanent Secretary. At the start of the pandemic, Dr Andrew Goodall was Director General of the HSSG and Shan Morgan was the Permanent Secretary. In November 2021 Dr Goodall was appointed as Permanent Secretary and the Director General of HSSG post was filled by Judith Paget.

8. As well as my CMO(W) role, I was also the Director of the Population Health Directorate which is a part of Welsh Government's HSSG. The directorate had responsibilities around health protection, health improvement for the Welsh population, Health and Care Research Wales (which Welsh Government commissions and supports), and (up to April 2022) health service quality and effectiveness. This has since the end of the pandemic been split into two with separate Directors covering Health Improvement and Health Protection.

9. As CMO(W) my role entailed a number of key areas of responsibility which were outlined in the job description as exhibited in **FAM3CMO01-03-INQ000177556.** During the Covid-19 pandemic, these responsibilities continued and in relation to the response of the healthcare system in Wales to that pandemic were enhanced as set out below in summary and expanded upon further in this statement. My responsibilities included:

    a. To provide independent professional advice and guidance to the Welsh Government's Cabinet, the Minister for Health and Social Services, the Deputy Minister for Health and Social Services, and their officials on matters relating to health strategy public health quality and safety research and development and other relevant matters. During the pandemic period this part of my role became central to decision making on non-pharmaceutical interventions to limit the incidence and spread of Covid-19 and I attended Cabinet on a far more frequent basis as outlined in my evidence for Module 2B which examined decision-making in Wales[1]. In relation to matters within the scope of Module 3 advice was provided to the Minister for Health and Social Services, this particularly related to the decisions on shielding which I have detailed at paragraph 190 onwards.

    b. To work with other UK Chief Medical Officers, government departments and key partners to share good practice and engage in the delivery of policy and planned initiatives and develop the profile of Wales. As I will detail in this statement, during the pandemic this entailed regular discussion with the UK CMOs and Senior Clinicians Group to gain intelligence on the healthcare system across the UK which I would feed back into the Office of the Chief Medical Officer, the Health and Social Services Group and the health system. Paragraphs 37 to 73 provided further detail.

    c. To develop and lead public health strategy, policy and programmes working across government departments, Public Health Wales, NHS Wales, local authorities and the third sector to improve health and reduce inequalities. This continued to be a key consideration during the pandemic.

[1]INQ000391115, M2B Witness Statement of Sir Frank Atherton, Chief Medical Officer (CMO) for Wales on behalf of the Welsh Government. Dated 18/12/2023.

d. To be responsible for key quality and safety areas across the NHS in Wales including policy relating to quality, quality standards and overall responsibility for quality assurance and audit. Ensure the focus covers all aspects of healthcare provided in primary and secondary care and through technology enabled integrated care.

e. To be responsible for key processes relating to the ambitious development of relevant health research activity.

f. To play a key role in medical workforce policy develop development and implementation including regulation education training and performance.

g. To provide professional leadership at the national level and within the Welsh Government for the medical profession including medical directors of the NHS organisations, as detailed in paragraphs 31 to 36.

h. To act as the responsible officer for all doctors delivering medical services for or on behalf of the Welsh Government. This also includes to act as higher-level responsible officer for all doctors in Wales.

i. To ensure that quality and professional standards are set for and achieved by all doctors and healthcare professionals employed by or on behalf of the Welsh Government.

j. To foster strong relationships with key national and local organisations including the General Medical Council royal medical colleges professional bodies and professional staff associations.

k. To play an active role in public and stakeholder engagement and communication process is relating to public health quality and safety and planned service improvements.

l. Publish a Chief Medical Officer's annual report each year for the government on the health of the population containing recommendations on priorities to improve health in Wales, as detailed in paragraphs 6 and 10 of this statement.

10. During the pandemic I addressed the Welsh public in a variety of different ways: appearing at the press conferences with the First Minister; providing radio/TV interviews and issuing public messages from the CMO(W) office. My 2019/2020 Annual Report – “Protecting our

Health" was in the form of a Special Report on the pandemic between January 2020 and August 2020 (**FAM3CMOW01/04 – INQ000066190).** In this report I took the opportunity to focus on health inequities and examine the effects of the pandemic on different groups of people in Wales. It is a sad fact that the pandemic exacerbated the situation for many people who are already the most disadvantaged or potentially neglected in our society, worsening pre-existing inequities. The special report outlined the emergence of the pandemic, the early response by the Welsh Government, the initial learning on preventative steps that can be taken in the future, the effects of Covid-19 on health equalities in Wales and the UK and how we emerge from the pandemic to build back better.

Office of the Chief Medical Officer for Wales

11. The Inquiry has asked about the role of the Office of the Chief Medical Officer for Wales. Given my role as Director of the Population Health Directorate (noted above in paragraph 8) it was the Population Health Directorate which provided the Chief Medical Officer with assistance with the public health response.

12. As I will detail below the Population Health Directorate includes a team of professionals and civil servants who assist the Chief Medical Officer in providing advice, analysing health data, and coordinating responses. The Population Health Directorate ensures that the Chief Medical Officer's recommendations are effectively communicated to policymakers and the public. In summary, while the Chief Medical Officer is the senior medical adviser and provides direct advice to the government, the Population Health Directorate facilitates the execution of these responsibilities by supporting the Chief Medical Officer's work. Therefore, in this statement where I have referred to my responsibilities, this includes and is not distinct from the responsibilities of Population Health Directorate which included my Deputy CMOs, Health Professionals and supported by administrative staff.

13. As CMO(W) I am supported by my Deputy Chief Medical Officer ("DCMO"), Dr Chris Jones. Dr Jones deputises for me during any absences and also has a lead role in supporting the health service quality, safety and effectiveness aspects of the Chief Medical Officer role in Wales. The Population Health Directorate also provides administrative support to the DCMO. During the pandemic period the DCMO led on infection prevention control measures in health and social care settings. Further information on this is detailed later in this statement.

14. In April 2021 an additional DCMO, Dr Gillian Richardson, was appointed to lead on issues related to vaccination, which I understand will be considered in depth in Module 4. Prior to taking up this role Dr Richardson had been on secondment to Welsh Government from Public Health Wales as a Senior Professional Advisor to the CMO(W). Her role as advisor to the CMO(W) included general support on public health issues, maintaining effective relationships with Public Health Wales, and helping to coordinate the efforts of Welsh Directors of Public Health.

15. I am also supported in my role by a Health Protection Team and a number of Health Professional Leads who sit within the HSSG. The personnel in this group changed from time to time with health professionals being brought in based on their experience and expertise and what this could bring to the work of the CMO office at the particular time.

16. During the pandemic in particular, experts, such as epidemiologists, were brought in-house. I met weekly with the Health Professional Leads to feed their expertise into Cabinet advice or to assist in responding to commissions coming into the office. Some of the Health Professional Leads sat within other policy areas within the HSSG but they became an informal network during the pandemic period and provided technical/scientific advice to inform the advice coming from the Population Health Directorate. Due to the pace and volume of information coming in on the virus and the proposed measures to respond to it, this was an important group for myself and others in the Population Health Directorate to have a group with expertise to discuss issues and 'test' our understanding.

17. Organograms are provided in exhibit **FAM3CMO01/05- INQ000066199** which shows how the Covid-19 response structure expanded significantly in April 2020 and the number of new workstreams that became part of the wider Chief Medical Officer structure. This included the following:

    a. Emergency planning

    b. Research and development

    c. International evidence

    d. Ethics, Equality, Black Asian, minority ethnic community, inclusion, Deprivation of Liberty[2] and protection of vulnerable adults

[2] In accordance with the Mental Capacity Act 2005

e. Care of the deceased

f. Testing

g. Health Protection Desk

h. PPE

i. Regulations

j. Closed settings

k. Maternal and Child Health

l. Convalescent plasma

m. Vaccination

n. Modelling

o. Mental health, vulnerable and socially excluded groups

p. Recovery/exit from measures

q. Non-Covid-19 health protection

r. The Emergency Co-ordination Centre Wales Desk

s. Shielding

18. It was not the case in all the above the Chief Medical Officer was leading on these workstreams, but these were all workstreams that demanded input from the broader Population Health Directorate within the Welsh Government. Many workstreams were being handled by one person within the Population Health Directorate for example Gillian Richardson was across 5 workstreams. **Name Redacted** was seconded from Public Health Wales ("PHW") from May 2020 until April 2022 as a Public Health Policy Advisor to provide public health policy support and would also support me directly as well as the public health team. **NR** was a Grade 7, which is a grade for experienced officials with significant policy responsibilities.

Private Office

19. As noted above the Chief Medical Officer is supported in their responsibilities by a team of administrative support referred to as "Private Office" which assists with the day-to-day business, managing meetings, typing, and other administrative support.

20. Private Office provides the core administrative and in-house business functions for the Chief Medical Officer

21. My role as CMO(W) assumed a greater level of responsibility and visibility during the pandemic. This was the busiest time of my professional career and a huge challenge. This early stage of the pandemic saw a lot of meetings and workstreams being developed at tremendous pace but from around April 2020 we began to settle into more of a regular rhythm.

22. A copy of my key meetings during the pandemic period is exhibited in **FAM3CMOW/06-INQ000066206.** This notes my meetings from the 20 January 2020 to the 30 May 2022. The key groups and bodies with whom I met are set out in more detail below, however the increase in my meeting commitments from March 2020 onwards is clear from this summary. Prior to the pandemic I would typically have 2 to 3 meetings per day. During the pandemic period, particularly in 2020, 6 to 7 meeting per day became quite normal. For example, on the 23 March 2020 I had 10 meetings which included calls with the NHS Chief Executives, UK CMOs, Technical Advisory Cell, Senior Clinicians and doing a Radio Wales call. Keeping track of the meeting requests, agendas and papers was challenging as the Private Office was not prepared for this level of activity or pace.

23. At the start of 2020 Private Office consisted of a Higher Executive Officer ("HEO") (NR NR) who had taken partial retirement shortly before the pandemic there by reducing her role. There was also an Executive Officer role (NR) who provided business and policy support. The business unit consisted of a Senior Executive Officer ("SEO") (NR) and a HEO (NR). SEO and HEO level staff includes policy officers and officials with specific policy responsibilities but the roles are not leadership roles but supportive. There was therefore no experienced, senior roles directly in the Private Office.

24. When the demands on me increased dramatically in February 2020, with the constant updates and activity around the pandemic, I was aware that there was insufficient administrative support in Private Office to manage the sheer volume of correspondence and information coming in and being requested. My Private Office was needed to support

myself but also the wider Population Health Directorate, which as outlined above was involved in a number of workstreams. I raised this lack of sufficient administrative support with the Director General Health and Social Services, Andrew Goodall, and some additional support was eventually provided.

25. In May 2020 Ffion Thomas also joined my private office as my Principal Private Secretary (Grade 7) and she brought in ad hoc support from NR (SEO) and NR (HEO) to support the existing team but only on a short-term basis to October 2020.

26. The unprecedented demands of the Covid-19 pandemic however remained a constant pressure on my office and the Health Protection Team as outlined in a letter to the Director General for HSSG on the 10 August 2020 set out in **FAM3CMOW/07- INQ000066192.** As I have set out in this letter, I expected to see significant resurgence over the next few months in keeping with international experience. I raised concerns not only with internal Welsh Government resources, but also with PHW resources as well but noting that PHW had funding to recruit additional communicable disease consultants. I particularly raised concerns that there was an expectation for resources within the HSSG to be used to perform new functions such as the Wales Covid-19 Vaccination Programme, the Coronavirus Intelligence Cell and the enhanced Health Protection Advisory Group. I was concerned that the exceptional efforts by staff in the Population Health Directorate that had been made to manage and mitigate the impact of the virus was largely unseen and was unsustainable.

27. Following my letter, I met with Andrew Goodall to discuss these concerns so no formal response was provided as confirmed in exhibit **FAM3CMOW/08-INQ000353108** and **FAM3CMOW/09-INQ000353147**. Andrew agreed with the overall concerns I had raised noting that some would need to be dealt with inside and others outside the organisation. I recall being content with the response from Andrew which is why I confirmed a formal response was not required and I felt his response was commensurate with the seriousness of the concerns I had raised. My recollection is that the concerns or key gaps were addressed adequately and did not give me cause to raise the issue with Andrew Goodall again.

28. NR joined my Private Office in October 2020 as an Assistant Private Secretary (HEO). NR joined the private office in November 2020 as a Private Secretary (SEO). Ffion Thomas left the Private Office in March 2021, arranging for me to have temporary support from Gemma Nye (who was a deputy director at the time) from

February 2021 to August 2021. NR moved to the Vaccination team in January 2022 and NR left the private office in February 2022 to join a policy team.

29. From February 2022 to the end of the relevant period, the Chief Medical Officer's Private Office has consisted of NR and NR.

30. This meant that from May 2020 until February 2022 I had more support in my private office team. While this team of excellent civil servants proved invaluable as the demands of the pandemic increased, on reflection it would have been helpful to have that resource sooner in the initial period January/ February to around March/ April 2020. This did not impact on my capacity to process and understand the information received, in particular that of a scientific or complex nature or my ability to advise the Welsh Government or the NHS in Wales. The issue was administrative support to address the volume of meetings and emails and ensure I had the right meeting information in my calendar, the most up-to-date papers for meetings and that there was some sort of system for logging information coming into my office. I also did not have administrative support within my office to accompany me to informal meetings and take notes on my behalf. This meant that for informal meetings with ministers, officials or the NHS I do not have contemporaneous comprehensive notes of the discussion. I did where possible take informal notes, jot down actions, or points of interest in my notebooks which are not part of the formal Welsh Government record but are available to the Inquiry.

Medical Director of the NHS

31. The role of Medical Director of the NHS in Wales is part of the responsibilities of the Chief Medical Officer for Wales (as outlined in the job description detailed above). I do not consider there to have been any clear delineation between the two roles, particularly in relation to matters within the scope of Module 3 to the Inquiry. The roles were closely interlinked. I am also the Responsible Officer for the Welsh Government which is a designated body for the purposes of the General Medical Council ("GMC") revalidation and I am the Senior Responsible Officer for the medical directors in local health boards and NHS trusts in Wales. This means that I am the professional lead for doctors in Wales.

32. As Medical Director of the NHS in Wales I provide professional leadership at the national level and within Welsh Government for the medical profession, including Medical Directors of NHS organisations. Medical Directors in the NHS are not operational decision makers in their own right, their role is to provide clinical input and medical oversight to NHS bodies and are members of the management Board within the NHS body. It is a

legal requirement for each local health board in Wales to have a Medical Director[3] on its Board. The local health boards have responsibility for the delivery of health services; my role was to coordinate the efforts of Medical Directors through the sharing of common issues and best practice to feed back to their local health boards.

33. Prior to the pandemic I met monthly with the Medical Directors of the local health boards (see further below). The meeting was intended to help the Medical Directors to co-ordinate the delivery of services. This was not an operational decision-making meeting but to provide clinical oversight and support. Matters such as winter pressures and ideas for managing various issues would be discussed. If there had been a change in Welsh Government policy then my meeting with the Medical Directors was an opportunity to set out the policy and outline any changes in approach.

34. In addition to these monthly meetings, it was my practice to regularly visit each of the health boards/Trusts to meet with medical leaders and to visit services in both primary and secondary care. These visits were paused as the pandemic response unfolded.

35. In undertaking the role of Medical Director of the NHS in Wales I am supported by the wider Office of the Chief Medical Officer for Wales which, as outlined above, includes the Deputy CMO(W) and a number of Senior Medical Officers providing clinical professional support and advice to the NHS in Wales.

36. This link to the Medical Directors is an important part of the Chief Medical Officer role but was even more so during the pandemic. The Inquiry has asked, in relation to the advisory groups I engaged with and the individuals or groups that I met with, whether there was any mechanism by which I fed in the views of senior leadership within the NHS in Wales and/or senior clinicians. In my role as Medical Director of the NHS I kept abreast of the situation within the NHS in Wales during the pandemic. I would regularly attend the Director General Health and Social Services / Chief Executive NHS Wales ("DG HSS"/ "CE NHS Wales") (Andrew Goodall) calls with the Chief Executives of the NHS as well as meeting with the Minister for Health and Social Services and I would feedback information from my meetings with the Medical Directors. The Information I gleaned from within the NHS informed all of the advice that I gave, and the dual role Chief Medical Officer and Medical Director NHS Wales meant everything I learned from my Chief Medical Officer

[3] Referred to as Medical Officer in the legislation (The Local Health Boards (Constitution, Membership and Procedures) (Wales) Regulations 2009)

INQ000416178_0014

colleagues, SAGE and TAG (which I detail further below and which themselves included senior clinicians) informed my work with the NHS.

Four nations Chief Medical Officers

37. Prior to, and during the pandemic, myself and the other three Chief Medical Officers ("the UK CMOs") in the UK had excellent working relationships and shared information freely and frequently. Prior to the pandemic, the UK CMOs tended to meet quarterly with the chair of the meeting being rotated. Professor Chris Whitty became Chief Medical Officer for England and Chief Medical Adviser to the UK Government in Autumn 2019 and from then a more informal approach to meetings was adopted by convening the UK CMO's whenever we had something to discuss.

38. The UK CMOs meetings were chaired by Chris Whitty and his office acted as secretariat but if they took minutes or notes these were not shared with the other UK CMOs so there is no formally agreed record of the meetings. I would occasionally take informal personal notes or note any actions for my team but these were for my own personal use and never added to the Welsh Government record or circulated. Overall, the meetings were quite informal and we did not have papers or agendas circulated in advance. Between February and July 2020 these meetings then continued on an ad hoc basis, sometimes up to 3 times a week, before we settled into a rhythm of weekly meetings on Friday mornings from August 2020 and we continue on this basis today with both a review of the Covid-19 pandemic status and scope for wider discussion.

39. These meetings were a means of disseminating information from the UK Government Chief Medical Officer to the Chief Medical Officers of the devolved governments as well as being a forum for discussion between the four UK CMOs. These meetings provided the opportunity to have those discussions. Prior to the pandemic the UK CMO meetings were focused on public health matters rather than the healthcare system. The Chief Medical Officer for England does not have the same Medical Director role as those for the devolved governments. During the pandemic the meetings' focus was on discussing the wider public health measures and non-pharmaceutical interventions that formed part of the response to the pandemic. The Chief Medical Officers from the devolved governments were included in the Senior Clinicians Group meetings (see below) and the discussion related to healthcare systems tended to be focused in that group.

Advisory Groups and bodies in Wales, the UK and Internationally

Within the UK

The Scientific and Advisory Group for Emergencies (SAGE)

40. I was a member of SAGE but I did not attend SAGE meetings and I did not provide advice to SAGE during the relevant period. The Welsh Government was not invited to SAGE until 11 February 2020 and once invited I delegated attendance to Dr Robert Orford to attended on behalf of the Welsh Government, first as an observer and later as a member/expert. Dr Robert Orford would disseminate the advice and information provided in SAGE which would, in turn, inform the advice the advice that I gave about the response to the pandemic. Updates from SAGE also included information coming from the Scientific Pandemic Influenza Group on Modelling, a subgroup of SAGE (see below).

New and Emerging Respiratory Virus Threats Advisory Group (NERVTAG)

41. The New and Emerging Respiratory Virus Threats Advisory Group (NERVTAG) advised the UK Government on the threat posed by new and emerging respiratory viruses. The Welsh Government did not have any representation at NERVTAG. TAC did not see any papers from NERVTAG prior to them being shared with SAGE. We received these papers from SAGE prior to each meeting. Whilst Wales was able to have an observer on NERVTAG (either Rachel Jones or Catherine Moore both virologists from Public Health Wales), it took some time for the Welsh Government to be added as an observer despite several attempts to join the group or request access to material. As an observer we were unable to gain access to draft papers.

42. Prior to Rob Orford attending SAGE (from the 1 February 2020) the main source of information from and to NERVTAG was the four nations UK CMOs discussions as the Chief Medical Officer England, Professor Chris Whitty, and his office had access to NERVTAG.

43. I did not hold a formal role in providing advice to NERVTAG, nor was it a forum in which I would raise the views of senior leaders or clinicians in the NHS. However, in early February I contacted the Deputy Chief Medical Officer for England, Jonathan Van Tam by email, exhibited in **FAM3CMOW01/10 - INQ000383582** requesting he share a paper with NERVTAG, which I exhibit in **FAM3CMOW01/11 - INQ000383583.** This paper was entitled 'Proposal for the testing of 'possible cases' of 2019-nCoV at Wales Specialist Virology Centre, Public Health Wales'. At that time all UK testing for

novel coronavirus was carried out by the Respiratory Virus Unit in Public Health England at the Colindale Laboratory. The Colindale test result was treated as the definitive result, however turnaround times for results from Colindale were exceeding 36 hours. This paper asks NERVTAG to endorse the test we were using in Cardiff and to note that it would be our intention, if the Cardiff 2019-nCoV test result was negative, to stand down actions with respect to enhanced health protection and infection control procedures for this virus. Public Health Wales would however continue to send a second sample to Colindale.

44. Advice from NERVTAG was important for informing the advice that I gave to the healthcare system. For example, as outlined in exhibit **FAM3CMOW01/12 - INQ000384630,** in April 2020 the then Chief Nursing Officer, Jean White and I sent out a letter giving professional advice on appropriate behaviour in hospitals for first responders to COVID 19 patients suffering cardiac/respiratory arrest. There was a difference in opinion between advice given by the Public Health England PPE guidance, which in Wales we had signed up to and that set out by Resuscitation Council UK. A request was made to NERVTAG to provide advice on the evidence which subsequently confirmed NERVTAG's view that chest compression and defibrillation does not constitute an aerosol generating procedure (AGP). A copy of the letter issued to NHS Wales Medical Directors on the 7 May 2020 is exhibited in **FAM3CMOW01/13 - INQ000299272** and summarised the NERVTAG advice that the evidence does not support chest compressions or defibrillation being procedures associated with a significantly increased risk of transmission of acute respiratory infections.

Scientific Pandemic Influenza Group on Modelling

45. The epidemic modelling from the Scientific Pandemic Influenza Group on Modelling, Operational sub-group (SPI-M-O) and Independent Scientific Pandemic Insights Group on Behaviours (SPI-B) for behavioural considerations were also important in informing early SAGE advice on Covid-19. I did not attend or advise SPI-M-O. Fliss Bennee who was part of the CSAH team and worked closely with the CSAH attended on behalf of the Welsh Government.

46. The information from SPI-M-O was fed into the Technical Advisory Group although Marion Lyons, who was part of the Population Health Directorate, was a member of the SPI-M-O. The SPI-B meetings were attended by Dr Heather Payne, who was also part of my Directorate, so we had more direct information into the Population Health Directorate from these sources as well.

47. SAGE and its subgroups informed and shaped the response of healthcare systems in Wales to Covid-19 through Technical Advisory Group (see below), which reviewed the advice coming from SAGE and its subgroups. The Technical Advisory Group, once established, brought together the information from SAGE and was the main source of information relied upon by myself and the Population Health Directorate.

The Joint Biosecurity Centre

48. The Joint Biosecurity Centre ("JBC") was established by the UK Government to provide evidence-based, objective analysis, assessment and advice to inform local and national decision-making in response to Covid-19 outbreaks. This operated on the basis of a four-nation partnership and provided inputs at different levels into Welsh Government. The JBC had a Technical Advisory Board which included the UK CMOs and the JBC informed the UK CMOs advice on the UK alert levels. The JBC data helped to inform the UK alert levels which myself and the other UK CMOs agreed jointly and then made recommendations to our respective Ministers about what the change of the UK alert level may mean for our particular nation. There were 5 levels:

    Level 1: COVID-19 is not known to be present in the UK.

    Level 2: COVID-19 is present in the UK, but the number of cases and transmission is low.

    Level 3: a COVID-19 epidemic is in general circulation.

    Level 4: a COVID-19 epidemic is in general circulation; transmission is high or rising exponentially.

    Level 5: as level 4 and there is a material risk of healthcare services being overwhelmed.

49. Alert Level 5 seeks to incorporate the risk of healthcare services being overwhelmed alongside transmission of the virus. JBC defined the material risk of healthcare services being overwhelmed as an inability to provide acute, life-saving treatment to critical patients in need (i.e. when an NHS hospital cannot admit any more critical-care patients). It was agreed that if the JBC recommends that the decision to escalate to Covid-19 Alert Level 5 that should be made in consultation with the directors and contingency planners of NHS hospitals and should be based around their predicated capacity, which includes surge and mutual aid. The methodology that was agreed for assessing the risk to

healthcare services is set out in detail in exhibit **FAM3CMOW01/14 - INQ000385654**. The methodology in summary was that the JBC monitored two metrics:

a. the number of COVID-19 patients currently in UK hospitals

b. the doubling time of estimated new infections in the UK 4.

50. Using a simple mathematical model of exponential growth, the JBC would estimate if bed capacity would be exceeded in the next 21 days. Escalation to Level 5 was intended to help prevent the NHS from being overwhelmed and therefore should be triggered well before capacity is exceeded (hence the 21-day window), thereby allowing potential NPIs or policy changes to have a beneficial impact.

51. Recommendations from the JBC were usually discussed at the UK CMOs meeting. Professor Chris Whitty's office would then prepare the written joint advice and then circulate for comment. The emergence of the JBC helped to develop and systematise UK intelligence and operational technical advice for Covid-19 and ensured consistency and equity of access to information and outputs which was fed into the Technical Advisory Group to help inform advice to Ministers on the non-pharmaceutical interventions and to the HSSG to prepare for potential periods of increased demand.

Within Wales

Public Health Wales

52. Public Health Wales NHS Trust ("Public Health Wales") is the national public health agency in Wales and its statutory functions include provision and management of a range of public health services relating to the surveillance, prevention and control of communicable diseases. It also develops and maintains arrangements for making information about matters related to the protection and improvement of health in Wales available to the public in Wales and undertakes and commissions research into such matters as well as undertaking the systematic collection, analysis and dissemination of information about the health of the people of Wales.

53. Given Public Health Wales's statutory functions and my role as CMO(W) and Director of Population Healthcare prior to the pandemic we worked closely and this continued and developed during the pandemic.

54. The role of Public Health Wales was significant throughout the pandemic and it provided an important source of information and advice both in terms of scientific, technical expertise but also in terms of the wider impacts of Covid-19 in Wales

55. Public Health Wales issued or assisted Welsh Government policy officials to develop and issue guidance for Covid-19, including in respect of infection prevention and control ("IPC") advice as detailed further below in this statement. In addition, Public Health Wales also provided a wealth of data via their Public Engagement Survey which they started conducting around April 2020. Each week, Public Health Wales would conduct interviews with people across Wales, to understand how Covid-19 and the measures being used to prevent its spread were affecting the physical, mental and social wellbeing of people in Wales. The outcome of this survey would be provided to the Welsh Government's Knowledge and Analytical Services team and provided an important insight into the impact of the Welsh Government's response to Covid-19 which was used to feed into decision making for non-pharmaceutical interventions but also provided insight into public perception of the NHS in Wales. For example, the report produced for the week of 11 -17 May 2020 indicated 96% of those surveyed were satisfied with the NHS response to the pandemic. A copy of this report is exhibited in **FAM3CMOW01/15– INQ000252518.**

56. Public Health Wales provided advice directly to the HSSG and the Welsh Government's Technical Advisory Cell but I would also meet with Public Health Wales colleagues regularly. This was ad hoc in February but from March 2020 we developed a rhythm of twice weekly check-ins or catch-ups with Public Health Wales, some with the Public Health leads or with Tracey Cooper, the Chief Executive, and with some additional ad hoc meetings if there were specific issues to discuss. These then found a rhythm of weekly meetings from September 2020 to December 2021 and now still take place monthly with a wider scope in 2022.

57. Public Health Wales also provided my office with regular advice, this was more formalised in October 2020 with Public Health Advisory Notes. Some of this advice was commissioned by myself or my office but Public Health Wales would also send me unsolicited public health advice at times as well if there were matters they were working on or had intelligence from their networks. Any advice was considered and if appropriate incorporated into my advice, be it verbal or written, to Ministers.

58. The Public Health Wales advice notes focused on the wider public health measures and not on the response of the healthcare system. These notes covered a range of issues focussed on the public health response to Covid-19 including advice on social distancing,

public communications, and non-pharmaceutical interventions. In terms of relevance to Module 3 the advice notes would provide summary of the epidemiological position in Wales, infection rates, variants of concern and the use of vaccination to control transmission. These advice notes were again particularly helpful in relation to advice to Ministers on the imposition or non-imposition of restrictions in Wales. I have exhibited the first of these notes by way of example in **FAM3CMOW01/16 – INQ000385726**. In this note Public Health Wales confirmed the recent advice from SAGE in relation circuit breakers, working from home, face to face teaching, closing of hospitality and shielding of individuals and stressed the need to have a sufficient reduction in transmission rates before the end of December to be able to offer the public some normality.

Welsh Government's Technical Advisory Group and Cell

59. At the beginning of the pandemic Wales did not have a suitable multi-professional independent expert SAGE-like committee. Robert Orford and I agreed that a technical and scientific advisory cell within the Welsh Government would be useful in order to provide advice to officials and ministers which was specifically tailored to Wales. On 27 February, the Welsh Government established a Technical Advisory Cell ("TAC"), which is chaired by Dr Robert Orford, as Chief Scientific Adviser for Health. TAC provided scientific and technical information interpreted for Wales in adherence to advice provided by the UK SAGE. The TAC worked alongside the Technical Advisory Group ("TAG"). Membership of TAG included experts from Welsh Government and PHW.

60. The first TAG meeting was held on 3 March 2020. The Terms of Reference for TAG are set out in **FAM3CMOW01/17 – INQ000177396.** The purpose of TAG, as outlined in the Terms of Reference was to:

    a. Interpret SAGE, COBR and other relevant working group outputs into the Welsh context.

    b. Commission and interpret models, research outputs and measurements that are specific to Wales.

    c. Help inform NHS, social care and wider public sector planning guidance.

    d. Relay relevant information and questions from the Welsh Government to SAGE.

    e. Support a collegiate approach to research in all areas of Covid-19 across the Four Nations.

f. Ensure that the Welsh Government and PHW have timely access to the most up-to-date scientific and technical information related to the outbreak.

61. TAC briefings very much informed my advice to Ministers as set out in Cabinet meeting papers and recorded in minutes.

62. The establishment of TAC and TAG as part of Welsh health emergency infrastructure meant that emerging information was shared with trusted stakeholders in a timely and secure manner to inform regional and local planning for Local Authorities and NHS organisations. TAC enabled Wales specific modelling to be created. Rather than working from UK modelling for reasonable worst-case scenarios (and applying a rough 5% population estimate to down scale for Wales) TAC modelling was able to consider the "Welsh context" meaning that the modelling was applied to the different population areas in Wales linked to the health board boundaries. Wales specific reasonable worst-case scenarios were extremely helpful. Regular modelling updates were published by TAC from May 2020, the first of which is exhibited as **FAM3CMOW01/18- INQ000066276.** This explains that NHS England model was adapted for Wales and scaled for lower geographic levels for planning purposes. The subsequent modelling updates issued by TAC are available for the Inquiry if required.

63. TAC would also provide guidance to the healthcare sector on specific issues, for example in exhibit **FAM3CMOW01/19- INQ000312124** advice was provided on Moral Injury in Health Care Workers during the Covid-19 Pandemic, which noted the impact on healthcare workers who engaged in, failed to prevent, or witnessed acts that conflict with their values or beliefs, examples of which during the pandemic included being present at a patient's death when the patient was without loved ones present, allocating restricted resources to severely unwell patients as well as potentially feeling let down by others with regards to their safety. The paper provided a number of practical recommendations for managers and senior NHS leaders to consider to support healthcare workers at risk of or who had experienced moral injury.

64. TAC, in addition to the information coming from SAGE, was receiving data from a variety of sources to inform its reports and briefings. The information flows from TAG and TAC were the primary source of expert, medical and scientific advice to the Welsh Government and this was cascaded down to other key bodies and organisations such as Public Health Wales, NHS bodies and local authorities in Wales. An illustration of this information flow

is set out in exhibit **FAM3CMOW01/20– INQ000068507** which shows the direct sources of information coming into TAG as from the following SAGE subgroups:

a. Research subgroup

b. Environmental subgroup,

c. Risk communication and behavioural insights subgroup

d. Policy modelling, and

e. Children and education subgroup.

65. There were also direct inputs from the TAG subgroups:

a. All Wales national modelling forum,

b. International intelligence subgroup,

c. Four nations modelling subgroup,

d. PHW COVID-19 Vaccination board,

e. Virology and testing technical advisory group,

f. Socioeconomic harms subgroup.

66. There were additional direct inputs from the vaccination team and the Test Trace Protect ("TTP") national overview (which refers to the contact tracing and protect support system in Wales designed to interrupt the spread of transmission of Covid-19 by ensuring cases and their contacts isolate). There was also input from the local government, trade unions and other national groups as requested by ministers, PHW strategic steering group, and the NHS strategic planning group.

67. While I was the lead health adviser, TAC/TAG would also provide advice for Ministers and public facing reports. I played only a limited active role in TAC/TAG. Whilst I did not regularly attend TAG or TAC meetings, I had regular informal catchups and email exchanges with both Dr Robert Orford and Fliss Bennee, who co-chaired TAG Dr Robert Orford kept me briefed and aware of emerging evidence and scientific developments from SAGE and the views of TAG throughout the pandemic. TAC/TAG advice was deliberately published separately from my advice as Chief Medical Officer as this afforded us the

opportunity to provide independent scientific advice. In practice, my advice and the advice of TAG/TAC advice did not conflict.

International sources

68. The Population Health Directorate had a wider international network/source of information which we also drew upon. I myself had worked in many different countries so have an informal network/contacts generally who I kept in touch with to discuss areas of professional medical interest rather than advice. Within the Population Health Directorate we had an international evidence workstream lead by Gillian Richardson and **NR** **NR**, supported by public health professionals, which would oversee the international evidence coming in.

69. We, through a variety of routes, had bilateral discussions with a number of countries to try to understand how the epidemic was unfolding in other parts of the world and to see what we could learn from those countries. From my recollection, I participated in discussions with colleagues in South Korea, Germany, Italy and in Sweden. These were informal meetings but were invaluable, because every country has a slightly different perspective and slightly different response and so comparing approaches was important. However, while those bilateral relationships were really useful, we needed a more systematic approach to understanding what is happening across other countries.

70. We did have some extremely good links via Public Health Wales which were made through the International Association of National Public Health Institutes ("IANPHI"), of which Public Health Wales is a member. We also have some links, with the World Health Organisation ("WHO").

71. Public Health Wales produced regular International Horizon Scanning and Learning reports to Inform Wales' Covid-19 Public Health Response and Recovery. These reports focused on Covid-19 international evidence, experience, measures, transition and recovery approaches, to understand and explore solutions for addressing the on-going and emerging health, wellbeing, social and economic impacts (potential harms and benefits).

72. Later during the pandemic, the Covid-19 International Comparators Joint Unit Data Team (a joint unit between Cabinet Office and the Foreign, Commonwealth and Development Office ("FCDO")) was also a good source of international data. The FCDO and Cabinet Office used international data, including from the FCDO's overseas network, to provide analysis of different countries' responses to the crisis. The FCDO analysis was shared

widely across government departments and with the Devolved Governments to inform policy decisions. The main link of this information to Welsh Government was via Dr Robert Orford and SAGE.

73. The exchange of information on the approaches by other countries was invaluable in helping inform our understanding of the virus and the medical, scientific and operational approaches being taken. This informed the Welsh healthcare system response by helping to stimulate discussions or inform discussions. For example, we followed international data on Long Covid as it emerged. I exhibit **FAM3CMOW01/21-INQ000387162** dated May 2021 which outlined the epidemiology data for Long Covid but in addition summarised what information there was on diagnosis, treatment and the policy response. At that time this noted that:

    a. There was no simple symptom or test for diagnosing Long Covid.

    b. No specific treatment of Long Covid-19 had been identified yet.

    c. More robust data, surveillance mechanisms and a consensus around Long Covid definition was needed to better understand the symptoms, improve treatment services and allocate resources more appropriately to support patients and families.

    d. Surveillance was a critical part of monitoring Long Covid but is not widespread in Europe,

    e. Multidisciplinary collaboration and management was essential to provide integrated outpatient care to survivors of Covid-19.

    f. Patients with Long Covid often report their difficulties were not taken seriously.

    g. Policy response needs to take account of the complexity and dynamic evolution of Long Covid,

    h. National health system responses include development of dedicated treatment guidelines and pathways, and creation of post-Covid clinics and online support tools.

74. This information was helpful to inform policy discussions in Wales on Long Covid-19 support. Further information on Long Covid is set out later in my statement at paragraph 109.

75. I am asked how I ensured the accuracy and reliability of information I had received from the sources summarised above when formulating my advice. The expert groups and, in particular SAGE considered papers from many sources including the Covid-19 Genomic UK Consortium, Imperial College London, London School of Hygiene and Tropical Medicine, Manchester Epidemic Group and many academic, clinical and other groups. Members of SAGE and other expert groups came from over 20 different institutions and covered a wide area of expertise, including: molecular evolution, epidemiology, clinical science and practice, modelling emerging infectious diseases, behavioural science, statistics, virology and microbiology. Within Wales TAG reviewed all the data they used to produce their advice and I trusted TAG as a data source when formulating my own advice. I would routinely review the TAG and TAC advice and reports and provide comments where appropriate, but I would not routinely review all the data sources used to compile the advice. The TAG reports covered a range of issues related to the Welsh Government's response. Not all these reports are relevant to Module 3 but where they are I have highlighted theses in the body of this statement.

Bodies or individuals with whom the Office of the Chief Medical Officer worked with during the relevant period

The Welsh Minister for Health and Social Services

76. Before Covid-19 I would meet regularly with the Minister for Health and Social Services ("MHSS") about a wide range of issues. I saw my role as providing a broad overview of the Welsh population's health; highlighting areas of concern that needed to be considered by the Government in Wales. Some examples of issues that I advised the Welsh Government on prior to Covid-19 childhood obesity and the importance of research and innovation.

77. In the first few months of the pandemic, I accompanied the Minister for Health and Social Services ("MHSS") and the First Minister to some COBR meetings and/or the pre/post meets in order to discuss the data and information coming in from the UK CMOs and SAGE. I ensured that they had the most up-to-date information as I received it. I would also provide advice in any Ministerial Advice (MA) documents officials would be sending to Ministers to note or to make decisions on. My contribution or that of the Population

Health Directorate to MAs was on the request of the submitting policy official, therefore formal advice was not provided on all MAs, only those where a need for medical advice was required.

78. I would also provide advice to Ministers at Cabinet Meetings. The Cabinet, chaired by the First Minister, is the principal decision-making body of the Welsh Government and it was here where key decisions about the Welsh Government's Covid-19 response were made. Decisions on the healthcare response to the pandemic were however not taken at Cabinet level. Those were decisions for the Minister for Health and Social Services. Initially, I attended Cabinet on an ad hoc basis but once we got into a regular pattern with the 21 day review process for the Health Protection (Coronavirus) (Wales) Regulations 2020 I would typically attend every three weeks although occasionally officials from my office would attend on my behalf and brief me.

79. There was, from around mid-April to October 2020 a weekly, usually Monday morning, check-in meeting with the First Minister and Minister for Health and Social Services and attended by key officials as well as myself and Dr Robert Orford. This was a "sit-rep" style meeting and the updates from myself and Dr Robert Orford would inform the First Minister and enable him, along with the Minster for Health and Social Services to set the tone for the priority areas for officials that week or leading up to the 21 day review period ahead of Cabinet meetings to decide on the Covid-19 response. This would include discussion on the wider healthcare response, but at a high level (as oppose to operational detail) with a focus on the assessment NHS capacity.

80. In putting together advice for ministers or making decisions in response to Covid-19 I pulled together various inputs of information and data coming into the CMO(W) office from wider UK sources such as the UK CMOs, the Senior Clinicians Group and the JBC as well as the sources in Wales via TAC, KAS and PHW. My principal role throughout the pandemic was to present to Ministers a summary of all those various inputs. That summary needed to be based on the most up to date information, succinct and relevant to the issues and recommendations being put by policy officials before the Ministers. In order to produce that summary, I was heavily reliant on the timely input of others and was required to place a high level of trust and faith in the data and work in close collaboration with colleagues such as Dr Robert Orford. Where appropriate I would input on the views of the Medical Directors in Wales. Dr. Andrew Goodall, and later Judith Paget, as Chief Executive NHS Wales would provide the 'voice' of the leaders of the healthcare system.

Health and Social Services Covid-19 Planning and Response Group

81. A new group was established in February 2020, the Health and Social Services Group Coronavirus Planning and Response Group ("Covid-19 Planning and Response Group"). I attended this meeting on occasion myself but often members of my team attended instead, particularly Gillian Richardson. The Covid-19 Planning and Response Group brought together strategic representatives of the Health and Social Services Group ("HSSG") of Welsh Government, NHS Wales and Social Care. The terms of reference are set out in **FAM3CMOW01/22- INQ000066198**. As noted in the terms of reference, its role was to share national information, including the latest risk assessments, examine and seek to address sector concerns; clarify and set out key planning and response structures; and identify appropriate contingency measures.

82. As part of the Health and Social Services Covid-19 structure (as outlined earlier in **FAM3CMOW01/05 – INQ000066199** above) there was the main Planning and Response Group (Chaired by Samia Edmonds and co-chaired by Gillian Richardson, the latter being in my team) and seven sub-groups. The sub-groups were:

    a. Social Care

    b. Primary and Community Care

    c. Acute Secondary Care (co-chaired by Chris Jones, DCMO)

    d. Workforce deployment and well-being

    e. Digital

    f. Essential services, and

    g. Health Countermeasures (which fed up to the PPE supply cell)

83. A number of the workstreams in the Population Health Directorate fed into the main group and its subgroups. Additionally, as illustrated in exhibit **FAM3CMOW01/05 – INQ000066199** another group or cell was formed consisting of myself, Jean White, the Chief Nursing Officer for Wales, Albert Heaney, Director of Social Services, Samia Edmonds, Chair of the Covid-19 Planning and Response Group and Andrew Goodall, the Director General of the HSSG and Chief Executive of the NHS in Wales. In terms of structure, this sat between the MHSS and the Covid-19 Planning and Response Group but more than anything it was a regular meeting at which myself and others responsible

for key areas in the HSSG could discuss issues with Andrew Goodall as Director General. These meetings covered general updates and sharing of information and agreed implications for the health and social care system. I also had regular separate one to one meetings with Andrew Goodall to keep him up to date with events from a public health perspective but he was also very engaged in meetings with MHSS and FM so had a number of information sources.

The Chief Scientific Adviser for Health

84. The Chief Scientific Adviser for Health is responsible for the science advice provided to the Welsh Government and Welsh Ministers. The Job Description for the Chief Scientific Officer for Health is exhibited in **FAM3CMO01/23- INQ000177490** and in summary outlines the role as covering the following:

    a. To provide impartial and expert advice to Welsh Government generally and the health and social services group specifically on the scientific aspects of healthcare.

    b. To advise on all statutory duties for those areas of health policy relevant to Health Science ensuring high compliance with quality and patient safety standards.

    c. To provide clinical leadership working with local health boards directors of therapies and Health Science to develop implement and evaluate Health Science strategies to ensure developments across the full spectrum of health and social care reflect Health Science contributions and align with the Welsh Government policies.

    d. To lead and support the local health boards directors of therapy and Health Sciences in the development of strategies which enable scientific staff to fully contribute to the shift of emphasis from in hospital to primary and community based care including working in partnership with other agencies where appropriate.

    e. To support the development of systems which maximise the potential benefits of new technologies and promote evidence based practise and high quality research activity among therapy and Health Science staff to ensure prudent health and care principles are embedded into daily practice.

f. Maintain and develop professional links and networks for the scientific and therapy professions in Wales, at the UK government department the agencies and expert committees.

g. To develop and support the effective use of resources within the scientific disciplines.

h. Contribute to the work of a team of health professionals working on policy development planning and implementation to meet the objectives of the Welsh Government to improve the health and well-being of the people of Wales.

i. To represent the Welsh Government in professional collaboration and dialogue with colleagues within an outside government department in the field of Health Science

85. During the pandemic period the Chief Scientific Adviser for Health took up a significant role as chair of the Technical Advisory Group and the advice provided to the Welsh Government and the Welsh Ministers during this time was a consensus of a group, either TAG or SAGE.

86. My role was very much as lead health adviser whereas the Chief Scientific Adviser for Health was leading on science advice. There was an inevitable overlap in some of these areas of responsibility but I believe that the Chief Scientific Adviser for Health and I managed this interface effectively in providing our advice to Ministers. Where I worked particularly closely with the Chief Scientific Adviser for Health was in relation to the coronavirus restrictions, which included the scientific rationale for social distancing, face-mask, and testing all of which were also considered in healthcare settings. Additionally, my Deputy Chief Medical Officer was a member of TAG and would also engage with the Chief Scientific Adviser on emerging information on the virus.

Knowledge and Analytical Services

87. From early April 2020, statisticians in the Welsh Government's Knowledge and Analytical Service ("KAS") compiled a regular "data monitor". An example how the data monitor looked is exhibited in **FAM3CMOW01/24 – INQ000215296.** This was developed in recognition of the need for a single document containing a rounded view of data covering all aspects of the pandemic to support multiple audiences – such as myself, TAC, Ministers and senior policy officials. The monitor brought together the latest data on the

pandemic and provided a concise and timely way to advise Ministers and senior officials on the latest figures and trends. The monitor drew on a wide range of the data sources set out in the earlier part of this statement and covered the following themes:

i. Cases and deaths (later this also included vaccinations)

ii. Health and social care

iii. Shielded and vulnerable people

iv. Attitudes and behaviours

v. Economy and labour market

vi. Public services

88. The monitor, or a version of the monitor, was also later shared with external bodies such as the Police and Crime Commissioners and the Joint Military Command Wales Intelligence Cell. The monitor was generally updated on a weekly basis. This work was led by the Chief Statistician for Wales who I would meet with informally on a regular basis to receive a brief on latest statistical developments or to help to inform any papers I was reviewing or producing myself about the healthcare response in Wales.

Health and Care Research Wales

89. Health and Care Research Wales is a networked organisation which brings together a wide range of partners across NHS Wales, local authorities, universities, research institutions, third sector and others. Its work is led by the Chief Adviser for Research in the Population Healthcare Directorate, Welsh Government and the Director of Health and Care Research Wales, with a team within the Research and Development Division, Welsh Government which has responsibility for health and social care research policy, strategy and funding. Health and Care Research Wales is accountable, via Research and Development Division to myself and the MHSS. During the specified period the Wales Covid-19 Evidence Centre was established as part of Health and Care Research Wales. The Evidence Centre aimed to improve the quality and safety of health and social care delivery by ensuring Covid-19 research was timely and applicable to Wales and undertook a range of research for NHS Wales and for the Technical Advisory Group and its sub-groups.

90. During the pandemic period Health and Care Research Wales funded a NHS research infrastructure covering all our health boards and trusts, which included skilled research nurses, pharmacists and other research related professions. Covid-19 studies and clinical trials had central coordination and oversight through the Health and Care Research Wales' Support and Delivery Centre, which links closely to all NHS organisation's Research and Development departments to deliver the trials. The work of Health and Care Research Wales was reported into the Chief Medical Officer and the Chief Scientific Officer for Wales. I was in regular contact with Professor Kieran Walshe, Director, Health and Care Research Wales during the period. I exhibit by way of example a paper prepared by Kieran Walshe on the role of the Welsh Government and Health and Care Research Wales during initial period of the pandemic, **FAM3CMOW01/25–INQ000310231**. In this document Professor Walshe notes that since the start of the pandemic in February 2020, there has been a major coordinated effort at a UK level to put in place a huge programme of research designed to answer the most pressing and urgent clinical and epidemiological questions about COVID19 – how to diagnose it, how to treat it, and how to prevent its spread. Health and Care Research Wales and Welsh Government were involved in these developments.

NHS Wales

91. To keep abreast of the situation within the NHS I would regularly attend the Director General's calls with the Chief Executives of the NHS. This was attended by all seven local health boards, PHW, Welsh Ambulance Service, Velindre NHS Trust, the NHS Wales Informatics Service[4], the NHS Wales Shared Services Partnership, Welsh Health Specialised Services Committee and the Emergency Ambulance Service Committee. This regular meeting would have a standard agenda which covered a national overview provided either by the Director General or myself, a public health update from Public Health Wales and a discussion between all attendees on any required national action, system risks or organisations updates and assurance. It was used to keep the system informed of developments, to monitor impacts of the pandemic and to share practice on solutions that were being developed.

92. As outlined above, in my role as Medical Director of the NHS I met frequently with the NHS Wales Medical Directors and the Directors of Public Health to help ensure learning and consistency across the health and social care sector. Members of my office would also meet with this group and provide updates or information on key developments to

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[4] NHS Wales Informatic Service functions has now been replaced by Digital Health and Care Wales.

ensure they were sighted on recent developments. For example, on 6 March 2020 Gillian Richardson from my office met with all Medical Directors and provided a joint presentation with PHW on the Covid-19 preparedness. By way of example, I have set out the slides from this presentation in exhibit **FAM3CMOW01/26 – INQ000252504** which outlines the position as it was at the time highlighting the early figures on the virus (a global total of 95,092), 2 cases in Wales and noting the potential for significant burden on the NHS Wales business continuity. The information to the Medical Directors group in this presentation confirmed the working assumption (based on the Imperial College modelling provided to SAGE) that there was expected to be a peak 11 weeks from the start of the epidemic. It was also noted that there would be considerable variation between health boards based on the local timing of the outbreak and size of the population and even when scaling the data for the smaller health board population the indication was that demand would exceed supply.

The UK Senior Clinicians Group

93. In addition to the regular Chief Medical Officer meetings the UK CMOs would also meet to discuss clinical issues at a weekly Senior Clinicians Group and this wider forum helped to maintain good, productive working relationships throughout the pandemic. This group was originally established on an England only base but the other three CMOs were invited to join from the 16 March 2020. Aside from the Chief Medical Officers of the other three nations, membership remained primarily English based, although was extended to devolved Chief Nursing Officers as well. The purpose of the Senior Clinician Group meetings at their inception would need to be confirmed with Professor Chris Whitty. The Chief Medical Officer's from the devolved nations joined to ensure we were sighted on matters and decisions affecting Senior Clinicians in England as these would often replicate the impacts on clinicians in our own devolved areas. The meetings provided the opportunity for the sharing of information and advice on a range of matters including PPE, infection control, testing and many others. Having these sources of professional support during the pandemic, particularly in the early stages, was very important to me and one of the really positive aspects of our pandemic management. The content of these meetings was not routinely reported to the Minister for Health and Social Services but information gained would, where relevant, be reflected or referenced in the advice provided to Ministers and the Director General HSS/Chief Executive NHS Wales about the healthcare response.

Office of National Statistics

94. The Office of National Statistics ("ONS") was a rich source of data and information particularly in respect of understanding the mortality rate of the disease. The Chief Statistician engaged with the ONS but given the ONS's expertise in mortality analysis and their privileged position on access to a wide range of data sources, I wrote to the National Statistician on the 8 July 2020, as exhibited in **FAM3CMOW01/27– INQ000066195** to request analysis of the first wave of the pandemic which explored the factors that may have influenced excess mortality. This could help inform responses to future waves of the pandemic. In my letter I specifically asked if the data could be analysed to confirm if geographical variation could be explained by other factors including deprivation, health, demography, urbanisation, prevalence of care homes, and occupation mix.

95. TAG provided some advice on this in July 2020 in a report entitled Technical Advisory Group: examining deaths in Wales associated with Covid-19. This is exhibited in **FAM3CMOW01/28-INQ000252526.** This report confirmed that there were proportionally fewer deaths in Wales than in the UK as a whole during the first wave of the Covid-19 pandemic and fewer than most parts of England. At that time we did not fully understand why this was the case. It was recognised that the highest death rates were in older people, people from Black Asian and minority ethnic backgrounds and deprived communities so there needed to be a continued focus on identifying and protecting the most vulnerable people in society. Men also had consistently higher mortality rates across all ethnic groups. Only a small proportion of excess deaths were either due to Covid-19 or deaths where Covid-19 was involved but was not the underlying cause.

96. TAG issued a further report in March 2021, as exhibited in **FAM3CMOW01/29-INQ000252532.** This confirmed that the level of excess deaths has been largely unchanged in Wales between the two reports whereas it had fallen in Scotland and many regions of England. There was considerable variation within Wales, and the reasons for these different patterns was not yet fully understood but may reflect the different geographical spread of the virus at different points in the year. TAG agreed that further work is required at a UK level to understand the relationship between COVID-19, policy interventions and deaths in each of the four countries, so that we can mitigate as much harm as possible in future waves. This is a complex piece of analysis and ONS has made progress on this topic, but as of the time of making this statement the request has not yet been completed or published.

97. The work I requested from ONS was finally published in October 2023 as an academic paper which is exhibited in **FAM3CMO/30-INQ000353561.** The analysis focuses on comparisons of excess mortality between the 4 nations of the UK and regions of England rather than an exploration of the factors that may have driven differences in excess mortality.

98. The main findings show:

    a. Across both waves the least affected country or region was the South-West of England and the most affected was London

    b. Across all areas, ages-standardised excess mortality was greater in males than females, this difference became more pronounced in wave 2 (week 37 of 2020 to week 9 of 2021).

    c. In wave 1 Wales (week 11 to week 36 of 2020) had some of the lowest age-standardised excess mortality rates when compared with Scotland, Northern Ireland and the regions of England. However, there was a large increase in age-standardised excess mortality rates from wave 1 to wave 2 for both males and females in Wales. The increase in age-standardised excess deaths from wave 1 to wave 2 was more pronounced for males than females in Wales.

    d. In Wales the male age-standardised excess mortality rate increased two-fold from wave 1 to wave 2. Most areas saw a decrease in female excess mortality in wave 2, the largest fall in the North-East of England. The exceptions were Wales and the East of England. Wales had the largest increase in both female excess age-standardised mortality rate (ASMR) in wave two compared to wave 1.

99. This is a complex piece of analysis and I am pleased that the ONS has made progress on this topic.

Understanding of Covid-19 and sources of information and advice

100. Covid-19 is a disease caused by a new type of coronavirus named SARS-CoV-2. In the UK we had some previous experience of coronaviruses in the form of severe acute respiratory syndrome ("SARS") and the Middle East respiratory syndrome ("MERS"), but Covid-19 was different.

101. My background is in Public Health and is not specific to virology or epidemiology, and given how quickly knowledge and understanding of Covid-19 was changing, the consistent approach that I took during the pandemic was to ensure that the Welsh Government was always provided with the evolving scientific knowledge of Covid-19 from the sources listed below and how it was affecting Wales and the UK, as well as the emerging international experience and evidence in order to inform its decision making.

102. In terms of providing Welsh Ministers with advice on the public health implications of Covid-19 and the measures implemented to deal with it, I pulled together inputs from a set of key significant sources such as SAGE and TAG.

103. My understanding of coronavirus, including the modes of transmission, the mortality rate of the disease, rate of severe illness in infected people and the impact of illness in different cohorts was very closely linked to the information and data coming from the Scientific Advisory Group for Emergencies ("SAGE"). As stated above, we did not receive an invitation to attend SAGE until the 11

104. February 2020. The minutes of SAGE 1, which took place on 22 January 2020 were shared with the Welsh Government with the agreement that the devolved governments would, through their CMOs, liaise directly with Professor Chris Witty, Chief Medical Officer for England.

105. A copy of the email from the SAGE mailbox on the 24 January 2020 to Nia Roberts in the Welsh Government confirming this decision is exhibited in **FAM3CMO01/31-INQ000252498**. From the 11 February 2020, Dr Robert Orford, the Chief Scientific Adviser for Health ("CSAH") attended SAGE and provided me with a summary by email of the issues discussed and the agreed position or information on the virus at that time, a copy of the first such summary from the CSAH to myself is exhibited in **FAM3CMO01/32-INQ000252500.** This email summary from Dr Robert Orford confirmed on the 11 February 2020 data and modelling was discussed. It was still early on and data was uncertain so the reasonable worst case scenario for pandemic influenza was being used for the time being. A later chain in the email went on to summarise that the focus of SAGE on the 13 February 2020 was around school closures, delaying the spread and public behaviours. He confirmed that there was still considerable uncertainty in much of the data and quite a bit of work underway to understand the virus. Restrictions on travel into the UK was touched on but further information was noted to follow on these areas. It was noted that there was very little evidence on the impact of cancelling mass gathering but an interesting

discussion on behaviours which reflected on the need to activate people to take sensible approaches.

106. In **FAM3CMO01/33-** INQ000300197 I have exhibited a document provided by SAGE on the 4 March 2020 which provides a good contemporaneous summary of the extant scientific understanding of Covid-19, compared with pandemic influenza planning assumptions. The assumptions made in this document by SAGE at the time were for the whole of the UK so were not specific to any region.

107. The key conclusions of SAGE outlined in this document were that there was a basic reproduction rate[5] of 2.4, the doubling time[6] was 4.6 days, the incubation period was an average of 5 days (with a range of 1 to 11 days). In respect of the duration of the disease SAGE concluded that most cases would probably resolve 7 days after symptoms start. This meant that from symptom onset to hospitalisation there was an average of 7 days. From onset of illness to discharge from hospital and average of 23 days. In terms of onset of illness to death this was an average of 22 days for severe cases but it was recognised there was a large variation around this with the longest time at that point appearing to be 41 days. SAGE also concluded at this time that the duration of infectivity was likely to vary depending on the severity of individual cases so it indicated 14 days as the upper limit. Peak infectivity was considered to probably be around the start of symptom onset, an average of 2 to 6 days, then falling off rapidly. The current understanding of transmission according to SAGE on the 4 March 2020 was that the transmission route was respiratory and via contact, so touching an infected person and the spray of droplets such as coughing and sneezing. At that point it was noted that asymptomatic transmission could not be ruled out and transmission from mildly symptomatic individuals was considered likely.

108. The fatality rate for the virus was considered to be 2-3% of identified cases only and the infection fatality rate[7] was considered to be 1%. In terms of the age distribution infection fatality rate this was very low for children (0.01% up to age 19) and still low for those in their 20s (0.04%), 30s (0.09%) and 40s (0.15%). The percentages start to increase from then with the over 50s (0.69%), 60s (2.21%), 70s (5.92%) and the over 80s (8.76%). SAGE had high confidence in the age distribution figures.

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[5] This was the number of secondary cases generated on average by one primary case. Suppression of an outbreak requires R to be sustained below 1.
[6] The time required for the number of cases to double.
[7] This is based on the cumulative percentage of all infected included symptomatic and asymptomatic infections.

Long Covid

109. Neither the Office of the Chief Medical Officer for Wales nor I was directly involved in the advice on the identification or characterisation of the post-covid conditions, such as "long Covid", not in formulating protocols or guidance around the condition. Colleagues from the Allied Health Professionals and Rehabilitation Team within the Welsh Government's HSSG lead on this work during the pandemic period and subsequently a Long Covid Coordination Team was established to lead on this work. These teams are not part of the Office of the Chief Medical Officer for Wales or my directorate.

Healthcare provision and treatment for Covid-19

110. The Inquiry has asked me to outline the role of the Office of the Chief Medical Officer for Wales in providing advice or formulating guidance or protocols for the clinical management of Covid-19 in Wales. As outlined above, I am not a virologist or epidemiologist. As noted above expertise was brought in via the Health Professional Leads working across the HSSG. We also engaged with clinical expert groups and the UK CMOs and Senior Clinician Group as outlined above.

111. The Inquiry asked specifically about the following areas which I will address in turn and outline the sources of information/clinical groups which supported the guidance and advice used in Wales:

The use of techniques such as proning.

112. During pandemic period best practice was constantly evolving and this including about how Covid-19 pathways needed to be developed to include methods such as proning (lying on your front). The use of techniques such as proning was noted as part of the UK guidance and taken forward by many health boards without central guidance from the CMO(W) office or the Welsh Government. The WCCTN report on 'Critical Care - Lessons learned from Welsh critical care units following the second wave of the covid 19 pandemic', as exhibited in **FAM3CMOW01/34-INQ000227419**, noted the usefulness of 'proning teams' that were set up within a number of critical care units and run by physiotherapists and other allied health professionals. Neither the Chief Medical Officer nor the Population Health Directorate had not specific role in providing advice on the use of proning.

The use of new and repurposed medicines.

113. During the pandemic, therapeutic agents such as dexamethasone, tocilizumab, sarilumab and remdesivir were made available for patients hospitalised with Covid-19 in response to the emerging evidence from the platform clinical trial referred to as 'RECOVERY' and commercial and non-commercial clinical trials. Dexamethasone, tocilizumab, and sarilumab are repurposed medicines, licensed for non-Covid-19 indications but had shown to have a beneficial effect on outcomes.

114. Information from the CMO(W) was usually communicated by 'Public Health Links'. Public Health Links are an important means of cascading messages across the NHS in Wales. The Public Health Links are hosted on the PHW website. As out lined below advice regarding the use of new and repurposed medicines to treat Covid-19 was issued by myself via Public Health Links, however this advice was produced by the Chief Pharmaceutical Officer for Wales, Andrew Evans.

115. A paper provided by the Chief Pharmaceutical Officer for Wales, to EDT on Deploying therapeutic agents for the management of COVID-19 sets out the background and Wales involvement. A copy of this paper is exhibited in **FAM3CMOW01/35-INQ000252571** and this outlined the role of the UK Therapeutics Task Force ("TTF") and how it had primarily discharged its responsibilities through a number of UK based clinical platform trials such as RECOVERY, REMAP-CAP (hospital care), PRINCIPLE (primary and community care) and HEAL (Long Covid). The results from these trials helped to identify medical treatments which could improve outcomes, most notably reducing mortality. The trials also identified medicines that have no discernable impact on outcomes (such as hydroxychiroquine, colchicine, aspirin and convalescent plasma). In the paper EDT were asked to agree the recommendation that a letter from the CMO(W) office is issued with a requirement for health boards to develop and implement pathways for the use of neutralizing monoclonal antibodies ("nMABs"). These nMAbs are synthetic proteins that act like human antibodies in the immune system, sticking to the spike protein of the Covid-19 virus to stop it from getting into a person's lungs and causing an infection. This letter was approved and issued on 24 November 2021, a copy of which is exhibited in **FAM3CMOW01/36-INQ000270452**. In this letter I outlined that it would be for health boards to determine the specific service model for delivery of nMABs for non-hospitalised patients but I set out the minimum requirements for all services which included:

    a. Providing access for eligible adults and children aged 12 years and above.

b. Proactively identify eligible individuals to provide timely treatment which in 72 hours of positive PCR tests.

c. Take referrals from other medical specialties or General Practice.

d. Provide clinical assessment of eligibility and suitability and arrange prescriptions where necessary.

e. Ensure appropriate arrangements for aseptic preparation either in an aseptic unity or near to patient using appropriate aseptic technique.

f. All for provision of nMABs in a healthcare setting or in limited cases in the community where it is not practicable for individuals to attend a healthcare setting.

116. A list of all public health links for the pandemic period is provided in exhibit **FAM3CMOW01/37 – INQ000252575** and have been disclosed to the Inquiry**.** These public health links covered information clinical topics. The whole list has been provided to the Inquiry but not reproduced here as not all were Covid-19 related. Those related to the use of therapeutic for the treatment of Covid-19 included:

a. **Covid – 19 therapeutic alert: antimicrobials (azithromycin and doxycycline) not beneficial in the management of Covid – 19 (Sars – Cov – 2) positive patients** – Advice was issued following an announcement by the National Institute for Health Research supported by the UK PRINCIPLE trial that there was a lack of beneficial effect in patients over 50 treated with antibiotics (azithromycin and doxycycline) at home in the early stages suggesting that these should not be used in Primary Care settings (**FAM3CMOW01/38– INQ000048628**).

b. **Colchicine in the management of Covid-19 (Sars-Cov 2) positive patients** – I wrote to confirm that Colchicine should not be used for Covid-19 other that in the context of a trial or if an additional licensed used is confirmed (**FAM3CMOW01/39– INQ000048638**).

c. **Interleukin-6 inhibitors (tocilizumab or sarilumab) for hospitalized patients with Covid-19 pneumonia (adults)** - I wrote and recommended that organisations consider prescribing either tocilizumab or sarilumab for patients hospitalised with Covid-19 pneumonia who were being treated with non-

invasive ventilation or in invasive mechanical ventilation (**FAM3CMOW01/40– INQ000081812**

d. **Convalescent Plasma in The Management of hospitalised Patients With Covid-19** – I wrote out to confirm that the results of the RECOVERY trial and the REMAP-CAP trial showed no significant clinical benefit from treatment with high-titre convalescent plasma. On this basis It was not recommended for use in the management of patients with confirm or suspected Covid-19 (**FAM3CMOW01/41– INQ000048655**).

e. **COVID-19 therapeutic alert: Casirivimab and imdevimab for patients hospitalised due to COVID-19** – I issued a link jointly with Andrew Evans, Chief Pharmaceutical Officer for Wales, recommending that NHS organisations in Wales consider the use of Casirivimab and imdevimab for patients hospitalised with Covid-19. This advice was based on the outcome of the UK wide RECOVERY trial and a conditional marketing authorisation for the use of these medications (which were non-Covid-19 specific) in this way was granted by the Medicines and Healthcare Regulatory Authority ("MHRA") (**FAM3CMOW01/42- INQ000048669**).

f. **Antivirals and neutralising monoclonal antibodies (nMABs) in the treatment of hospitalised and non-hospitalised patients with COVID-19** – As number of links were issued on the use of antiviral and nMABs to treat Covid-19. From 16 December 2021 there was be access to monoconal antibodies as a treatment for Covid-19 for non-hospitalised Covid-19 patients. This advice was based on the PANORAMIC trial (**FAM3CMOW01/43– INQ000048677)**. The advice made clear that antiviral treatments would only be routinely available to those at the highest risk of developing serious disease. Further advice was provided in January 2022 following the evidence of the PINETREE trial and confirming treatment options for Omicron variants and non-Omicron variants (**FAM3CMOW01/44– INQ000048688)**. Advice also provided in January 2022 to remind clinicians that that treatments should only be offered where the patient is not already showing signs of clinical improvement and provide further clarity on haematological disease and chemotherapy agents to determine patient eligibility. This letter also stressed that the alternative of nMABs was important in areas where Omicron was prevalent as the efficacy of Casirivimab and imdevimab was likely to be compromised by the Omicron variant (**FAM3CMOW01/45– INQ000048687)**.

117. In issuing public health links on the treatment options for Covid-19 I highlighted to NHS bodies and reiterate here that clinicians needed to consider the patient's condition, history and co-morbidities and follow the health board or hospital governance procedures for the use of any off-label medicines. These public health links were essentially for information and were not clinical direction. Discussion on the use of repurposed medicines or on other forms of treatment such as the use of anticoagulants/thromboprophylaxis would have occurred at the clinical level or at WCCTN meetings.

The use of anticoagulants/thromboprophylaxis.

118. Advice on the use of anticoagulants or thromboprophylaxis was not issued by me, in my name or by the Population Health Directorate. To my recollection advice was issued by the Chief Pharmaceutical Officer for Wales, Andrew Evans.

Renal replacement therapy for Covid-19 patients with acute kidney injury;

119. Guidance was issued in May 2020 by NICE on entitled Covid-19 rapid guideline: acute kidney injury in hospital. Guidance or protocols on the management of acute kidney injury was not issued by the Chief Medical Officer nor the Population Health Directorate. The Welsh Renal Network ("WRN") worked across health boards to share information and planning for renal care during the pandemic **NR** in Population Healthcare was sighted on their work and fed information into the CMO(W) office. The WRN was established before the pandemic and led on the commissioned of adult renal services for Wales and delivery of the Renal Services in Wales Delivery Plan for 2016 to 2020. Each health board drew up plans for dealing with patients who required Renal Replacement Therapy ("RRT") as we were all conscious of the increase risk for this group. Exhibit **FAM3CMOW01/46-INQ000252506** include the initial plans which outlined immediate actions to manage the risk and working collaboratively and in discussion with the Welsh Ambulance Service to ensure patient transport to dialysis was managed safely and ensuring renal teams had appropriate PPE supplies.

Invasive and non-invasive ventilation of patients;

120. The Wales Critical Care and Trauma Network ("WCCTN") issued advice to the healthcare system on invasive and non-invasive ventilation of patients. Professor Chris Jones, DCMO(W) worked closely with the WCCTN. The WCCTN was an established group before the pandemic period with a focus on improving the quality of care for critically ill patients throughout Wales. On the 4 March 2020 the WTCCN produced draft guidance on a Covid-19 Planning Framework for use by critical care units in Wales to help plan for

and respond to issues that may arise. This was formally approved and issued on 14 March 2020 by the WCCTN, in collaboration with the Welsh Intensive Care Society ("WISC") issued guidance to health boards in Wales. A copy of this guidance in exhibited in **FAM3CMOW01/47-INQ000226944.** In terms of non-invasive ventilation for patients with Covid-19 in intensive care units ("ICU") the guidance was clear that this remained controversial and was a decision for health boards and dependent on what equipment, facilities and staff they had within the health board.

Identification of medical equipment required to treat severely or critically ill patients, such as ventilators, continuous positive airway pressure (CPAP) and haemodialysis machines

121. The provision of clinical advice on medical equipment for severely or critically ill patients was provided by Wales Critical Care and Trauma Network ("WCCTN"). Professor Chris Jones, DCMO(W) had close links to this group and co-chaired the Acute Secondary Care Planning and Response Sub-group, which was part of the HSSG Covid-19 Planning and Response Group. A copy of this sub-groups terms of reference is exhibited in **FAM3CMOW01/48 – INQ000252578.** The subgroup remit included oversight of medical equipment. In March 2020 this subgroup undertook an ad hoc assessment of available invasive and non-invasive ventilation devices such as CPAP devices. This included beds with piped oxygen, oxygen concentrators, oxygen cylinders, and non-invasive ventilation or CPAP devices. A copy of the Sub-group's letter to health boards requesting this information on the 24 March 2020 is exhibited in **FAM3CMOW01/49 – INQ000226972.** This was form of reporting to the Sub-group was later replaced by the NHS Daily Sitrep which was used to provide more routine reporting of oxygen devices available and in use. In this letter of the 14 March the DCMO set out the following priorities:

    a. Ensuring a national coordinated and common approach to the pandemic via the designated Covid Coordinators within each hospital.

    b. Ensuring the Covid Reporter in each hospital submits the daily data to NHS Wales Informatics Services ("NWIS").

    c. Confirmation of planning intentions for increasing bed numbers including confirmation of beds that can deliver ventilation or acute care.

    d. Stock control processes and processes to ensure PPE is utilised correctly and issued from central stocks.

e. Confirmation of the physical capability of NHS estates with a particular focus on piped oxygen, power supplies and number of devices that can be supported simultaneously.

122. NHS Shared Services Partnership ("NWSSP") led on the procurement of additional ventilation devices and reported procurement activity to the Subgroup. Any offers of support or new supply received via officials or ministers was passed onto the NWSSP to investigate and where appropriate action. The Subgroup also included National Clinical Leads for Respiratory Medicine and for Critical Care, who provided advice on the appropriateness of procuring different devices based on clinical application of those devices.

123. A summary of the collated health board responses on ventilator information was provided to myself and others in the HSSG on the 31 March 2020. A copy of this is exhibited in **FAM3CMOW01/50-INQ000226996** and the information set out below which gives the picture in Wales at the time.

Collated health board responses – Ventilator Information (received 31 March 2020)

Health Board	Invasive only ventilators	Ventilation capable anaesthetic devices	Ventilators (capable of invasive or non-invasive ventilation)	Non-invasive only ventilators	Non-invasive ventilators (capable of non-invasive ventilation or CPAP)	CPAP only machines	Notes
Aneurin Bevan	26	58	14 5 (transfer)	74	0	99	Non-invasive 20 on-order CPAP 15-20 (Part of Trial) 29 in workshop 100 secured from HD 71 on order
Betsi Cadwaladr	37	91	55	n/a	30	84	
Cardiff and Vale	54	69	28	n/a	8	52	
Cwm Taf Morgannwg	24	49	32	0	55	34	
Hywel Dda	n/a	38	45	n/a	40	814	
Swansea Bay	61 ICU 3 burns 23 other	40	8	0	0	15	3 burns 23 other (included in surge figures)
Powys	0	2	0	0	0	0	2 (to be transferred to CTM)
Velindre	n/a	2	n/a	n/a	n/a	0	1 adult/1 paediatric
WALES	**202** **(plus 26)**	**349**	**182** **(plus 5)**	**74**	**133**	**1,098**	
Shared Services	35 (portable)		60				35 (portable) (included in surge)
Private Sector		24					

124. In relation to guidance on the use of ventilators or other equipment in critical care facilities, the Welsh Government worked with the WCCTN. This included also working with WCCTN to agree clinical sign off new CPAP devices made in Wales to support the Covid-19 response. Where new equipment was proposed which required agreement on clinical use

or addition to the clinical pathway this would come to myself and Professor Chris Jones, so the CMO(W) office, and we would seek consensus from the clinical experts via the WCCTN. Exhibit **FAM3CMOW01/51-INQ000252514** is an example of this working practice whereby Professor Chris Jones was contacted by Ifan Evans, the Welsh Government's Director Technology, Digital and Transformation for the HSSG requesting sign off of the clinical utility of CPAP machines following an offer from a manufacture who confirmed capacity to make 100 units per day. The machine was tested in the field and results discussed with and endorsed by the Acute Secondary Care Cell which Professor Chris Jones chaired.

Identification of the relevant types of clinical staff to provide treatment for severely or critically ill patients

125. Advice or formulated guidance in relation to staffing types and levels for critical care units treating patients with Covid-19 was provided via the WCCTN. In relation to staffing of critical care wards, the WCCTN agreed, with sign off by Professor Chris Jones, DCMO(W), for HEIW to start work on training competencies with discussions with universities on support that could be provided to upskill staff and for mutual aid to enable critical care consultants to move between health boards at short notice, as noted in the briefing provided to the MHSS exhibited in **FAM3CMOW01/52- INQ000252505**. The HSSG Covid-19 Planning and Response Group, chaired by Samia Edmonds also issued a briefing on system risks as exhibited **FAM3CMOW01/53- INQ000252511.** This noted that among other actions, in the case of critical care services staff from inpatient's, day cases and outpatients should be redeployed and retrained to increase critical care capacity. It also noted that health boards needed to reassess the use of community/home ventilation and prioritise critical care units where appropriate as well as converting non-invasive ventilators to invasive ventilators.

Advice provided to the Welsh Government on critical care capacity, medical equipment and supplies

126. The need to build capacity in NHS Wales was recognised early in the pandemic and I wrote to health bodies on the 13 February 2020 to highlight the need to increase capacity across the NHS estate to manage possible Covid-19 patients who required admission, a copy of this letter is exhibited in **FAM3CMOW01/54-INQ000227377**. In the letter I sought assurance on the ability of health boards to deliver care to those patients who required hospital admission. The main areas I sought assurance on were isolation facilities (confirming the need for Negative Pressure Suites ("NPS")). In hospital settings, these

rooms prevent the spread of infectious contaminants and maintain sterile or restricted spaces and are also referred to as 'airborne infection isolation rooms'. A NPS incorporates a ventilation system designed so that air flows from the corridor into the NPS, ensuring that contaminated air cannot escape from the NPS to other parts of the hospital area. Air naturally moves from areas of higher pressure to areas of lower pressure. When negative pressure exists, a continuous air current enters the room under the door, which prevents airborne particles generated in the room from escaping into the corridor. Typically, such rooms are used in the isolation wards of hospitals and medical centers, especially as part of the quarantine of contagious diseases.

127. I was aware that following an audit in 2019 by NWSSP, only 6 of the 22 isolation facilities in Wales were fully compliant with the guidance on that had been issued by the Welsh Government in a Welsh Health Circular in 2018 for NPS. One of the main recommendations stated in Welsh Health Circular in 2018, against which the isolation facilities were measured, was that all new isolation rooms used for the isolation of patients who have infections that can be spread via the airborne route must be Negative Pressure Suites (NPS). The circular also recommended that Health Boards should consider converting existing Positively Pressurised Ventilated Lobby (PPVL) isolation suites to NPS suites. Other requirements include required each health board to provide isolation rooms in the following locations:

    a. Every hospital in Wales with a 24 hour Emergency Unit must have at least one Negative Pressure Suite located within that Emergency Unit.

    b. Every Health Board in Wales must have at least one Negative Pressure Suite able to accommodate a case requiring respiratory isolation in either an acute respiratory unit, or an infectious diseases unit or a medical unit with access to respiratory expertise.

    c. Every Health Board in Wales must also have either:

        i. A Negative Pressure Suite in every Level 3 general Critical Care Unit Or

        ii. At least one Negative Pressure Suite in a Level 3 general Critical Care Unit and robust plans (agreed with all partner agencies involved) for transfer and transport of critical ill cases requiring respiratory isolation between the Critical Care Units within the Health Board.

d. In addition, there must be a Negative Pressure Suite in every tertiary specialist pediatric facility in Wales.

128. I knew work was ongoing and an update on progress since 2019 was required. I also wanted confirmation on appropriately trained workforce to ensure there was a dedicated clinical lead, general nursing (with agreed ratio per bed) and healthcare support workers (with agreed ratio per bed). In my letter I requested a summary from each health board on their preparedness to be submitted by the end of the month. A note of all the returns received was prepared on the 5 March 2020 and is exhibited in in **FAM3CMOW01/55-INQ000226922.** This included a summary of the information which I have set out below:

Health Board returns to follow up email to CMO letters of 10 and 13 February 2020
COVID-19: NHS Wales preparedness

Summary		
Health Board	**Number of compliant NPS**	**Date when can accept a COVID patient**
Aneurin Bevan	4	Immediate (5/3/20)
Betsi Cadwaladr	6 adult (**awaiting clarification**) 1 neonatal	Immediate (5/3/20)
Cardiff and Vale	2 adult, 1 paediatric PPVL 1 adult room undergoing conversion to NPS, ready 9 March	Immediate PPVL (5/3/20) NPS from 10/3/20
Cwm Taf	2 PPVL	**queried**
Hywel Dda	2 NPS 2 PPVL	Immediate (5/3/20)
Powys	N/A – no acute hospitals	
Swansea Bay	2	Immediate (5/3/20)
All-Wales	15 Adult NPS 1 neonatal NPS 4 adult PPVL 1 paediatric PPVL (can accommodate 2 if necessary)	

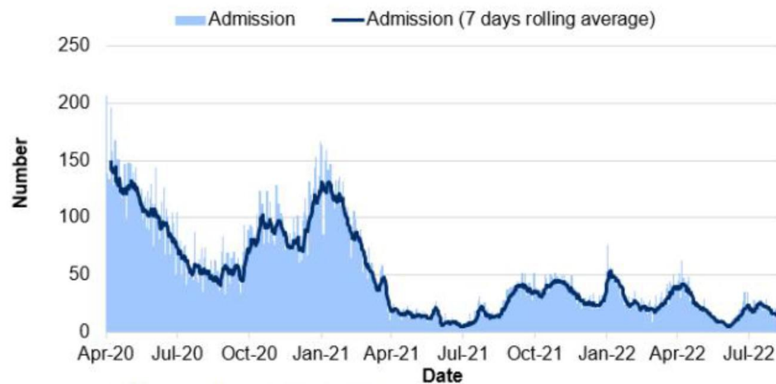
129. As noted in the above table, from 5 March 2020 there were 14 NPS suites available in Wales, and from the 10 March 2020 there were 15. The number of patients who required hospital care during the COVID-19 pandemic was much larger than the capacity of isolation facilities available across the NHS estate. Patients were nursed on wards rather than in individual rooms. It is impossible to say, due to the nature of Covid-19 if isolation facilities usage impacted on care during the pandemic.

130. Neither I nor my Directorate provided advice to the Welsh Government on the number of critical care beds, ventilators, CPAP machines or other medical resources required to respond to the Covid-19 pandemic in the event of a surge in infection rates in Wales. This information was collated by the NHS was led by Andrew Sallows and the NHS organisations and reported into the Covid-19 Planning and Response Group.

131. From the 23 April 2020 the Welsh Government published on its website a weekly output of management information related to NHS activity and capacity. The weekly output

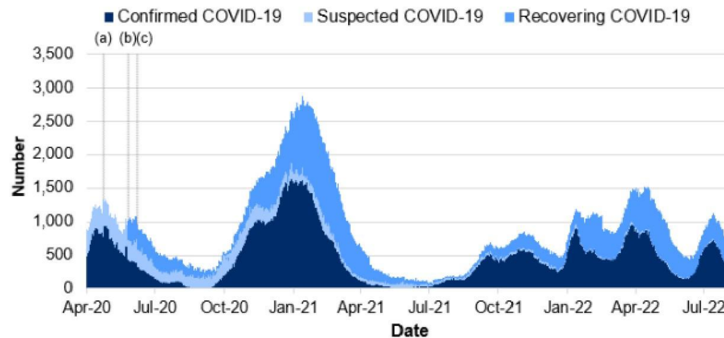
became monthly from April 2022 onwards. This included data on critical care beds, ventilators and CPAP machines in use in Wales. The most recent output was on the 11 August 2022 and a copy of this is exhibited in **FAM3CMOW01/56-INQ000227408.**

132. To support transparency and provide an understanding of NHS activity and capacity during the COVID-19 pandemic, the report set out the number of admissions and hospitalisations of Covid-19 related patients and invasive ventilated beds occupied with Covid-19 related patients. I have set out below the charts to provide a visual depiction of the information between April 2020 and July 2022.



133. Chart 1 shows that the number of new daily admissions with suspected or confirmed Covid-19 fluctuates. The 7 day rolling average generally decreased from January 2021 to June 2021, before increasing again until mid-September 2021. After a period of fluctuation, the average generally decreased between November 2021 and late December 2021. In 2022 admissions have continued to fluctuate, with increases in January, March and June.

Chart 2: Number of people in hospital as suspected, confirmed or recovering with COVID-19, from 1 April 2020



Source: Digital Health and Care Wales (DHCW)
(a) From 23 April 2020, data from community hospitals are included.
(b) From 26 May 2020, a new category for recovering patients was introduced.
(c) From 7 June 2020, Aneurin Bevan started reporting recovering patients but these were previously captured in the confirmed COVID-19 category.

134. Chart 2 shows the total number of beds occupied with Covid-19 related patients (confirmed, suspected and recovering) increased from the end of September 2020 and reached its highest reported level on 12 January 2021 (2,879 patients). From January 2021 to June 2021, this generally decreased and reached the lowest reported levels on 30 June 2021 and 4 July 2021 at 86 patients. The number of confirmed Covid-19 patients and the number of recovering Covid-19 patients peaked at different times; with highest numbers of confirmed patients occurring early in January 2021 (1,643 on 4 January 2021) and highest numbers of recovering patients seen a few weeks later (1,192 on 31 January 2021).

135. At Cabinet, advice on the healthcare system, covering bed capacity and data on ventilator and medical equipment such as CPAP machines was, up until November 2021, provided by Andrew Goodall, the Director General of the Health and Social Services Group and Chief Executive of the NHS. He was supported by Andrew Sallows, NHS Programme Director, Performance and Delivery and Samia Edmonds, the NHS Planning Programme Director. In November 2021, Judith Paget took up the role of Director General of the Health and Social Services Group and Chief Executive of the NHS and attended Cabinet in Andrew Goodall's place.

136. I am asked whether I or my office became aware of any issues regarding critical care capacity or medical supplies within the NHS in Wales. As outlined above the Population Health Directorate was part of or engaged with a number of groups, meetings, and discussion forums both with colleagues in the Welsh Government or within the NHS in Wales. As a result, regular discussions were held with the critical care network and

medical directors of health boards and regular updates were received from health boards on ventilator/equipment availability.

137. By way of example, on 16 March 2020 concerns were raised with myself and others in NHS Wales about ventilator use see exhibit **FAM3CMOW01/57-INQ000252517.** Concerns were raised by the NHS Medical Directors that even with the extension of facilities and some extension of roles by health boards this would only be 50% of what was reasonably predicted at Peak Demand. Professor Chris Jones Deputy Chief Medical Officer (Wales) asked the team to outline the work being done by the WCCTN, which the Acute Secondary Care Sub-group whose remit, as confirmed in the response, was to help ensure the NHS was prepared for the peak. It was confirmed that some health board plans appeared to be in the place of doubling capacity but others were aiming to quadruple capacity (which would be close the peak demand figures).

138. An example of the weekly report that was prepared on equipment availability for the 1 April 2020 is exhibited in **FAM3CMOW01/58-INQ000226943**. The figures noted were as follow:

Health Board	Invasive only ventilators	Ventilation capable anaesthetic devices	Dual purpose Ventilators	Non-invasive ventilators	CPAP machines
Aneurin Bevan	26	58	19	74	99
Betsi Cadwaladr	37	91	55	30	84
Cardiff and Vale	54	69	28	8	52
Cwm Taf Morgannwg	24	49	32	55	34
Hywel Dda	0	38	45	40	814
Swansea Bay	61	40	34	0	15
Powys	n/a	2	n/a	n/a	n/a
Velindre	n/a	2	n/a	n/a	n/a
WALES	**202**	**349**	**213**	**207**	**1,098**

139. I understand that detailed analysis of equipment availability has been requested by the Inquiry and will be covered separately in M3-WGO-02.

Pulse Oximeter use for Covid-19

140. The CMO office did not directly provide advice on the supply of pulse oximeters. The Welsh Government asked NWSSP to deliver a national roll-out of pulse oximeters to general practice in support of the clinical management of people with COVID-19. The roll-out included guidance for clinicians on the application of pulse oximeters but the Welsh Government was not involved or sighted in drafting this guidance.

141. In terms of home use, Health Technology Wales ("HTW") was asked to provide an exploratory report on oximetry in June 2020. A copy of the HTW rapid summary on oximetry dated the 17 June 2020 is exhibited in **FAM3CMOW01/59- INQ000226160**. The advice was provided to Dr Robert Orford and shared with myself and the Population Health Directorate. The question this report was asked to address was what the effectiveness of home monitoring using oximetry in people with Covid-19 was and to guide future management and also to consider what guidance existed on its use at the time. The report summarised the published UK guidance, international guidance, systematic reviews and primary studies which addressed this question. At that time the report confirmed that the UK and international guidance recommended the use of oximetry to help manage Covid-19, including in home settings. The systematic review did not offer any definitive evidence of effectiveness but the report noted four on-going studies which would address the question.

142. Following an audit of Covid-19 patient pathways conducted in Aneurin Bevan University Health Board, I issued a Welsh Health Circular on 4 August 2020 to all general practices in Wales, as exhibited in **FAM3CMO01/60-INQ000048607,** highlighting my concern that as a result of stay at home public messaging patients may avoid presenting with severe symptoms of Covid-19. While there was little evidence coming in from the health boards that the message was having this negative impact this was a clear concern. I encouraged general practice to assess patients whose symptoms were not improving and noted the use of pulse oximetry machines as part of that clinical assessment. The Welsh Government public messaging was also adjusted at that time to take into account these concerns. I was clear in that letter that I did not advocate remote monitoring of pulse oximetry at the present time. I considered that there were some limits to the value of remote oximetry, including training and interpretation, false reassurance and inappropriate escalations of care; as well as practical difficulties in providing a sufficient number of devices, determining who should have them and recovering them. I confirmed that the use of remote monitoring is a matter for local discretion based on the needs of the local population, highlighting that at the present time I was recommending an enhanced use of pulse oximetry as part of the wider clinical assessment.

143. A pilot of Covid-19 virtual wards was progressed by the NHS Medical Directors group, with support from the HSSG rather than the Chief Medical Officer or the Population Health Directorate. Exhibit **FAM3CMOW01/61-INQ000227259** is an email from Deputy Medical Director of Swansea Bay University Health Board in October 2020 noting that the All Wales Medical Directors Group would draft plans for Covid-19 virtual wards or remote

monitoring of patients in vulnerable groups with symptoms. Attached to this email was draft proposals, as exhibited in **FAM3CMOW01/62-INQ000227260** which notes an option for prioritising monitoring of vulnerable groups, including those who were from Black, Asian or minority ethnic backgrounds. Virtual wards would include pulse oximeters use at home with support from local teams in the community.

144. The Population Health Directorate was aware of the report dated March 2021 relating to pulse oximetry and racial bias, a copy of this report is exhibited in **FAM3CMOW01/63-INQ000249826**. This report raised questions about the accuracy of pulse oximetry testing on darker skinned patients and noted that given the increased mortality of amongst ethnic minority patients during the pandemic considered differential accuracy of this equipment to be a possible contributing factor to this health inequality. This report called for an urgent review of pulse oximetry equipment by the MHRA, identification of suitable parameters to identify hypoxia (which was noted as important given the use of this equipment for self-monitoring by Covid-19 patients in the community), for a review of all medical equipment to ensure it is cultural competent and sensitive to serve the needs of diverse populations and for research to focus on more diverse populations (noting the role of the National Institute for Health Research to consider).

145. This report was posted on the All-Wales Healthcare Science Network Sharepoint for information. This is a network overseen by the Chief Scientific Adviser for Health and not the Population Health Directorate. The report findings did not specify any actions for Wales and were not incorporated into the treatment pathways at the time in Wales particularly as there was limited use of home monitoring using pulse oximetry in Wales and no self-monitoring.

146. A further rapid evidence summary was produced in June 2021 by Health Care and Research Wales in collaboration with the Wales Covid-19 Evidence Centre, as an update to the HTW summary from the year prior. The aim of this report again was to consider the effectiveness of home monitoring using pulse oximetry in Covid-19 patients. A copy of this report is exhibited in **FAM3CMOW01/64-INQ000227340.** The summary outcome of this report was that there remained questions about the safety and cost of home monitoring using oximeters and that it was not clear whether the changes in patient care would justify the cost of buying the equipment and monitoring the results.

147. The CMO(W) office did not provide any specific advice on the use of pulse oximeters on different skin pigmentation. The report from March 2021 however was featured in a BBC article in November 2021 on which the MHSS asked for more information, Professor Chris

Jones, DCMO(W) checked the position with NR the National Respiratory Lead for Wales. A response to the Minister was provided by email, as exhibited in **FAM3CMOW01/65-INQ000227343** and which noted that UK level guidance was due to come out shortly on this issue and reiterating the outcome of the report by Health and Care Research Wales noted above, namely that the safety and cost effectiveness of home monitoring with pulse oximetry is uncertain and it was unclear whether cost and clinician time for monitoring would be offset by changes in patient management. It was recognised that using the machines in this way could result in additional costs if patients inappropriately delay presentation or conversely there could be unnecessary emergency department attendances.

148. TAC provided a brief on the 10 February 2022 as exhibited in **FAM3CMOW01/66-INQ000087026**. This noted the extant research as outlined above in respect of the use of pulse oximetry on darker skinned patients noting again any delay in appreciating the severity of Covid-19 pneumonitis would likely be detrimental to patient care.

Infection Prevention Control

Formulation of infection prevention and control guidance, protocols or standards

149. During all phases of the Covid-19 pandemic, health and social care providers in Wales were asked to adhere to the UK IPC guidance. The guidance was based on a continual review of the international evidence base and was issued jointly by the DHSC, Public Health Wales, the Public Health Agency (Northern Ireland), Public Health Scotland, UK Health Security Agency ("UKHSA") and NHS England – also referred to as the 'UK IPC Cell'.

150. In terms of questions the Inquiry may have about the formulation of this guidance these would need to be directed to the UK IPC Cell but I have set out my understanding and communication with the Cell. Neither the Office of the Chief Medical Officer for Wales nor I provided stand alone/separate advice on what forms of PPE should be used in healthcare settings in Wales. Nor did we provide advice on testing the adequacy or suitability of PPE. Additionally, neither I nor the Office of the Chief Medical Office were engaged in the assessment of the IPC measures set out in the guidance for healthcare settings. Nor were we involved in discussions on how these were determined by assumptions about the modes of transmission of Covid-19 nor how these changed over time.

151. The UK IPC Cell was set up in January 2020 and Wales's involvement was led throughout by Public Health Wales. The main contact into the Welsh Government was Dr. Eleri Davies, Head of Healthcare Associated Infection, Antimicrobial Resistance and Prescribing Programme ("HARP") at Public Health Wales who initially sat as a member of the IPC Cell and then subsequently chaired the Cell.

152. The IPC guidance for the UK, including Wales, was issued by the UK Government on the 10 January 2020 and based on the limited information available at that time about the coronavirus. I wrote out to all clinical staff in Wales on the 24 January 2020 providing a link to the UK Government website where the IPC guidance was located. A copy of this letter is provided in exhibit **FAM3CMOW01/67-INQ000224481**. This guidance was updated on a periodic basis throughout the pandemic period. The Welsh Government did not keep a log of the updates or changes to the guidance as this was held by the UKG Government.

153. On the 31 January 2020 I sent a public health link sent to NHS bodies in Wales, a copy of my letter exhibited in **FAM3CMOW01/68-INQ000048560.** In the letter I signposted to the Public Health England's *Novel coronavirus (2019-nCoV) infection prevention and control guidance* noted that the four key principles to bear in mind in community settings are to:

   a. Identify possible cases as soon as possible.

   b. Isolate to prevent transmission to other patients and staff.

   c. Avoid direct physical contact unless wearing appropriate personal protective equipment.

   d. Get specialist advice from PHW.

154. On the 4 February 2020 I wrote to all the Health Board HCID Leads and Emergency Planning Leads as well as the Chief Executives and Directors of Public Health highlighting again the PHE guidance and noting that it was important that staff assessing and managing these patients were protected in accordance with the UK guidance. A copy of this letter is exhibited in **FAM3CMOW01/69-INQ000226920.**

155. All healthcare workers managing possible and confirmed cases were advised to follow the UK IPC guidance for Covid-19. This guidance included instructions about different PPE ensembles that were appropriate for different clinical scenarios. As outlined above

the UK IPC Cell would assess international evidence and the guidance and subsequent updates took into to account steps being taken in other countries.

156. I understand the UK IPC Cell kept the guidance under continual review in line with the emerging evidence/science and data. NHS England provided the secretariat function for the UK IPC Cell and the Welsh Government does not have copies of the minutes of the meetings.

157. In March 2020 Dr Eleri Davies provided advice to the DCMO(W) on IPC guidance. A copy of her email is provided in exhibit **FAM3CMOW01/70-INQ000252515.** In her email she confirmed that the UK IPC guidance was broadly consistent with the WHO guidance, with the only difference between the UK IPC guidance and the WHO guidance being the recommendation to use aprons rather than gowns for droplet and contact precautions and the use of FFP3 masks rather than N95 or FFP2 masks for aerosol generating procedures. The apron recommendation in the UK was a longstanding recommendation for this transmission route and based on the requirement to be 'bare below the elbows' to enable effective high hand hygiene which was a key measure in reducing the spread of the virus. The use of FP3 masks was a specification in excess of that recommended by the WHO.

158. In November 2021 the UK CMOs and nursing officers asked the UK IPC cell, then chaired by Dr Eleri Davies, to review evidence around the route of transmission. Dr Eleri Davies provided us with informal email updates around the work of the IPC Cell. An example of this is provided in **FAM3CMOW01/71-INQ000252535** in which Dr Eleri Davies provided us with a copy of her email to the UK CNOs which outlined her role as Chair of the UK Covid-19 IPC Cell and that throughout this pandemic the Cell had considered the latest evidence, international IPC guidance and WHO briefings in regard to SARS CoV-2. This email confirmed that the Cell had discussed the implications of the Omicron variant for the IPC guidance, and that all member organisations / countries of the cell were represented and a wide-ranging discussion was had. The consensus view of the Cell was that the IPC Guidance as it stood was currently fit for purpose. There was to the Cell's understanding that there was no evidence ~~yet~~ that the mode of transmission of the virus had changed, therefore the Cell considered that current PPE recommendations remained appropriate. This information from Dr. Eleri Davies directly to myself, the DCMO(W) and Sue Tranka, the Chief Nursing Officer was helpful to address questions we may have been receiving.

159. Another source of guidance and oversight of IPC measures was via the Nosocomial Transmission Group ("NTG"). Myself and the Chief Nursing Officer for Wales ("CNO(W)"), established the NTG in May 2020 with Professor Chris Jones, DCMO(W) as chair. The first meeting was held on the 19 May 2020. The NTG membership was drawn from Welsh Government, PHW and colleagues from health, social care and professional organisations. The group was stood down on the 28 March 2022.

160. A copy of the groups Terms of Reference is exhibited in **FAM3CMOW01/72-INQ000252576.** As noted in the terms of reference, the purpose of the NTG was to provide advice, guidance and leadership for all healthcare and care settings including hospitals, primary and community care, registered care homes, domiciliary care, learning disability units and prisons (healthcare settings) to minimise nosocomial transmission and enable the safe resumption of services.

161. Monitoring of the nosocomial infections was undertaken by PHW and data fed into the NTG to consider and discuss actions needed and the effectiveness of the IPC guidance to the health and care sector. The NTG provided updates to myself, the HSS Covid-19 Planning and Response Group and MHSS. A copy of the Ministerial Briefing of the 15 November 2020 is exhibited in **FAM3CMOW01/73-INQ000396261**. This briefing set out the current data for hospital transmission in Wales, noting that hospital transmission rates in Wales had increased over the last few weeks, as community transmission increased. The rate was highest for the Cwm Taf Morgannwg University Health Board population, where the community transmission rate was also highest and a recent outbreak had re-emerged, but all health boards were noted to have experienced problems, usually in the form of small clusters often on several different sites and areas. The paper highlighted the formation and work of the NTG and made the following proposals for hospital settings:

    a. Commence twice weekly testing of all patient facing NHS staff using lateral flow devices.

    b. Initiate re-testing of unscheduled care patients, who have tested negative on admission, at 5 days.

    c. Formally request PHW release staff from Improvement Cymru to provide improvement support to improving patient flow.

    d. Review hospital discharge guidance to extend definition of the non-infected patient and improve flow. Welsh policy at the time was that all hospital patients should have tested negative prior to transfer to a care

home. The requirement provided reassurance to care homes but prevented the flow of vulnerable patients who remain at risk in hospitals, particularly as community transmission had increased and so had hospital outbreak. It was proposed that this discharge policy was reviewed as people may remain positive for SARS-CoV-2 for prolonged periods of many months when tested by RT-PCR, and the recognition that this positivity represents non-infective viral fragments. For this reason, England prevented repeat testing within 90 days of a positive PCR test, outside the hospital setting.

e. Evaluate the use of 'pop-up' isolation rooms. These were pop-up temporary isolation room (resembling a plastic cart which could be moved around sites) which could quickly and safely stop transmission of contact and droplet pathogens. Concerns were raised by the Nosocomial Transmission Group that there was a lack of single occupancy rooms which could accommodate the isolation of patients. Pop up isolation rooms were used as an alternative.

f. Strengthen requirements on bed spacing and environmental controls in hospital.

g. Encourage the use of field hospitals to enable isolation and segregation of patients.

h. Publish revised cleaning standards for NHS premises during the COVID-19 crisis – consider financial support for HB implementation.

i. Create a programme of supportive communications to staff needs to be developed, to explain the evidence and encourage positive behaviour change.

162. The paper also covered information on transmission in care homes which I understand will be relevant to later modules.

163. These recommendations were accepted and work commenced on implementation. In relation to the recommendation for twice-weekly testing of patient-facing NHS staff with lateral flow devices Ministerial advice recommending this approach was submitted on 20 November 2020 (, which I exhibit as **FAM3CMOW01/74-INQ000116627**). Related advice on testing in adult social care settings was submitted at the same time, which I exhibit as

FAM3CMO01/75-INQ000144929. The Minister for Health and Social Services made a statement on 4 December to outline Wales' approach to introduce twice-weekly asymptomatic testing of patient-facing health and social care workers in health and social care settings including hospitals, primary care and domiciliary care. Health Boards and local authorities introduced asymptomatic, twice-weekly lateral flow tests (LFTs) for higher risk health and social care workers as part of an initial pathfinder phase to help map out practical arrangements, which began in the week of 14 December 2020. The wider rollout of the programme began in the week of 11 January 2021 and included other groups of health and social care workers including those in independent hospitals and primary care practices, and healthcare and social care inspectors. The Minister for Health and Social Services published a refreshed Covid-19 Testing Strategy for Wales on 28 January 2021, outlining testing priorities including 'test to safeguard' which aims to protect health and social care services and the vulnerable people they care for. From 4 February 2021, health and social care workers in Wales were able to register their lateral flow tests and record the results digitally through a self-test reporting tool developed by NHS Digital.

164. In relation to the recommendation for a review of the discharge guidance, Following the recommendation to review arrangements, the Technical Advisory Group issued a consensus statement, exhibited as **FAM3CMO01/76-INQ000227902** which confirmed the advice that patients that have had Covid-19 during admission but who have had resolution of fever for at least three days and clinical improvement of symptoms other than fever, and are to be discharged from hospital to a care home or other step down care can be assumed to be non-infectious if:

    i. 20 days have elapsed since onset of symptoms, or first positive SARS-CoV-2 test, or

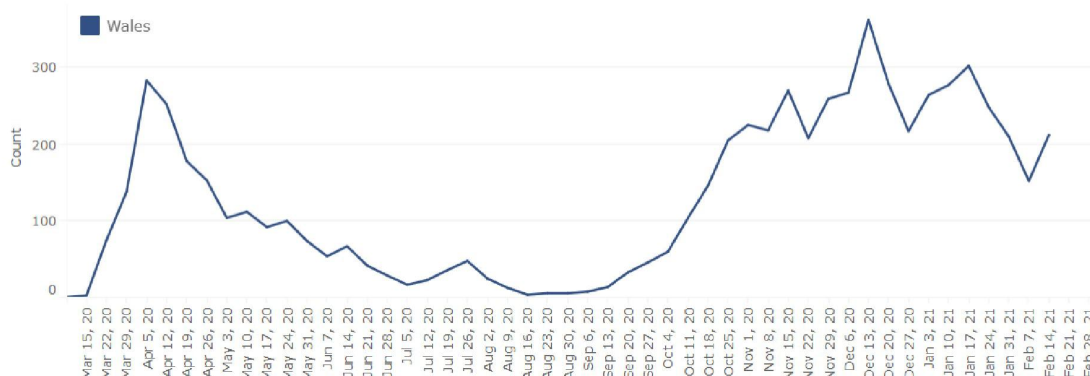
    ii. 14 days have elapsed since onset of symptoms, or first positive SARS-CoV-2 test; AND An RT-PCR test is negative or 'low positive' with a Ct value ≥35.

165. For patients with severe immunocompromised, there should be individualised discussion and assessment between clinical and microbiology teams. These changes were announced by the Minister for Health and Social Services on the 15 December 2020, as exhibited in **FAM3CMO01/77-INQ000227285.**

166. A further report issued 18 February 2021 which is exhibited in **FAM3CMOW01/78-INQ000227307.** The chart below was presented in the report and sourced from PHW

information. This shows the highest number of hospital onset cases (definite or probable) since the start of the pandemic was reported in the week ending 13 December 2020: 360 cases, representing 2% of total confirmed Covid-19 cases.

Weekly counts of probable and definite nosocomial COVID-19 in Wales



167. The report noted a number of priorities for the NTG, which included initiating a peer review of IPC and nosocomial policies, commissioning PHW to undertake a behavioural insights project to understand areas where modifying staff behaviour will positively affect the rate of hospital onset Covid-19. Additionally, Improvement Cymru and HEIW were also asked to run a programme of supportive communications to staff to explain the evidence around transmission of Covid-19 and encourage positive behaviour change. The NTG also worked to strengthen the implementation of and compliance with environmental controls and revised cleaning standards.

168. Healthcare Inspectorate Wales ("HIW") also provided oversight of the implementation of IPC guidance in healthcare settings. In its National Review published in June 2021 (exhibited in **FAM3CMOW01/79- INQ000182583**) it noted that positive arrangements were in place to strengthen IPC across the NHS and independent healthcare services, which included a strong focus on hand hygiene, cleanliness and the correct provision and use of Personal Protective Equipment (PPE). The report highlighted the processes which were introduced to help mitigate the risk of nosocomial transmission and control the spread of the virus. This included pre-screening patients before scheduled appointments

to assess their risk of having Covid-19, and arrangements for testing patients and staff to identify people positive with Covid-19

169. HIW confirmed arrangements were in place to limit the risk of Covid-19 transmission by segregating groups of patients in hospitals. Whilst most providers completed investigations following a Covid-19 outbreak, we identified some examples where the process could be strengthened.

170. In most settings up to date policies and procedures were in place for the prevention and control of infections, including the management of Covid-19. This included where policies had been amended to reflect the management of Covid-19, or supplementary guidance was available to support staff to deliver safe and effective care.

171. HIW identified that improvement was required in some NHS and independent mental health settings, where there had been a lack of follow up action where issues had been identified from IPC audits and risk assessments. Additionally HIW found a number of concerns relating to IPC from its on-site dental inspections, which had been undertaken as a result of concerns being raised with HIW.

Personal Protective Equipment

172. On the 18 March 2020 the *COVID-19 preparedness and response: guidance for the health and social care system in Wales* was issued by the HSSG Planning and Response Group. A copy of which is exhibited in **FAM3CMOW01/80 - INQ000395659**. This guidance was to be read in conjunction with other guidance particularly the *Wales Health and Social Care Influenza Pandemic Preparedness & Response Guidance 2014,* as exhibited in **FAM3CMOW01/81 - INQ000116503**. The 2014 Influenza Guidance in relation to PPE noted at section 4.4 that *"Although there are central stockpiles of facemasks and respirators, it could take time for distribution of centrally held stocks to be completed and organisations should prepare to rely initially on local stocks and continuity arrangements. For this reason, organisations should maintain sufficient stock for seven days use in the initial stages."*

173. On the 2 April 2020 updated UK wide PPE guidance was agreed by the four UK CMOs, CNOs and Chief Dental Officers in the UK and endorsed by the Academy of Medical Royal Colleges. I wrote out to the NHS in Wales informing them of the update on the 3 April 2020. A copy of this letter is exhibited in **FAM3CMOW01/82- INQ000080942.** The updated guidance reflected the fact that Covid-19 was now widespread in the community, meaning clinicians were more likely to see patients with the virus. The guidance was

based on the best scientific evidence and is consistent with what WHO recommends in circumstances and settings with the highest risk of transmission. The update included new tables describing PPE use across different clinical scenarios and settings; advice on sessional PPE use and reusable PPE; change in close-contact distance; advice on washing forearms if exposed; advice on acceptable respirators; general formatting to improve usability. The UK Guidance on IPC and PPE remained in use throughout the pandemic period.

174. Concerns about shortages of PPE raised via the various touch points with the health care system were funnelled through to the PPE Cell. I do not recall any specific concerns on shortages of PPE or poorly fitting PPE notified to directly to myself or the Population Health Directorate.

Testing for healthcare workers

175. The testing programme for Wales was not led by myself or the Population Health Directorate. It was led by the HSSG and reported into Dr. Andrew Goodall as Director General HSS. Members of the Population Health Directorate and myself provided information and input on testing, as detailed below, however neither the Population Health Directorate nor I were involved in the development of antigen tests including their specificity or efficacy, I therefore cannot comment on how these changed over time.

176. On the 18 March 2020 I confirmed the interim criteria for testing key frontline Healthcare Workers (HCWs). This definition was based on advice received from Public Health Wales, copy of the advice is exhibited in **FAM3CMOW01/83- INQ000262104**.

177. The advice from PHW advised for testing of HCWs involved in frontline patient facing clinical care working in the following areas:

    a. Acute Medical Assessment Units

    b. Emergency Departments

    c. Critical Care Units/Intensive Care Units

    d. Primary Care

    e. EMS frontline NHS Ambulance staff.

178. A copy of my letter issued to NHS Wales to our line the PHW advice is exhibited in **FAM3CMOW01/84 - INQ000252513.** I noted in this letter that keeping HCW off work for

7 days based on symptomatology pending a negative result will be detrimental to the safe running of the service compared to providing negative results at day 2 or 3 to allow them to return to work. While a negative test did not rule out infection with Covid-19, it provided a basis for early return of HCW from self-isolation to support the running of the service. HCW who test positive and recover from the infection could also be redeployed to care for Covid-19 patients. I do not recall any specific feedback or concerns raised regarding the definition of "frontline" HCWs with myself or my office.

179. The testing plan for Wales was published on 7 April, and this included aspects such as blood tests for patients, front line staff to monitor acquired immunity and developing point of care testing to control future outbreaks. A copy of this plan is exhibited in **FAM3CMOW01/85 - INQ000338226**. The plan was focused on reducing harm from Covid-19 (direct and indirect) and was wider than the testing of HCWs however it did specify a model for HCW to be tested every 2-4 weeks. Further detail on the rationale for this was outlined in Annex III to the plan which noted that an active concern was the vulnerability of HCW to the virus. While they could be tested for the presence of viral Ribonucleic acid (RNA) through PCR tests this did not show immunity. In the plan it was proposed developing a prospective cross sectional serosurveillence programme which would aim to estimate the overall population immunity (with HCW being 2.5% 0f the Welsh population). Serosurveillance is the testing of blood samples for the presence of antibodies against a particular disease, due to past infection or vaccination, in the general population. This was also noted to provide assurance to HCW of immunity and help to inform deployment and occupation risk. The serosurveilence programme for health care workers was introduced to enable information to be available in real time to health boards and trust to inform planning and the individual staff notification of immunological status could help to inform where those staff work.

180. A critical worker policy was published 18 April 2020. A copy of this policy is exhibited in **FAM3CMOW01/86 - INQ000182402.** This updated my previous advice set out above in exhibit FAM3CMOW01/66 - INQ000226920 and confirmed prioritised testing for critical workers, based on evidence and best use of testing capacity available at that time. The broad category of critical care workers included health and social care workers, public safety (emergency workers) and national security workers, local and national government workers and other key public service workers. The policy confirmed that at the discretion of Medical Directors more workers could qualify as critical workers for testing purposes.

181. On the 15 July 2020 a New Testing Strategy Published, a copy of which is exhibited in **FAM3CMOW01/87 - INQ000275673** The strategy included a section (4) dedicated to

protecting the NHS. It set out approaches to testing patients, for emergency and elective admission, inpatients, outpatients, and discharge; and staff, covering health and care staff and across community, primary and secondary care settings. This included screening for critical care workers (i.e. routinely testing in the absence of symptoms). The strategy highlighted that care needed to be taken particularly at times when the prevalence was low. The strategy was based on TAC's Consensus paper on RT-PCR released on 9 July 2020 and published on 15 July 2020 informed by the work of SAGE and its subgroups, along with the seven principles set out by the Royal College of Pathologists. A copy of the TAC paper is exhibited in **FAM3CMOW01/88 - INQ000066281**. It had been established and discussed by the Technical Advisory Group (as detailed in this paper) that low prevalence of the disease was likely to generate a higher rate of false positives and false negatives based on the specificity of the test. For example, where prevalence is low, perhaps 1% and the test is 99% specific to that illness, there would be one true positive and one false positive for each 100 tests. So, testing 1,000 people results in 10 true positives and 10 false positives. This would have significant implications for the use of tests as a screening tool for staff and patients alike, including:

a. for critical worker screening, this may lead to significant unnecessary exclusion from work which has to be balanced against the risk to patients of transmission particularly where they are vulnerable and at risk of more severe illness.

b. In the context of pre-surgical screening, this may lead to significant unnecessary postponement of surgery.

182. However, the balance of risks needed to be considered carefully, where testing can also provide reassurance and support positive wellbeing for healthcare patients and staff. The paper confirmed that while evidence was emerging that testing for infectivity may be refined by the level of test positivity (Ct value) and the presence of an antibody response, it was recommended that all testing plans define the rationale, and actions dependent on testing, and triangulate against the likely false positive and negative rates at the predicted condition prevalence. Therefore, use in asymptomatic individuals should, wherever possible, be on the basis of effective targeting, for example following tracing that has indicated a high-probability of exposure and thus likely infection.

183. I did not contribute directly to this paper but as with the majority of the TAC papers, I reviewed a draft, although I do not have a specific recollection of making any comments at the time.

184. The Strategy in respect of HCW committed to using additional available NHS testing capacity to routinely and strategically test asymptomatic frontline staff as part of IPC measures and to use antibody testing to help understand the spread of the disease in healthcare settings. At this time the type of testing used was PCR tests as lateral flow tests were not routinely used in Wales (as noted above lateral flow tests were introduced in December 2020). Asymptomatic testing was not used routinely across high prevalence areas but was undertaken more in such areas due to outbreaks. Some Local Health Boards introduced targeted asymptomatic testing of NHS staff working in settings with vulnerable patients. For example, Aneurin Bevan UHB (ABUHB) was testing asymptomatic staff working in haematology using RT-PCR tests, following advice from ABUHB's Nosocomial Transmission Group. ABUHB had developed a priority running order for expanding asymptomatic staff testing using RT-PCR tests, this was not implemented due to concerns about overrunning Public Health Wales laboratories.

185. In November 2020 advice was provided to the MHSS on the testing of healthcare workers and hospice staff, previously exhibited in **FAM3CMOW01/74-INQ000116627**. I did not contribute to this advice which was produced by Sioned Rees, Deputy Director HSSG but I was a copy recipient. The advice noted that at the time there was limited asymptomatic testing of HCW but some local health boards had taken the decision to provide asymptomatic testing of staff working with vulnerable patients. Advice noted the availability of new testing technology which were classified under three key themes:

    a. Lab based technology using loop mediated isothermal amplification (LAMP)

    b. Point of Care; and

    c. Lateral Flow Devices

186. Following the scientific validation of testing using Lateral Flow Test devices officials recommended proceeding with asymptomatic testing of all HCW. Wales' share of the Lateral Flow Devices (4.7% population share of those purchased by UK Government) were drawn down and stored by NWSSP ready to be made available in Wales by the end of November 2020. In December 2020, the MHSS announced the introduction of a programme of regular, twice per week, asymptomatic testing of patient-facing health and social care workers in hospitals and primary care and community care settings, and others who have contact with people in those settings. This testing programme included testing of staff delivering domiciliary care services and professionals visiting care homes and

other social care settings. The incremental roll-out of this policy began on 14 December 2020 and continued for the remainder of the pandemic.

187. In June 2022 the Testing Transition Plan, as exhibited in **FAM3CMOW01/89-INQ000227373** confirmed that testing would continue to be in place for the following groups:

    i. LFD and PCR testing for those eligible for COVID-19 treatments.

    ii. PCR testing for COVID-19 and other respiratory viruses for symptomatic care home residents and prisoners.

    iii. PCR and LFD testing under the patient testing framework and when clinically advised including pre-operative hospital patients and care home residents returning from inpatient hospital stays.

    iv. LFD testing for symptomatic health and social care staff.

    v. Twice weekly LFD tests for asymptomatic testing for health and social care staff.

    vi. Those visiting people in care homes should continue to test using tests provided by the care home they are visiting.

188. The position remained until 8 September 2022 from which time changes to our testing arrangements in health and social care were introduced so that there was a pause in regular asymptomatic testing of staff.

189. Throughout the pandemic period advice on matters such as specificity and sensitivity of test and identification of asymptomatic infection came from SAGE, TAG and PHW. The OCMO(W) was not directly involved in the formulation of this advice,

Shielding of the clinically vulnerable and clinically extremely vulnerable

190. Early in the pandemic members of the public were identified by health professionals as being clinically vulnerable ("CV") or clinically extremely vulnerable ("CEV") to severe complications of the coronavirus ("Covid-19"). The CEV individuals were identified based on the severity, history and treatment levels of their condition(s) and collated in a list referred to as the "shielding patient list" or "SPL". These individuals were advised by myself as CMO(W) and via Welsh Government policy and guidance to shield themselves from the risk of transmission by limiting their social contacts. The Inquiry has asked if the Office of the CMO or myself was involved in development of the Shielding policy and

guidance for the clinically vulnerable and clinically extremely vulnerable. While I have tried to outline this where possible, my role and that of my office are not always distinguishable, as in providing advice I would frequently discuss this with those who were a part of my office.

The CMO office role in the initial development of the shielding policy and guidance for the clinically vulnerable and the clinically extremely vulnerable groups in Wales.

191. On the 3 March 2020 a joint action plan between the UK Government and devolved Governments in Wales, Scotland and Northern Ireland was published, 'Coronavirus action plan: a guide to what you can expect ("joint action plan") which is exhibited in **FAM3CMOW01/90- INQ000057508** While the joint action plan did not refer to shielding individuals directly, it set out a phased response to the virus and noted *"[s]o far the data we have suggest that the risk of severe disease and death increases among elderly people and in people with underlying health risk conditions (in the same way as for seasonal flu)"*. My office was not directly involved in this joint action plan but was provided with a draft as part of a wider circulation list within the HSSG.

192. On the 5 March 2020 the Scientific Advisory Group for Emergencies ("SAGE") discussed the need for vulnerable groups to be identified and protected confirming *"there is scientific data to support implementation – roughly 2 weeks later – of social isolation (cocooning) for those over 65 or with underlying medical conditions to delay spread, modify the epidemic peak and reduce mortality rates."*

193. Dr Robert Orford attended the meeting on the 5 March 2020. Following this meeting the I was provided with a written briefing from Dr Robert Orford outlining the discussion at SAGE, which is provided in exhibit **FAM3CMOW01/91-INQ000227250**. This confirmed that: "Early enactment of social distancing for those over 65 unlikely to delay peak or significantly impact peak height but could reduce 25-35% of deaths and decrease demand for hospital and critical care beds. This group is estimated to contribute up to 5% of cases but 20-35% of deaths".

194. On 16 March 2020 the Welsh Government, in conjunction with the UK Government, issued guidance on Coronavirus social distancing. A copy of this guidance is exhibited in **FAM3CMOW01/92-INQ000080866**. The initial draft plan for shielding was produced by the UK CMO office and shared with the other three CMOs on the 15 March 2020. The plan was then discussed at the four CMOs meeting on the 16 March 2020 and collectively agreed. This guidance that was issued was designed for everyone but in respect of those

who were at increased risk of severe illness from Covid-19 it advised them to be particularly stringent in following social distancing measures. This group was specified in the guidance as including those who were:

a. aged 70 or older (regardless of medical conditions)

b. under 70 with an underlying health condition listed below (ie anyone instructed to get a flu jab as an adult each year on medical grounds):

c. chronic (long-term) mild to moderate respiratory diseases, such as asthma, chronic obstructive pulmonary disease, emphysema or bronchitis

d. chronic heart disease, such as heart failure

e. chronic kidney disease

f. chronic liver disease, such as hepatitis

g. chronic neurological conditions, such as Parkinson's disease, motor neurone disease, multiple sclerosis, a learning disability or cerebral palsy

h. diabetes

i. a weakened immune system as the result of conditions such as HIV and AIDS, or medicines such as steroid tablets

j. being seriously overweight (a body mass index (BMI) of 40 or above)

k. those who are pregnant.

195. The advice on the 16 March confirmed that further advice would follow for those with particular clinical conditions which put them at event higher risk of illness from Covid-19.

Process by which certain medical conditions were identified as giving rise to clinical vulnerability or clinical extreme vulnerability, including any changes and the reasons for change

196. I, as part of the UK CMOs, and advised by clinical leaders, agreed the clinical criteria for those who were at even higher risk, the CEV, who would be to be advised to shield. On 17 March 2020, the four UK CMOs finalised the interim list of conditions. As set out in exhibit **FAM3CMOW01/93-INQ000226948,** this interim list included:

a. Solid organ transplant recipients.

b. People with specific cancers

c. Severe respiratory conditions, including all cystic fibrosis and other respiratory conditions which resulted in ITU/HDU admission

d. Severe single organ disease (e.g. liver, cardio, renal, neurological) which has resulted in ITU/HDU admission

e. Rare diseases and inborn errors of metabolism that significantly increase the risk of infection

f. Pregnancy with significant congenital heart disease

g. Exclude patients with a life expectancy of less than 6 months or anybody who does not wish to follow shielding measures.

197. Comments were requested from clinical advisers, including those in the Office of the CMO(W). Heather Payne, Professional Lead for Maternal and Child Health, and part of the OCMO(W), confirmed that she had requested children's conditions to be added to the list and the Chief Nursing Officer's team took forward reviewing principles and guidance for health boards to keep children out of acute setting if possible, as exhibited in **FAM3CMOW01/94-INQ000226949**. The final agreed list was cleared by the four UK CMOs on the 18 March 2020. As exhibited in **FAM3CMOW01/95-INQ000226953** this included the shorter final list of:

a. Solid organ transplant recipients.

b. People with specific cancers

c. Severe respiratory conditions, including all cystic fibrosis, severe asthma and severe Chronic Obstructive Pulmonary Disease (COPD)

d. Rare diseases and inborn errors of metabolism that significantly increase the risk of infection (such as Severe Combined Immunodeficiency (SCID), homozygous sickle cell)

e. People on immunosuppression therapies sufficient to significantly increase risk of infection

f. Pregnancy with significant congenital heart disease

198. Identification of all CEV individuals in Wales was a significant and complex task. The initial criteria for the "at risk" CV group announced on the 16 March could have been processed drawing heavily on the GP register but once the more clinically specific list for the CEV was confirmed by the UK CMOs on the 18 March there were issues with accessing and aligning the data points to create an accurate database of individuals.

199. I asked for a collaboration of national bodies in Wales (NWIS, DU, Shared Services and Public Health Wales) to identify those in Welsh population who met the clinical criterial agreed by the UK CMOs. This list was referred to as the Shielded Patient List ("SPL"). The methodology for high risk shielded patient list identification is summarised in exhibit **FAM3CMOW01/96- INQ000395540** a briefing from NHS Wales on High risk shielded patient list identification methodology.

200. As noted in this briefing, where possible, the Welsh approach was to use the NHS Digital (England) methodology and codes to support the identification of patients but where systems and access to alternative data are different, NHS Wales sought clinical advice in relation to the application of methods. This process included clinical input from the Wales Cancer Networks, Welsh GPs, the Welsh Analytical Prescribing Support Unit, the Congenital Anomaly Register & Information Service and from Intensive Care clinicians. The identification of patients for inclusion in the SPL involved interrogation and analysis of multiple national datasets collected by NHS Wales. These included:

a. Patient Episode Database for Wales ("PEDW") namely Admitted Patient Care ("APC")

b. Prescription Pricing Service ("PPS")

c. Welsh Demographics Service ("WDS")

d. Maternity Services Dataset ("MSDS")

e. Cancer Network Information System Cymru ("CaNISC")

f. Congenital Anomaly Register & Information Service ("CARIS")

g. Using searches deployed via Audit+ ("Audit+")

h. Critical Care Dataset ("CC")

i. Hospital Pharmacy

j. Office for National Statistics Daily Death Notifications

k. Electronic Master Patient Index ("eMPI")

201. In April 2020 work started on Phase II of the SPL in Wales. A briefing was prepared by the NHSDU outlining the requirements for Phase II used in England and the impact this would have on the number of Welsh individuals who would be included on the SPL. A copy of this report is exhibited in **FAM3CMOW01/97-INQ000227084.**

202. As a result of this briefing, I was asked to confirm whether Wales would align with the position taken in the other nations or diverge. My view was that it would be sensible to align our lists with the other UK nations, exhibit **FAM3CMOW01/98-INQ000227088** refers.

203. A report outlining how the SPL was formulated between March to July 2020 was produced by NHS Wales Informatics Service ("NWIS") a copy of which is provided in **FAM3CMOW01/99- INQ000385360 .**

204. Subsequent changes to the clinical criteria for the CEV group were made but these were in line with the other three nations and on agreement with the UK CMOs. On the 1 July 2020 the four UK CMOs endorsed the statement within the Royal College of Paediatrics and Child Health ("RCPCH") guidance that they should remove most children from the shielding list but agreeing that no child should be removed from the SPL without a conversation with a clinician. This agreement followed discussion by myself and the other three CMOs with the RCPCH about the proposals ahead of the issue of the statement – I exhibit a note of the meeting as **FAM3CMO01/100- INQ000414002** . The RCPCH confirmed that they had reviewed the data and spoken to speciality consultants to agree which group of patients must be shielded; and groups that may needed to be shield dependent on the degree of their condition such as Cystic fibrosis. It was considered that with specific definitions they could now exclude patients from the shielded list. For example, within the original list some children with asthma and diabetes were pulled into shielded group, whereas asthma not a risk for children and number admitted is very low. In the RCPCH experience the vast majority of children are under the care of primary care and on that basis they had agreed 3 principles:

a. If the child is under secondary/tertiary care and needs to be shielded on the individual advice from their clinician

b. If not under secondary care they probably do not need to be shielded, so a number of children can be released from shielding

c. Each patient would be known to senior clinicians in secondary care and therefore the completed lists who of has been shielded is much more nuance and risk is much lower.

205. On the 5 August 2021 the 4 UK CMOs agreed that those under 18 should no longer be considered CEV and should be removed from the shielding patient list.

206. While the four UK CMOs made collective decision around the criteria applied to identify the shielding patient list, the impact on those identified individuals did eventually vary. We were of course working in different contexts once the four nations began to diverge in relation to the imposition and non-imposition of non-pharmaceutical interventions (NPIs) or, as they were often referred to, 'restrictions'. As such we had slight different considerations in terms of the impact the advice to shield had for those clinically vulnerable individuals. It is important to note that the restrictions in Wales were applied equally to the whole population but the advice or guidance to those on the shielding list was more restrictive and when there were easements or lifting of restrictions those shielding and following the advice may not have always experience the benefit.

CMO(W) involvement in "shielding advice" for at risk groups in Wales, including whether this changed and the reason for the changes

207. On the 24 March 2020 the Welsh Government announced measures to protect those at highest risk from coronavirus which was supported by guidance for those who are identified as extremely vulnerable to the virus. The announcement confirmed that those at highest risk would be given specific advice about how they could protect themselves, based on their individual medical history and health needs. On the same date 88,000 shielding letters were issued to the 'Phase I' cohort. A copy of this letter is exhibited in **FAM3CMOW01/101-INQ000226987** and it included advice to:

- Strictly avoid contact with someone who is displaying symptoms of coronavirus (COVID-19). These symptoms include high temperature and/or new and continuous cough;
- Not to leave their house for at least 12 weeks (up to 15 June 2020) unless it is absolutely vital.

- That visits from carers or healthcare workers, who would normally come and help with daily needs or social care, would be able to carry on as normal.

- Not to attend any gatherings. This includes gatherings of friends and families in private spaces, for example family homes, weddings, parties and religious services.

- Not to go out for shopping, leisure or travel and, food or medication deliveries, should be left at the door to minimise contact.

- To keep in touch using remote technology such as phone, internet, and social media.

208. This letter was issued by myself and with input from my office on the appropriate measures for this group. A copy of the guidance is provided in **FAM3CMOW01/102 - INQ000080896.** An easy read version of this guidance was issued on the 1 April 2020, exhibited in **FAM3CMOW01/103- INQ000081032**.

209. On the same date I issued a public health link to NWSSP, copy of this message is exhibited in **FAM3CMOW01/104-INQ000080900.** I asked for this to be forwarded to all General Practitioners asking that they ensure the message was seen by all practice nurses and non-principals working in their practice. This letter set out the 16 March criteria (noted above) and confirmed the agreed clinical subset agreed by the UK CMOs (noted above) A copy was also provided to all the health boards and NHS trusts (including PHW) and NHS Direct, the British Medical Association, the Royal Colleges and Community Pharmacy Wales.

210. This was followed on 3 April 2020 by a letter from me to those on the SPL explaining the support available to them: local authorities had been provided with their contact details to offer support, priority delivery slots were available for online shopping deliveries and free food boxes could be requested where online shopping or other alternatives were not possible. A copy of the letter is exhibited in **FAM3CMOW01/105- INQ000080944**. Also on 3 April 2020, a public health link was sent to GPs providing information about the SPL and the shielding letters. It also gave answers to a number of practical questions such what to do if a patient had received a letter but did not know why, or had expected to receive a letter but had not. The letter highlighted GPs' ability to generate shielding letters where they and the patient believed the patient meet the criteria. A copy of the public health link is exhibited in **FAM3CMOW01/106- INQ000048588**.

211. The guidance on shielding and protecting people defined on medical grounds as extremely vulnerable from coronavirus was updated on the 8 April 2023 to include the information my letter of the 3 April 2020 regarding available support and a link to advice on social distancing. A copy of this guidance is provided in **FAM3CMOW01/107-INQ000080982.**

212. Easy read versions of the guidance were published on the 23 April 2020 and are exhibited at **FAM3CMOW01/108- INQ000081040** and **FAM3CMOW01/109- INQ000081043.**

213. A statement was made by the MHSS on the 5 May 2020 confirming there had been a refinement of the medical criteria for shielding in line with the other three nations. Updated guidance was published and is exhibited at **FAM3CMOW01/110- INQ000081108.** This replaced 'People who are pregnant and children up to the age of 18 with significant heart disease, congenital or acquired' in the list of groups to shield with 'pregnant women with significant heart disease, congenital or acquired' and 'children up to the age of 18 with significant heart disease, congenital or acquired'. The previous advice to stay at home and avoid face to face contact 'for at least 12 weeks from receipt of the letter' was updated to 'until at least 15 June 2020'. I sent letters to further high-risk patients advising them to shield. As a result, approximately 21,000 patients were added to the SPL (taking the number advised to shield in Wales to approximately 121,000).

214. On the 1 June 2020 the MHSS announced two changes for people who are shielding based on advice that I had provided. Firstly, that they could exercise outdoors an unlimited number of times a day. Secondly, that they could meet with another household outside on the same terms as the everyone else in Wales.

215. On the 2 June 2020 MHSS agreed to my proposal to continue shielding until 16 August 2020, a copy of the advice to the MHSS is exhibited at **FAM3CMOW01/111-INQ000144908**. An announcement confirming this was issued on the 4 June 2020 a copy of which is exhibited at **FAM3CMOW01/112- INQ000227166**. Guidance was updated on the 8 June 2020, a copy of which is exhibited at **FAM3CMOW01/113- INQ000081191** and this guidance reflected my advice for clear messaging to those on the list to ensure when exercising or mixing with other household to act with caution.

216. On the 22 June 2020 after the UK Government updated its advice to people who were shielding in England, the DCMO(W) issued a statement to say that shielding advice has not changed in Wales, where it is in place until 16 August, a copy of this statement is exhibited at **FAM3CMOW01/114- INQ000227186.**

217. The Welsh Government announced that two households in Wales could form what is termed an "extended household" from 6 July, enabling them to meet up indoors and stay overnight; the extended household measure also included people who are shielding and I therefore issued advice on this, a copy of which is exhibited at **FAM3CMOW01/115-INQ000227201.**

218. On the 31 July 2020 Shielding was paused in the other nations but in Wales this continued until the 16 August 2020. This decision to continue Shielding in Wales was made by the MHSS following advice provided on the 2 July 2020. A copy of this advice is exhibited in **FAM3CMOW01/116-INQ000136796.** My advice at the time was to align with the other nations. The MHSS, having considered input from the Disability Equality Forum provided by the Deputy Minister and Chief Whip about the need for adequate warning of changes, decided to continue with the plan for shielding advice to continue until the 16 August 2020. A copy of the Deputy Ministers email is exhibited in **FAM3CMOW01/117-INQ000252522** and the decision by the MHSS is confirmed in exhibit **FAM3CMOW01/118-INQ000252524** in which the MHSS reflects on moving people to an earlier date being fraught with difficulty and the concern that people felt abandoned rather than liberated by being taken out of shielding. Ultimately the advice was of course just that, advice and on this basis the Minister decided to keep the advice in place.

219. New guidance was issued on the 16 August 2020 at the point at which shielding was paused in Wales. A copy of this guidance is exhibited at **FAM3CMOW01/119-INQ000081384.**

220. Early October 2020, as levels of Covid-19 were increasing across most areas of Wales and other parts of the UK, the four UK CMOs advised that shielding should not be reintroduced, however advice to this group on how to keep safe could be issued to support those on the SPL to manage their own risk.

221. On the 22 October 2020 I wrote to those who were CEV and were previously shielding ahead of the firebreak period being introduced in Wales. While there was no requirement for shielding to re-start the letter contained the latest advice to people on how to take extra care and best protect themselves. This included reducing contact with family and friends from other households even after the firebreak period, hand-washing and surface cleaning, social distancing, shopping online (with priority supermarket delivery slots still available) or at quieter times of day and taking the flu vaccine. A copy of this letter is exhibited at **FAM3CMOW01/120-INQ000227258.**

222. Further easy-read guidance was issued at the end of the firebreak period, on the 5 November 2020 on how to take extra care as more people get coronavirus. This included the same advice as in the October guidance with the addition of mask-wearing inside public places. A copy of this guidance is exhibited at **FAM3CMOW01/121-INQ000081602.**

223. On 17 December 2020 Christmas advice for people who were shielding was issued. A copy of this is provided in exhibit **FAM3CMOW01/122- INQ000081669.** This advice, although separate to the Coronavirus Action Plan for Wales which introduced 'Alert levels' in Wales, clarified the additional actions those who were CEV should be considering as incidence of coronavirus increases or decreases, linked to the alert levels without the need to communicate more formally with each change. It noted that those who were CEV could choose to be part of a Christmas bubble but advised that this involved greater risks, and the risk of infection would be minimised by limiting social contact with people outside the household. For those joining a Christmas bubble, social distancing, regular hand-washing, surface cleaning, ventilation, going outdoors, avoiding car-sharing with people outside the household and consideration of face-covering indoors were advised.

224. Unfortunately, on the 22 December 2020 the advice to people in Wales who were CEV changed from this date due to the uncertainties concerning the new variants of concern (at this stage the "Kent variant"). People within this group were advised to no longer attend school or work outside the home. A letter from the MHSS was issued confirming this advice, exhibit **FAM3CMOW01/123 - INQ000227295** refers, but it was recognised given the time of year these letters would be inevitably delayed, and a public announcement was issued with a plea to stakeholders and employers to note the change of advice. A copy of the announcement is exhibited in **FAM3CMOW01/124- INQ000321032**.

225. On the 27 January 2021 further guidance was issued to the CEV advising that they should continue to no longer attend work or school outside the home until to 31 March 2021, as exhibited in **FAM3CMOW01/125- INQ000227306**. This was based on my recommendation made in light of the high incidence of Covid-19 at that time. A copy of my advice is provided in exhibit **FAM3CMOW01/126- INQ000081809.**

226. On the 12 March 2021 the MHSS announced that following my recommendation the advice to the CEV to follow shielding measures would be paused from 1 April 2021. A copy of the guidance issued on 1 April 2021 is exhibited in **FAM3CMOW01/127-INQ000227322** and a copy of the announcement in exhibit **FAM3CMOW01/128-INQ000337551**

227. Updated guidance was issued on the 11 June 2021 to the CEV. A copy of this is exhibited in **FAM3CMOW01/129- INQ000082105.** At this time shielding advice was still paused, changes made were minor to reflect updates on universal credit, travel and SMS (text) and email alerts.

228. I wrote a letter on 27 July 2021 with advice for people who were CEV to provide guidance as the Covid -19 rules were relaxed. This strongly recommended the vaccine for those who had not yet had it and advised keeping contacts to a minimum, meeting outside where possible, social distancing, avoiding touching the face, wearing a face covering where required and regular hand washing and surface cleaning. A copy of this letter is exhibited in **FAM3CMOW01/130 - INQ000271726.** An easy read version of this letter, dated 27 July 2021, is exhibited in **FAM3CMOW01/131- INQ000082194.**

229. On the 9 September 2021 the four UK CMOs recommended that that shielding advice to the CEV group should no longer form part of the Covid-19 response and that it was appropriate to return to the pre-pandemic approach of individual clinical advice. The SPL remained open in Wales however advice was still paused.

230. On the 9 September 2021 the four UK CMOs recommended that that shielding advice to the CEV group should no longer form part of the Covid-19 response and that it was appropriate to return to the pre-pandemic approach of individual clinical advice. The SPL remained open in Wales at the MHSS request however advice was still paused.

231. On the 23 December 2021 the MHSS issued a statement confirming that I would be writing to everyone on the SPL with advice on minimising their risk due to the increase in the rate of the new omicron variant. A copy of this statement is provided in exhibit **FAM3CMOW01/132- INQ000227352.** A copy of my letter, exhibited at **FAM3CMOW01/133- INQ000353303,** explained that the Omicron variant could quickly move from person to person and highlighted the need for regular hand washing, wearing a face covering, indoor ventilation and the taking of a lateral flow test before going to busy places or visiting friends and family. The letter also strongly encouraged a booster in addition to the two vaccine doses.

232. The CEV guidance was updated on 25 January 2022, confirming that those under 18 were no longer considered CEV or on the SPL and highlighting my advice in my letter from December 2021 regarding the Omicron variant . A copy of this guidance is exhibited in **FAM3CMOW01/134 – INQ000080897.**

233. On the 17 March 2022, I issued advice to the CEV confirming that the SPL would close on the 31 March 2022. A copy of this is provided in exhibit **FAM3CMOW01/135–INQ000252541.** On the 31 March 2022 shielding programme in Wales officially closed and a copy of the announcement is provided in exhibit **FAM3CMOW01/136–INQ000227382**.

Impact and effectiveness of the shielding advice during the pandemic

234. Impact of shielding on vulnerable individuals: integrated impact assessment (**FAM3CMOW01/137- INQ000066205**) noted the most significant impact was positive, with the creation of a robust system of governance that provided assurance that access to services and provisions continued for those who were identified as extremely vulnerable/shielding. It noted the real risk to the health and well-being of isolated shielding individuals without this programme, as not providing priority access to food, medicines, social and other services could have led to people risking their health to leave their homes and shop and/or going without food, medicines and essentials. There was a significant impact in terms of financial cost but this was fully taken into account and was considered proportionate as part of an emergency response to the pandemic. The assessment did not consider if the shielding advice reduced the incidence of infection or hospitalisation in the Clinically Extremely Vulnerable however.

235. The Welsh Government's Knowledge and Analytical Services Directorate collated data on the number of Clinically Extremely Vulnerable living patients on the SPL including:

    a. shielding patient counts by local authority and age band

    b. shielding patient counts by local health board and age band

    c. shielding patient counts by lower super output area and age band

236. These anonymous summaries were published to provide the latest information on the shielded patients in Wales, and updated when there were significant changes to the SPL advice. The dataset included regional and local data to allow for analysis, modelling and planning to take place to aid the response to the coronavirus pandemic and to support transparency and understanding of the size of the SPL in Wales.

237. There was no analysis during the pandemic of how the advice impacted on the number of people on the list or analysis of the proportion of those on the list who were hospitalised with Covid-19. The numbers were collected for operational input not research.

238. The Welsh Government has however facilitated research into this which is led by Professor Helen Snooks at Swansea University as part of a programme referred to as the EVITE Immunity project. This study aimed to measure effects and costs of shielding to protect members of the general population at highest risk of serious illness or death from Covid-19 in Wales. The objectives were noted as

    i. Capture the rationale for UK shielding.

    ii. Assess effects of shielding in the general population and subgroups in terms of deaths, hospitalisations, safety and self-reported health.

    iii. Assess the infection levels and immunity within the shielded and control populations as a whole.

    iv. Explore behaviour, adherence and safety concerns relating to shielding.

    v. Assess the costs of the shielding intervention against its consequences.

    vi. Understand the experiences and views of healthcare providers in relation to the shielding intervention and perceived effects, including healthcare associated harms

239. Neither myself not my office has been involved in this work which is facilitated by the NHS in Wales and supported by Knowledge and Analytical Services.

240. The results of the EVITE research were published 15 February 2023 entitled, 'Did the UK's public health shielding policy protect the clinically extremely vulnerable during the COVID-19 pandemic in Wales? Results of EVITE Immunity, a linked data retrospective study'. A copy of this is exhibited in **FAM3CMOW01/138- INQ000328637**

241. In summary the paper indicated that the shielded cohort in Wales included 117,415 people, with 3,086,385 in the comparator cohort. The largest clinical categories in the shielded cohort were severe respiratory condition (35.5%), immunosuppressive therapy (25.9%) and cancer (18.6%). People in the shielded cohort were more likely to be female, aged above 50 years, living in relatively deprived areas, care home residents and the frail. The proportion of people tested for Covid-19 was higher in the shielded cohort, with lower positivity rate incident rate ratios. The known infection rate was higher in the shielded cohort (5.9% vs 5.7%). People in the shielded cohort were more likely to die, have a critical care admission, hospital emergency admission, emergency department attendance and common mental disorder. The researchers concluded that deaths and

healthcare utilisation were higher amongst shielded people than the general population, as would be expected in the sicker population. Differences in testing rates, deprivation and pre-existing health are potential confounders; however, there was a lack of clear impact on infection rates which the researchers considered raises questions about the success of shielding and indicates that further research is required to fully evaluate this national policy intervention.

Clinical trials and research into the treatment of Covid-19

242. The OCMO(W)'s had limited involvement in or monitoring of the observational studies such as SARS-CoV2 immunity and reinfection evaluation (SIREN) and the COVID-19 Clinical Information Network (CO-CIN) and therapeutic trials including the Randomised Evaluation of COVID-19 Therapy study (RECOVERY). In terms of SIREN myself and the Deputy CMO were contacted by Public Health Wales to confirm that they were supporting Health and Care Research Wales to work with Public Health England in order to take forward this piece of work. A number of health boards in Wales participated in RECOVERY which was open in: Aneurin Bevan University Health Board, Betsi Cadwaladr University Health Board, Cardiff and Vale University Health Board, Cwm Taf Morgannwg University Health Board, Hywel Dda University Health Board, Swansea Bay University Health Board, Velindre University NHS Trust.

243. Wales participated in many of the clinical trials and recruited over 60,000 participants into Covid- 19 related studies. I wrote, on behalf of the UK CMOs, to NHS Wales on the 6 April regarding the enrolment of Covid-19 patients in national priority clinical trials. A copy of this letter is exhibited in **FAM3CMOW01/139- INQ000048586.** In this letter I acknowledged that while prescribing decisions were clinical decisions, I discouraged the use of off-licence treatments outside a trial as this was a wasted opportunity to create information that could benefit others and inform future decisions. We needed to gather as much reliable information as possible through clinical trials. A further letter on the national clinical trials was sent on the 6 May 2020, a copy of this letter is exhibited in **FAM3CMOW01/140-INQ000048596.** This letter outlined the positive response to recruitment to clinical trials so far and provided an update on sources of information to clinicians on the work of the main UK clinical trials.

244. NHS organisations came together with national programme leadership via Health and Care Research Wales and set-up and delivered Covid-19 studies efficiently and at pace, with patient access to research across all areas of Wales. Specific studies were prioritised

through a UK process (badged urgent public health ("UPH")) which meant it was clear what should be prioritised locally and proactively facilitated.

245. Wales also participated in the set up and delivery of the Covid-19 Vaccine Research Register, set up to enable individuals in Wales and across the UK register their interest in participating in vaccine studies for Covid-19

246. The OCMO(W) and the Technical Advisory Group followed the work of UK trials and papers were shared and discussed at the Technical Advisory Group to share learning from such studies and trials to inform clinical practice in the treatment of Covid-19 in Wales. Health and Care Research Wales also followed the trials closely feeding back into the Technical Advisory Group as well as to myself and the Chief Scientific Adviser for Health in Wales.

247. The Secure Anonymised Information Linkage ("SAIL") Databank played a key role in supporting data-linkage research that examined the impact of Covid-19 on society and NHS, as well as the effectiveness of treatment options and other non-pharmaceutical interventions. This included being the leading UK trusted research environment supporting Covid-19 research and securing significant amounts of funding from SAGE National Core Studies programme to support delivery of Covid-19 Research.

Other matters within the scope of Module 3

248. The Inquiry has understandably requested information on the extent to which my office was involved in other matters within the scope of Module 3. I have set out this information below to assist the Inquiry in this regard:

The clinical criteria or treatment protocols relating to the escalation of care for patients severely or critically ill with Covid-19

249. As outlined above Professor Chris Jones, DCMO works closely with the WCCTN. That role is separate to the main work of the OCMO(W) and falls within the Chief Nursing Officer for Wales remit. Neither the DCMO(W) nor I were involved in providing advice to the Welsh Government on these matters.

The establishment of temporary field hospitals and use of private hospitals to increase the capacity of the healthcare system in Wales

250. This area is not within the responsibility of the Chief Medical Officer but fell within the Director General Health and Social Services ("DG HSS") remit and led by that office.

Staffing levels, critical care capacity and allocation of staff and resources within the healthcare system

251. Again this would be directly overseen by the DG HSS and Helen Arthur, the Director of Workforce for the HSSG.

Clinical criteria for discharge of patients from hospital

252. This comes within the Public Health Protection Directorate so within my area of responsibility as CMO(W). This was overseen by Marion Lyons, Senior Medical Officer for Communicable Diseases, Healthcare Associated Infections and Antimicrobial Resistance.

253. My office did not provide initial advice on the framework of actions issued on the 13 March 2020 which included the expedition of discharge of vulnerable patients from acute and community hospitals.

254. The COVID-19 Hospital Discharge Service Requirements (Wales) was issued on 6 April 2020. Public Health Wales provided advice on the guidance to colleagues in the Health and Social Services Group. The guidance was to discharge patients as soon as clinically safe to do so While advice was provided on the decision in relation to testing before discharge, no specific advice on the clinical criteria for discharge was issued by myself or by the Deputy Chief Medical Officer but we were kept updated with the iterations of guidance being developed and issued to the healthcare sector.

Increased use of technology in primary care settings e.g. remote patient consultations

255. Use of digital Technology comes within the HSSG Digital Transformation Directorate which is over seen by Mike Emery, Director for Digital and Technology. During the pandemic Phillip Bowen, Deputy Director Digital Policy and Delivery worked on the use of video conferencing and other options for remote patient consultations. Neither myself nor to my knowledge the Deputy Chief Medical Officer provided advice on remote patient consultations.

Suspending non-urgent elective surgery and diagnostic screening programs

256. This would be a matter for the NHS in Wales to make decisions on at a local level. Support would have been provided by the DG HSS and Chief Executive NHS Wales in relation to this.

Maintaining healthcare and treatment for patients with non-Covid conditions, such the establishment of risk-based clinical pathways.

257. This area comes within the remit of the NHS Wales Performance Directorate led by the Deputy Chief Executive NHS Wales and Quality and Nursing Directorate let by Chief Nursing Officer's Office however myself and Chris Jones will be sighted on any policy developments in this area and asked to sign off on some aspects.

258. During the Covid pandemic planned care changed across the world; routine non-emergency resources were redeployed to address Covid-19 delivery. The clinical guidance issued in the UK moved from a maximum target waiting time driven system, to the available resources targeted to patients clinically assessed with the greatest need (essential care). This approach used the identification of risk and considered the implications of harm from both the risk of contracting Covid-19 and the risk of sub-optimal outcomes. Health boards in Wales used the Royal College of Surgeons' (RCS) "Clinical Guide to Surgical Prioritisation during the COVID 19 pandemic" to prioritise surgical patients. This was a clinically and time-based prioritisation, which acknowledged that delay in patients' treatment may cause harm. This provides a deferment time window for treatment once patients are past their treatment targets.

259. The Planned Care Programme Team within the Welsh Government (which formed part of the NHS Performance Directorate) led the work on this area but I was asked to consider the recommendations made, firstly as part of the HSSG Executive Director Team and secondly in my capacity as Medical Director NHS Wales. I have exhibited **FAM3OCMO01/141 – INQ000414005** , in which a summary was provided to the Minister for Health and Social Services of the work in this area, which I was copied into and cleared, along with Andrew Goodall. This summary notes that approach sought to build on the implementation of the health risk factor ("HRF") approach used within ophthalmology, developing a standardised framework for implementation across Wales that has the flexibility to support clinical variation. This offered a consistent approach building on the three levels of prioritisation (risk) linked to a clinical review date. This proposed that waiting lists for new reviews were managed as follows:

    a. At the point of referral, patients are clinically categorised using parameters based on risk level / urgency:

i. R1 - High Risk. Risk of irreversible harm or significant patient adverse outcome if target date is missed

ii. R2 - Intermediate Risk (Urgent). Risk of reversible harm or adverse outcome if target date is missed

iii. R3 - Low Risk (Routine). Low risk of significant harm or adverse outcome

b. Time frame for target review.

i. Needed to be agreed by specialty groups with consensus across Wales for each risk category.

ii. May include a range of weeks to allow for local variation.

260. This method of prioritisation put the clinician in control of how and when they would reasonably expect to see the patient based on their clinical need.

Palliative care.

261. This comes within the remit of the Quality and Nursing Directorate let by Chief Nursing Officer's Office and is led by NR Head of Clinical Conditions and Pathways.

Regulatory Issues

262. The General Medical Counsel ("GMC") is the regulator for doctors in Wales, as in the rest of the UK. During the pandemic period the GMC provided emergency registration so retired or trainee doctors were licensed to practise and could help deal with the coronavirus (COVID-19) pandemic, if they are asked to do so by the health services in the four UK countries. In Wales, Medical practitioners may not perform any primary care services, unless they are general medical practitioners and they are included in a medical performers list for a local health board[8]. The Welsh Government requested for provision to be made in the Coronavirus Act 2020 to provide a temporary exception to the general requirement for medical practitioners to be on the 'performers list' of a local health board

[8] See the National Health Service (Performers Lists) (Wales) Regulations 2004 (S.I. 2004/1020 (W. 117)) and The National Health Service (General Medical Services Contracts)(Wales) Regulations 2004 (S.I. 2004/478 (W. 48)).

in order to be able to practice. This was designed to expedite the up-take of professionals into the health service during this period of emergency.

263. The Coronavirus Act 2020 also made temporary modifications to be read into the Nursing and Midwifery Order 2001 and the Health Professions Order 2001, to enable the emergency registration of health professionals such as nurses, midwives, paramedics and other relevant professionals such as physiotherapists and occupational therapists.

264. Neither I nor my office was involved in the discussions around the provisions in the Coronavirus Act 2020, which were led by UK Government with instructions on the Wales medical performers list coming via the Primary Care Directorate in the Welsh Government.

265. In respect of regulation of the healthcare system in Wales this is performed by the Healthcare Inspectorate Wales ("HIW"). HIW's decision to pause routine inspections of healthcare settings was taken entirely by HIW with no input or advice from myself or my office. HIW is not a subordinate element of, or integral to, the Welsh Government HSSG, which is most closely concerned with the services upon which HIW reports and inspects. Although part of the Welsh Government, HIW is deliberately separated from the HSSG and operates independently Protocols have been established to safeguard the operational autonomy of HIW. Exhibit **FAM3OCMO01/142-INQ000182578** provides the current Memorandum of Understanding between HIW and the Welsh Ministers.

Impact and inequalities

266. In broad terms my advice throughout the pandemic was based on an assessment of how the Welsh Government's response would impact on the four harms of the pandemic which had been articulated by Chris Witty, the CMO for the UK. The four harms were as follows:

    i. direct harm to individuals from SARS-CoV2 infection and complications including for those who develop severe disease and in some cases sadly die as a result;

    ii. indirect harm caused to individuals if services including the NHS became overwhelmed due to any sudden large spike in demand from patients with Covid-19 on hospitals, critical care facilities and other key services;

    iii. harms from non-Covid illness, for example if individuals do not seek medical attention for their illness early and their condition worsens, or

more broadly from the necessary changes in NHS service delivery made during the pandemic in Wales to pause non-essential activity; and

iv. socioeconomic and other societal harms such as the economic impact on certain socioeconomic groups of not being able to work, impacts on businesses of being closed or facing falling customer demand, psychological harms to the public of social distancing and many others.

267. A fifth harm was added to the list by the Technical Advisory Group in July 2021:

v. the way Covid-19 has exacerbated existing or introduced new inequalities in our society.

268. I considered all five harms when providing my advice to the ministers. In terms of the impacts of specific Welsh Government decisions or policies there is a statutory requirement to undertake an assessment of the impact of decision made. Impact assessments are routinely undertaken but the OCMO(W) does not have a specific role in providing advise on or inputting into the assessment of impacts across the HSSG or the Welsh Government.

269. By way of example, in July 2020 my advice to the First Minister as part of the 21 day review noted that whilst the direct harm of being infected by Covid-19 continued to fall, I remained concerned that the restrictions which were in place were leading to significant negative impacts on mental health and wellbeing. These were particularly acute for the young, and those less able to understand the necessity of a change in routine such as young children or people with autism. I advised that to address these inequalities caused by the restrictions the Welsh Ministers should consider the continued restoration of economic activity in areas that the public values (for example personal services, the housing market, entertainment and cultural venues and enabling holidays to be taken) could help to alleviate these impacts. Exhibit **FAM3OCMO01/143- INQ000353094** refers.

270. In June 2020 I present a paper for the Executive Directors Team ("EDT") meeting on 'Covid-19 and Health Inequalities'. A copy of this paper is exhibited in **FAM3CMOW01/144– INQ000227598.** This paper highlighted the extant concerns that the Covid-19 outbreak had compounded the existing health inequalities in Wales, which had shown little improvement in the last 10 years based on the gap in life expectancy between the most and least deprived population. This report explored that data in more detail and recommended that the most deprived population needed be protected from the direct effects of the Covid-19 in a potential second wave and from the indirect effects of Covid-

19 on the economy which would increase health inequalities in the longer term. I outlined that we needed to look at policies to increase health and financial resilience across the population in Wales. The report I presented focuses on health inequalities by socioeconomic position and set out possible policy considerations for the EDT to take back to their policy teams. I recommended a group be established to look at health inequalities particularly focused on the 'four harms' outlined above. Additionally, attention should be given to guidance looking at high risk, typically low paid occupations and settings and how we reduce the risk for these individuals. Examples of potentially higher risk occupations may included among others social care and healthcare workers.

271. I noted that we would know we have succeeded in this if the gradient in Covid-19 mortality is less steep in future than in the first peak and if we saw a reduction in the gradient in all-cause mortality in 2022, given that it is unlikely that inequalities would reduce in the next two years. The analysis of mortality rates was essential to understanding this which is why I wrote to ONS in July 2020 to request further information, as outlined in paragraph 94 of this statement.

272. This report to EDT was intended to complement the parallel work by the First Ministers advisory group on worse COVID-19 outcomes in Black, Asian and minority ethnic communities which was published on 22 June (exhibit **FAM3CMOW01/145–INQ000227599)** which identified the full range of structural inequalities seen in deprived communities, with the additional influence of the effects of racism. That report concluded progressing the Race Equality Plan for Wales, with an acknowledgement of the impact of Covid-19 to be included. Immediate action on improving the quality of recording ethnicity data in health and social care services was also recommended. The use of the risk assessment tool for health care workers to be disseminated to ensure those at higher risks from Covid-19 in the Black, Asian or Ethnic Minority groups were provided with additional protection. This risk assessment tool was developed by a sub-group of the First Minister's Black, Asian, Minority Ethnic Covid-19 Advisory Group and disseminated to workers and employers, using existing networks, such as those with the Wales Trades Union Congress (TUC), health boards and social care networks. The Tool was made available without delay, in May 2020, to minimise avoidable risk and protect lives, initially as a PDF document and subsequently as an online tool through the national e-learning platform Learning@Wales as well as through the Electronic Staff Record (ESR) for NHS Staff. The report also highlighted non-Covid-19 specific recommendations which included use of networks and enhanced communication plans as well as building in consideration

for Black Asian and minority ethnic groups into economic plans and employment schemes.

273. Prior to the pandemic work had been ongoing on developing data on health inequalities in Wales. During the pandemic this focus was shifted slightly to consider the impact of Covid-19 on vulnerable groups. Reducing inequality was a central ambition of both prosperity for all and a healthier Wales which demands that we work in a more integrated and collaborative way with a shift towards prevention. The MHSS agreed a memorandum of understanding between the Welsh Government and the World Health Organisation ("WHO") regional office for Europe which sort to accelerate progress in building a healthier and more equal Wales and Europe. Resulting from this agreement was the Welsh Health Status Equity Report initiative ("WHERSRi") which aims to address health inequalities at their determinants, related policies and solutions for action and investment prioritisation in Wales, following cutting edge WHO methodology and tools from the European Health Equality Status Report ("HESR") and initiative ("HESRi"). This work culminated in a report entitled 'Placing health equality at the heart of COVID-19 sustainable response and recovery: Building prosperous lives for all in Wales' issued in collaboration with public health Wales (exhibit **FAM3CMOW01/146–** INQ000239588

274. The report highlighted how the pandemic triggered a public health and socio-economic crisis, exacerbating underlying inequities, and exposing new vulnerabilities. It has revealed the fragility of systems and capacities, related to chronic under-resourcing of public health, disease prevention and health promotion. The impact on livelihoods, especially for the most vulnerable, has been catastrophic, highlighting how interdependent individual health and well-being, social cohesion, and the economy are.

275. It noted that the key population groups with multiple vulnerabilities, compounded or exposed by COVID-19, include:

    a. Children and young people

    b. Minority ethnic groups, especially Black and Asian

    c. People living in (or at risk of) deprivation and poverty

    d. People in insecure/low income/informal/low-qualification employment, especially women

    e. Marginalised and socially excluded, such as homeless persons.

276. The report was clear that returning to the status quo before the pandemic is not enough. There is an opportunity for a transformative, synergetic recovery, accelerating innovation, bridging the gaps in health, education, housing, income, employment prospects and social safety nets, advancing green solutions, and ensuring the well-being of current and future generations. Preparing better for the next pandemic is not enough. There is an opportunity to prevent future epidemics and crises, building sustainable, inclusive, evidence-informed systems, policies and services, which enable healthier living environments and behaviours, and strengthen individual and community resilience to infections and adversities. The case for targeted investment in people's well-being, health equity and prevention is stronger than ever and requires urgent coherent action across all sectors towards closing the health gap.

277. My Annual Report for 2021/2022 – "Restoring our Health" considered how the health of the Welsh people had been affected by the pandemic between January 2021 and October 2021 (**FAM3CMOW01/147– INQ000066191**). In that report I set out the disproportionate effect that the pandemic had had on disadvantaged groups and considered how we could work towards restoring the nation's health.

278. We know that Covid-19 has deepened inequalities and we have seen its disproportionate impact on some of the most vulnerable people in our society. We must use our experience of Covid-19 to reset and improve action aimed at improving our health across the whole of society. The pandemic has shown the interconnectivity of our world and how quickly everything we take for granted can be brought to a halt; equally it has shown us how resourceful and adaptable we all are and how we can find solutions to seemingly intractable problems.

Future risks, reviews, reports and lesson learned exercises

279. The process of writing this statement has given me the opportunity to pause and reflect on what was the most challenging and busy time of my career to date. I have tried to remember faithfully the information I had and the advice I gave. The pace of action required, particularly in the early days of the pandemic when so little was known about the virus and its potential impact, placed extraordinary pressure on a small number of dedicated staff in Welsh Government and Public Health Wales. While they should be proud of the work they have done to mitigate the worst of the impacts, we will not forget the enormous sacrifices made by the people of Wales, many who felt considerable anxiety, worry and fear for themselves, families and neighbours and of course those who also sadly lost loved ones as a result of Covid-19.

280. My greatest fear is that the competing pressures which Wales is currently exposed to through economic recession, rising costs of living, increasing energy costs, war in Europe, and climate change will divert attention and investment away from the opportunity which we now have to build a more resilient system for protecting the heath of everyone in Wales.

281. My fellow CMOs and I have also worked together to produce a document aimed at the CMOs, Government Chief Scientific Advisers ("GCSA / CSAs"), National Medical Directors and public health leaders of the future should they find themselves faced with a new pandemic or major epidemic. It covers some technical aspects of interest primarily to our scientific, public health and clinical successors. Any future pandemic will present its own unique challenges, but the document sets out what we learned from this pandemic. A copy of this report is exhibited in **FAM3OCMO01/148** **INQ000203933** This report may be of interest to others, and we made it public for any wider audiences who wish to read it, but it is in places inevitably technical given this specific audience. It is not an attempt to describe policy choices or formation or to analyse operational delivery; in some places operational elements are described but this is for context rather than analysis.

282. The report in summary makes four main points. The first is that there were multiple strands of scientific work from different disciplines needed, and these had to be integrated at considerable speed. This is likely to be a repeated theme for any pandemic or major epidemic. The UK started with a strong science and research base and even with this, and swinging most of the medical scientific and research effort over to COVID-19, accumulating evidence for policy was incremental, with initially wide confidence intervals and uncertainty. Evidence will continue to accumulate as time goes on, and new evidence will no doubt come to light after the publication of this report that enables a better understanding of some of the issues the report covered.

283. The second is that, unsurprisingly, the UK was relatively effective and rapid in responding in areas in which we already had strengths and substantial capacity, including in biomedicine, which could be adapted and built on. For example, UK strengths in phase 3 clinical trials (phase 3 meaning trials where the medicine is tested in larger groups of people and compared against an existing treatment or a placebo) allowed very rapid progress in assessing clinical effectiveness of pharmaceutical interventions; the relatively small relevant diagnostics industry meant the scale up of diagnostic tests was slower and was a significant limitation on the initial response.

284. The third point made was that, while we have concentrated on the UK experience because that is the one for which we have first-hand experience, science and medicine are international and pandemics by definition cross borders. Much of what we learned was from scientists, public health experts and clinicians in other countries. The experience of each country in the Covid-19 pandemic, facing the same pathogen, is different, and all had different scientific strengths. It would however have been unwise to have relied entirely on the scientific capacity of others and the UK provided a significant contribution to the global scientific output as well as insights specific to the UK experience.

285. Finally, the engagement of policymakers and the public in the scientific insights was profound and critical to the response. People rightly wanted to understand why specific interventions, actions or treatments were being recommended and the underlying rationale and evidence for each. Often the most difficult part of medical and scientific communication is explaining uncertainty or evolving science in a transparent way without it leading to paralysis in decision making. Our collective experience of this as CMOs was almost entirely positive. Just as people in a one-to-one clinical encounter want to understand the logic, risks, benefits and uncertainties of a course of action, the same was true at national levels in this pandemic.

286. In Summer 2022 the MHSS agreed to commission an independent review of the health protection system in Wales. The review was conducted by David Heymann - Professor of Infectious Disease Epidemiology at the London School of Hygiene and Tropical Medicine and Head of the Centre on Global Health Security at Chatham House, London - and Sara Hayes who was formerly Director of Public Health at Abertawe Bro Morgannwg University Health Board. As part of the independent review I was interviewed and my views on the key issues and the health protection system in Wales sought.

287. The final report was published on the 6 February 2023, a copy of which is exhibited in **FAM3CMOW01/149-INQ000177516**. The purpose of review was to:

   a. identify the underpinning principles of a robust high performing health protection system;

   b. assess the strengths of the Welsh Health Protection System against the established benchmark of a high performing health protection system; and

   c. provide reasonable and actionable recommendations on the ways in which the health protection system in Wales could be further strengthened to meet or exceed the gold standard benchmark.

288. The review limited its focus to health protection, meaning the consideration of how public services work to protect individuals, groups and populations from infectious disease, incidents and outbreaks. The following areas of interest to the scope of Module 3 were assessed:

a. System design – the availability and use trained staff available for health protection activities, including ensuring that backlogs in health services and public protection services do not lead to deterioration in the public's health and wellbeing.

b. Governance and accountability – considering the range of organisation-wide and collaboration-wide plans for dealing with emergencies, incidents and outbreaks; and for dealing with endemic infectious diseases.

c. Workforce – availability of specialist epidemiologists and Consultants in Communicable Disease/Consultants in Health Protection and the impact of re-deployment of staff to support health protection during emergencies.

d. Leadership, collaboration and communication – how civil contingency partners (health board, local authorities, emergency services) work together

e. Intelligence – effective use of data capture and its value in national and local surveillance

289. This review did not address health protection arrangements and responses within or related to primary care, nor the infection prevention and control arrangements in healthcare settings, though these have a significant part to play in any integrated health protection system. The reviewers were clear that the health protection system in Wales is not broken and is not dysfunctional but there are things we can do to strengthen it further. The key overarching recommendations include:

a. Ensure that backlogs in health services and public protection services are cleared and remain manageable, and do not lead to deterioration in the public's health and wellbeing, so ensuring more healthy people who are less vulnerable to infectious disease threats.

b. Maximise the health and therefore resilience of the population through health and wellbeing initiatives and the recovery of NHS and Public Protection services which have been impacted by Covid.

c. Accountability frameworks should be developed so that for any population data, inequalities can be routinely monitored, and actions can be designed to tackle them.

d. Ensure that health board Public Health teams and local government Environmental Health teams have clarity on their respective core roles and responsibilities. We strengthen the system including use of behaviour science, risk communication and infection prevention and control.

e. Local resilience for all-hazard health protection needs to be retained following recovery from the Covid pandemic. For a local disease control or response team to be effective it needs support from both health protection specialists, public health laboratories and field epidemiologists. This multiagency relationship can be strengthened through joint training.

f. The voluntary sector should be engaged nationally and locally to explore what contribution volunteers may make in endemic disease control and future significant events.

g. Continue to bring the wider system, from the local to the regional and national levels, together in routine disease control activities, and in exercising and training for emergencies so that it works as one system and does not become fragmented. Health protection and civil contingency plans should be tested through exercises, with staff from all levels of the organisations taking part.

h. Discussions should be initiated with universities and other tertiary education providers to explore mechanisms to engage students on health-related courses to support health protection and participate in present and future all-hazard exercises and responses.

i. Ensure communication systems can operate in all directions, not just one way, to provide feedback and allow recipients to engage fully.

j. Review all data systems currently operating and explore how they can operate to agreed, shared standards and be combined, within the confines of Data Protection safeguards, to aid data capture and to increase their value in national and local surveillance.

k. Continue and strengthen four nation and international links and academia, for stronger horizon scanning, anticipation of emergency events, and identification of needs for better routine control.

290. The implementation work will be overseen by the Health Protection Advisory Group ("HPAG") which I chair. An Implementation Plan was produced and I exhibit a copy of this in **FAM3CMOW01/150-INQ000252577**. The plan will build upon previous assessments, recommendations and improvements to the public health system, including the work of Audit Wales and the technical report on the COVID-19 pandemic by the UK's Chief Medical Officers. We aim to address the recommendations in a thematic way, ensuring we take forward the more detailed recommendations in the report alongside the overarching thematic recommendations outlined in this plan. Work will reflect the "One Wales/Health" approach. An update on work to address both the overarching recommendations and those more detailed recommendations **was** published in 2024. **FAM3CMOW01/151 - INQ000495980**

291. A number of challenges now face public health in Wales. Covid-19 is still with us and remains a serious public health challenge. In addition, we see emerging the legacy of the direct harm of the virus in the form of long Covid and the indirect harms to people's health. The people of Wales have faced the challenges of Covid-19 with remarkable resilience and understanding; many have made great sacrifices. I am grateful to them.

292. Above all at the end of this statement I would like to remember those who died from Covid-19 and their families. As a doctor with a life-long passion for public health I recognise the losses and sacrifices that have been endured by so many and I hope that the lessons learned through this inquiry will also serve to strengthen our protections against future threats to the health and wellbeing of people in Wales and across the other nations of UK.

Statement of Truth

293. 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** Professor Sir Frank Atherton, Chief Medical Officer for Wales

Dated: ________________21st February 2024__________________