UK COVID-19 INQUIRY

CLOSING STATEMENT ON BEHALF OF
THE OFFICE OF THE CHIEF MEDICAL OFFICER

I. INTRODUCTION

1. This brief written closing statement is filed on behalf of the Office of the Chief Medical Officer ("**OCMO**") at the conclusion of the hearings in Module 2 of the UK Covid-19 Inquiry. It is the first closing statement that the Chief Medical Officer, current and former Deputy Chief Medical Officers and officials within their small private office have made in this Inquiry and is intended simply to clarify a small number of issues which appear to merit further elucidation.

2. The OCMO wishes to thank the Chair for undertaking the significant task of investigating the UK's response to and impact of the COVID-19 pandemic. As set out in Professor Whitty's first statement[1], the pandemic has been a tragedy on a global scale and there are important lessons to be learned both in relation to the handling of pandemics and in wider social, economic and political decision-making.

3. The CMO and DCMOs would also like to take this opportunity to thank again the many health and care professionals, scientists, and the general public who responded so remarkably to the huge threat of COVID-19. They express their profound sadness for those who lost their lives or had to endure prolonged illness or disability as a result of the disease.

4. The OCMO has not sought to question witnesses or make speeches in this module or in Module 1 because it is hoped that the evidence that has been provided by the OCMO speaks for itself. Some of the underlying science is also inevitably deeply

[1] [INQ000248853] at §1.2

technical and the witness evidence is based on the career-long study of epidemiology and public health by the Chief Medical Officer and his deputies. The OCMO considers that certain nuances and judgements are better suited to a close and careful reading of the witness statements, supporting evidence and contemporaneous documents than to a more adversarial process or by way of submissions from a legal team.

5. In considering the body of evidence before the Inquiry, the Chair will no doubt be considering the following evidence in full:

    a. The First Statement of Professor Sir Chris Whitty[2].
    b. The Second Statement of Professor Sir Chris Whitty.[3]
    c. The Third Statement of Professor Sir Chris Whitty.[4]
    d. The Fourth Statement of Professor Sir Chris Whitty[5].
    e. The First Statement of Professor Sir Jonathan Nguyen-Van-Tam.[6]
    f. The Second Statement of Professor Sir Jonathan Nguyen-Van-Tam[7].
    g. The Fourth Statement of Professor Dame Jenny Harries.[8]

6. Exhibited to the First Witness Statement of Professor Whitty is the 'Technical report on the COVID-19 pandemic in the UK'[9] (the "**Technical Report**"), a report produced by the GCSA, the CMOs and the lead DCMOs of England, Scotland, Wales and Northern Ireland. This was produced for the authors' successors and includes many of the lessons that the authors learned from their involvement in the pandemic. Whilst it was written for a different audience (those who will be at the forefront of confronting a future pandemic or major epidemic in the UK), it is hoped that the Technical Report is of assistance to the Chair when it comes to considering recommendations.

[2] [INQ000248853]
[3] [INQ000184638]
[4] [INQ000184639]
[5] [INQ000251645]
[6] [INQ000207293]
[7] [INQ000269203]
[8] [INQ000273807]
[9] [INQ000203933]

II. SCIENCE AS A COLLECTIVE ENDEAVOUR

7. Science is a collective endeavour, both nationally and internationally. As set out in the First Witness Statement of Professor Whitty, during the whole of the first two years of the COVID-19 pandemic, scientific advice was built up from thousands of international scientific inputs, integrated through specialist scientific committees such as NERVTAG, SPI-M-O, SPI-B and JCVI and then synthesised in the multidisciplinary committee SAGE. As Professor Whitty explained[10]:

> "In late January 2020 the SAGE system was activated; this provided a formal forum for combining scientific expertise from multiple strands to provide a unified view. A series of specialist scientific committees (some already in existence and others set up especially) then took scientific outputs from many thousands of scientists in the UK and internationally to form a central view in their area of expertise. The agreed committee views were then fed into SAGE, which was constituted to bring together scientists from multiple disciplines and chaired by the GCSA, then Sir Patrick Vallance FRS, and co-chaired by me as CMO because of the nature of the emergency. The product of SAGE's work then formed the basis of advice to Ministers and Cabinet given both through minutes of SAGE meetings, which are the definitive record of SAGE advice, and from me as CMO, the GCSA, the DCMOs and others."

8. There are five important points that arise from this. **First**, there will inevitably be views outside of the central view. Most of those views will be entirely reasonable and respectable even if they are not the central view. Others may not be. The Inquiry has heard from some witnesses whose views differ from the central view as recorded in, for example, the SAGE minutes. No doubt the Chair will exercise particular caution in respect of 'preferring' those views to the central view. An example might be the opinion in relation to the introduction of non-pharmaceutical interventions that "*if you go early, you don't have to go so hard*"[11] or the views that the imposition of stringent border restrictions would have played an important role in controlling the spread of the epidemic[12] or that test and trace represented a viable strategy for control of the pandemic in the UK as of March 2020[13]. Whilst some of these views may no doubt be

[10] At §5.12
[11] [16 Oct/40/12]
[12] [11 Oct/84/8]
[13] [16 Oct/92/12]

well considered; where they were contemporaneously expressed, they fell outside the central view of their respected colleagues.

9. **Second**, the nature of a public inquiry is such that focus is often placed on the role of individuals, particularly those in the public eye and who communicated the central views to Ministers or to the public. This undue focus may be heightened by, for example, cross-examination of one of the conduits of this information on a particular topic. For example, the OCMO agrees with the oral closing statement of Go-Science that "*there has been some inaccurate and ill-informed suggestion that there was a significant divergence in view between the GCSA and the CMO as to the timing of the first lockdown. That is not so. The advice of SAGE, including its assessment of the progress of the pandemic and the effect of NPIs is in the minutes and was communicated to decision-makers by the GCSA and the CMO as co-chairs of SAGE*".

10. That the CMO was aligned with the GCSA, for whom he and the DCMOs had and have the utmost respect, and that their advice reflected the central view of SAGE on this issue, is clear from the advice both gave in respect of the introduction of non-pharmaceutical interventions in the first half of March 2020. On 5 March 2020, SAGE advised that the Government should plan for the introduction of behavioural and social interventions within 1-2 weeks and outlined the measures under consideration. This advice was clearly repeated:
    a. On 9 March, by the CMO at COBR[14].
    b. On 10 March, at the subsequent meeting of SAGE[15].
    c. On 12 March, by the GCSA at COBR[16].

11. On 13 March, in response to new data showing greater than expected numbers of cases, SAGE advised[17]: "*household isolation and social distancing of the elderly and vulnerable should be implemented as soon as practical…*"[18]. On 16 March, SAGE advised:

[14] [INQ000056219] at §§5, 6 and 8
[15] [INQ000061522] at §34
[16] [INQ000056209], [INQ000056221] at §§3 and 4
[17] [INQ000061523] at §§1 and 2
[18] The wording of this minute was revised on 16/03/2020: see the Fourth Statement of Professor Whitty at §7.97.

"*there is clear evidence to support additional social distancing measures to be introduced as soon as possible*"[19]. The increased urgency of the situation was reflected in the advice CMO and GCSA jointly gave COBR later that day[20].

12. **Third**, there are undoubtedly legitimate differences of opinion as to whether the minuting of SAGE should better reflect the views that fell outside of the central view. The OCMO's position is that, in light of the time constraints regarding the production of the minutes and the need for a 'safe space' to test or express opinions that might fall outside of the central view, the publication of such views in the official minutes may not in fact be desirable or indeed practical in a timely way. However, irrespective of any difference of opinion as to the contents of the minutes themselves, there can be no doubt that the key decision-makers had access to the full range of opinions expressed at SAGE and other relevant meetings. This is because observers from, for example, the Prime Minister's Office, the Cabinet Office, the Treasury and the Department for Health and Social Care were present at meetings[21]. The CMO and GCSA were careful to ensure that decision makers were aware of the risks and available options[22]. Any recommendations as to the content of the minutes will need to take into account these other sources of information (and, of course, the fact that some decision makers prefer shorter minutes if they are to read them whereas others may rarely read them at all[23]).

13. **Fourth**, it may be suggested that having the GCSA and CMO as those responsible for presenting the central view has less utility than if decision-makers had direct access to a wider range of scientific advice (beyond that available from the SAGE minutes and

[19] [INQ000075664] at §2
[20] [INQ000056210] at §1
[21] See the First Witness Statement of Ben Warner [INQ000269182] §§41 to 43 and the minutes of the SAGE meetings where representatives from the Home Office, HM Treasury, NHS and other departments are listed as attending.
[22] See, for example, in relation to a meeting on 2 July 2021 with the Prime Minister, Chancellor and other ministers where a return to work was discussed, the GCSA recorded that "*CMO and I made risks very clear*" [INQ000273901] at p.614. In oral evidence, the Rt Hon Dominic Raab MP made clear that Professor Whitty did not give "*binary advice to the extent that there was only really one option*" [29 Nov/225/7] and "*got the balance right between giving clear advice but not for closing the idea there weren't alternatives that could be meaningfully considered*" [29 Nov/226/7].
[23] See, for example, the evidence of Matt Hancock who stated that he did read SAGE minutes [30 Nov/67/9] albeit not the early ones [30 Nov/118/17] and *cf* the evidence of Boris Johnson which was to the effect that he only read them from time to time [6 Dec/24/4] or read a fraction [6 Dec/25/5].

the feedback from observers). It would obviously have been possible for Ministers, had they wished to, to attend SAGE to hear the debate first hand, or to speak to individual scientists outside SAGE (as the Prime Minister did on one occasion). The Chair will wish to consider the risk that decision-makers, often with limited relevant scientific knowledge, will prefer a view (or a particular scientist) which falls outside the central run of scientific opinion but suits a particular policy aim or political perspective.

14. **Fifth**, decision-makers acknowledged that they were able to challenge and test the advice being given by the GCSA and CMO, and did so[24].

III. EARLY IMPLEMENTATION OF NPIs

15. One suggestion that was put to some witnesses during the oral hearings was that advice was given to delay the implementation of *any* measures. It may assist the Inquiry to consider the following 'headline' chronology of events (set out in far more detail in the First Statement of Professor Whitty[25] and elsewhere[26]):

    a. 22 January 2020: SAGE was activated[27] following a request from Professor Whitty[28] and with the agreement of GCSA.

    b. 28 January 2020: SAGE sets its first set of triggers that would "*require a change in HMG's approach*"[29]. Those triggers are sustained human to human transmission outside China and/or a severe UK case. Professor Whitty emailed No.10 on the same day setting out the possible scenarios[30].

[24] According to the Rt Hon Dominic Raab MP, CMO and GCSA were "*constantly peppered*" with questions [29 Nov/198/22]. The then Prime Minister said of a WhatsApp conversation with GCSA and CMO that it was an example of him "*interrogating my advisers*" [7 Dec/17/14].
[25] [INQ000248853] from §5.39
[26] [INQ000269203] from §6.1, [INQ000251645] from §7.1
[27] [INQ000087535]
[28] [INQ000047510]
[29] [INQ000203936] at §28
[30] [INQ000047585]

c. 29 January 2020: a COBR meeting is held where the GCSA gave a read out of the SAGE meeting of 28 January. A pandemic scenario is described by Professor Whitty to COBR as "*plausible*" and that the reasonable worst-case scenario was similar to that of pandemic influenza[31].

d. 30 January 2020: the UK CMOs advised the public of an increase in the UK risk level from low to moderate[32] stating that the "*government should plan for all eventualities*".

e. 4 February 2020: Professor Whitty briefs the Prime Minister in person on COVID-19. As he explained: "*In this meeting I reflected the view of SAGE that there was now the possibility of significant mortality in the UK. I gave 100,000-300,000 deaths as a figure in my view mortality might well reach if this became a pandemic*"[33].

f. 5 February 2020: Professor Whitty addresses COBR for the second time, observing that "*novel coronavirus case numbers in South Asia were rising quickly and that this trend was likely to continue*". The Director of the Civil Contingencies Secretariat addresses the same meeting on planning[34].

g. 14 February 2020: Professor Whitty briefs the Cabinet on COVID-19[35]. This includes informing the Cabinet that if the virus did not die out naturally: "*he expected that up to 50 per cent of the population would be affected with symptoms*".

16. Pausing there, it is clear that - throughout January and early February 2020 - the potential seriousness and need to plan had plainly been emphasised by Professor Whitty and the OCMO at the highest levels of Government, as it had by the GCSA. As Professor Whitty explained in his oral evidence about the meeting on 4 February 2020[36]:

[31] [INQ000056226] p.5, [INQ000051796] at §§25 and 27
[32] [INQ000203938]
[33] [INQ000248853] at §5.117 and see also [INQ000292665] as contemporaneous evidence of this.
[34] [INQ000056215]
[35] [INQ000056138] p.7
[36] [21 Nov/162/18]

"You have a situation where the Chief Medical Officer, and as you know from other documents, reported to the Prime Minister that there was a possibility -- it wasn't a certainty -- of a pandemic, and if this pandemic occurred, my view was it was reasonable to think -- this is not the same as a reasonable worst-case scenario, and I want to be clear on that it was reasonable to think that we would be looking, on first pass, at maybe 100,000 to 300,000 deaths, which, to be clear, is pretty accurate compared to where we are, sadly, now. I wasn't saying this was certain.

Now, the important second point, this wasn't some maverick coming in and saying this; this was on the basis of SAGE meetings chaired by the Government Chief Scientific Adviser, COBR had met, the World Health Organization has by now declared a public health emergency of international concern, this is all over the news.

Now, the point I would like to make on this, because I think this is actually something where we really do need to think very seriously in government, is that had, let us say, the Director General of MI5 or the Chief of the General Staff come in and said, "There is a possibility of 100,000-plus people sadly dying from a terrorist attack or an attack on the UK", the chances that this would have been the response in the letter and that this is what would have -- that the system would have continued as it did next COBR meeting, still chaired by the Secretary of State for Health and Social Care, I think is quite small.

The reason I'm making that point is: this was not a new consideration. Pandemic infection -- flu, but this is very similar to pandemic flu -- has been top of the National Risk Register for years. This is not a new potential threat. So my worry has always been – and I think this, in a sense, reflects it -- that hard geopolitical threats are treated in a different way -- and in my view an entirely appropriate way, this isn't a criticism of what they do -- to ones which are seen as natural threats or hazards. And that, I think, is something collectively that we should think about, without ascribing this to any person."

17. It cannot reasonably be said that notifying the Prime Minister on 4 February 2020 that there will very possibly be between 100,000 to 300,000 deaths and bringing the issue to the attention of COBR and the Cabinet is insufficient notice to senior decision makers of the severity of the situation. CTI rightly described this notification as a "*very grave piece of advice*" when questioning the Rt Hon Dominic Raab MP – a proposition with which Mr Raab agreed[37].

[37] [29 Nov/191/8]

18. If and insofar as it is suggested that the OCMO itself should have been doing more in the period between notifying the Prime Minister on 4 February 2020 and early March 2020, the OCMO would note the following range of activities that were being undertaken during this period (amongst others and in addition to its other public health duties):

    a. Building a more accurate picture of the virus and its epidemiology[38]. This work contributed to SAGE agreeing the key epidemiological characteristics of COVID-19 on 11 February 2020[39] and the subsequent development of a reasonable worst case scenario for COVID-19 on 27 February 2020[40].

    b. Setting up a substantial research effort in advance of the first UK deaths and domestic transmission[41]. This included CO-CIN[42] which would provide information for policymakers and clinicians in the UK and internationally and also intervention studies including the RECOVERY trial and what became the AstraZeneca vaccine among others.

    c. Work to assist other government departments in respect of travel advice, the arrangements for repatriation of British nationals abroad and the establishment of managed quarantine facilities in the UK[43].

    d. Liaising with international partners to share scientific understanding and compare strategies to respond to COVID-19[44].

    e. Responding to ad-hoc inquiries from Government to inform pandemic preparations[45].

[38] See, for instance, [INQ000047682], [INQ000047684] and [INQ000151412]
[39] [INQ000087552] at §§9 to 15
[40] [INQ000203874]
[41] [INQ000047681], [INQ000047777], [INQ000047928] and [INQ000047676]
[42] See [INQ000203874] at §2, [INQ000047953], [INQ000047954] and [INQ000048132]
[43] See for instance, [INQ000047675], [INQ000151499], [INQ000151500], [INQ000151503], [INQ000151421], [INQ000151452] and [INQ000087551]
[44] See, for instance, [INQ000047669], [INQ000047798] and [INQ000047705]
[45] [INQ000151408]

f. Work to identify and procure potential treatments for COVID-19[46].

g. Work to inform draft legislation[47].

h. Media appearances aimed at improving public understanding of COVID-19[48].

i. Trying to identify measures which would keep R below 1 but have lower negative public health impacts than a full lockdown as first undertaken in China[49]. This built upon work undertaken as early as 3 February 2020[50] by SPI-M-O examining the use of border measures, quarantines, school and university closures, restrictions on mass gatherings, contact tracing and home isolation.

19. In respect of the last of these, the following quotations give a flavour of the work that was ongoing (and role of the OCMO in driving this forward):

- Email from Professor Whitty to GCSA of 22 February 2020[51]:

  "I think the key things is for SAGE to concentrate on the possible building blocks and their scientific basis. The Chinese have done this by throwing the kitchen sink at it: we will have to be more targeted so identifying the interventions with the greatest likelihood of pulling R below 1 is the key (and ideally ruling out ones with little chance of success)".

- SAGE minutes of 25 February 2020[52], under 'Measures to Limit Spread':

  "Interventions should seek to contain, delay and reduce the peak incidence of cases, in that order. Consideration of what is publicly perceived to work is essential in any decisions...SAGE discussed a paper modelling four non-pharmaceutical interventions: university and school closures, home isolation, household quarantine and social distancing, including use of interventions in combination….All measures require implementation for a significant duration in order to be effective."

[46] See, for instance, [INQ000047799]
[47] [INQ000151501], [INQ000047826] and [INQ000047827]
[48] See, for instance, [INQ000047935]
[49] [INQ000151447] and [INQ000151523]
[50] [INQ000051882]
[51] [INQ000236382]
[52] [INQ000087503] and the range of important papers that were discussed: [INQ000074910], [INQ000075787] and others referred to at [INQ000325155].

- SAGE minutes of 27 February 2020[53], where the action point in advance of the March 2020 meeting was as follows:

  "ACTION: SPI-M, in support of the existing table on non-pharmaceutical interventions, to produce a narrative describing effects of interventions attempted in other countries, and develop illustrative scenarios showing the plausible impacts of combinations of interventions in the UK (simple visuals of epidemic curves) — for review at SAGE on 2 March 2020. Existing table to be reviewed weekly to assess whether it requires updating"

20. The OCMO, in collaboration with the GCSA, particularly through the SAGE mechanism, were therefore working on the building blocks that would be appropriate in the context of what was at that stage an epidemic with no UK deaths. Those building blocks, such as university and school closures, home isolation, household quarantine and social distancing were all ultimately implemented.

21. This was, of course, alongside the work of Cabinet Office's Civil Contingencies Secretariat which had by this stage taken charge of the response to the epidemic[54] and the work of the Department for Health and Social Care, Go-Science, Public Health England and other large departments and agencies (the OCMO comprised, at most, 19 people at the height of the pandemic and fewer at this point in time[55]).

22. There may be a suggestion that the 'precautionary principle' implies that lockdown or other NPIs should have occurred at the earliest possible moment. As Professor Whitty set out in his oral evidence[56]:

    "So the precautionary principle is useful if you're dealing with something where there are, for practical purposes, no downsides, or very minimal downsides relevant to the advantages, in which case the argument has got to be: well, just go ahead and do it. So an obvious example was advice to people to wash their hands. There is no downside to do that, it's a good thing to do. The more you get into

[53] [INQ000203874]
[54] See [INQ000146563] of 24 February 2020.
[55] [INQ000248853] at §4.5. The Chair will no doubt recall the evidence of Professor Whitty that: "*There's only one of me*" [21 Nov/204/3]. Whilst scrutiny of the advice that was given is absolutely appropriate, and whilst appreciating that questions need to be put from all angles, it is important to maintain perspective as to the volume of work that this small private office could be expected to have carried out.
[56] [21 Nov/30/7]

things where there is significant cost -- I do not mean that in an economic sense, I mean cost to individuals, cost to families, in terms of their health, mental health and so on -- the less you can say, "Well, it's just a precautionary principle, I'm going to impose this on you just in case"; that's not an appropriate understanding of what precautionary principle is or should be."

23. Most NPIs have some negative public health costs to physical and mental health in the short, medium or long term. This issue was set out by Professor Whitty in his paper on 21 March 2020: *Coronavirus: summary of strategic and tactical approach to the epidemic*[57] but it is also reflected in SAGE and other significant minutes during this period[58]. Professor Whitty regularly advised decision-makers as to the potential negative consequences of measures[59] but that is very different to advising that they should not be taken. He used the analogy of a medical intervention such as a drug or surgery; it is the job of the surgeon or physician to lay out the side effects or potential complications even if they think the operation or treatment is advisable or essential.

24. As Sir Patrick Vallance observed in his oral evidence[60]:

"Chris Whitty is a public health specialist and he was rightly, in my opinion, concerned about the adverse effects of the NPIs. He was concerned that there would be more than just the issue of the direct cause of death from the virus, that there would be indirect causes of death due to effects on the NHS, that there would be indirect harms due to people isolating -- mental health, loneliness, issues of health that come from that procedure -- and that there would be indirect long-term consequences due to the economic impacts creating poverty, which is a major driver of health. So he was definitely of the view that the treatment and the result of that treatment needed to be considered together, and that pulling the trigger to do things too early could lead to adverse consequences. And that I think is a totally appropriate worry from the Chief Medical Officer and a legitimate public health concern throughout."

25. Getting the balance right between not going too late in imposing NPIs and not going too early and therefore incurring significant public health harms for minimal impact in the epidemic wave is extremely difficult. The evidence that the Inquiry has heard is that this was made more difficult because limited testing and poor data flows in the

[57] [INQ000048167] and see also [INQ000251645] at p.115, §§8.2 to 8.7
[58] [INQ000052319] at §9, [INQ000061522] at §§27, 28 and 34, [INQ000056136] at p.1
[59] See for instance, the notebook of Simon Case [INQ000265760] at p.180, [INQ000090156] and the evidence of the Rt Hon Dominic Raab MP at [29 Nov/205/14]
[60] [20 Nov/43/19]

first three months of the pandemic (and especially in the last week of February and first three weeks of March) meant that identifying where England and the wider UK were on the epidemic curve was difficult[61]. This was articulated most clearly by Sir Patrick in his oral evidence[62]:

> "this goes right back to a comment that Sir Chris made in February, we wanted to try to understand the mechanisms to get R below 1, to make the pandemic shrink. The question, then, was: when do you trigger that and how deeply do you trigger it in terms of the number of things you need to have? That's what we were trying to understand, and the modellers needed the precise details to be able to understand what that looked like. So this was not an academic exercise, it was important for them to understand, and we thought it should be relatively straightforward to get these numbers. It turned out, like a lot of data flow early in the pandemic, it wasn't easy to get these numbers".

26. In light of the importance of getting the balance right, by 5 March 2020 the central position of SAGE was that "*HMG should plan for the introduction of behavioural and social interventions within 1 to 2 weeks to contain and delay spread; precise timings depend on progress of the epidemic*"[63]. Unfortunately, soon after, from 12 March 2020, SAGE became aware that the UK was further along the epidemic curve than had previously been calculated. This was mainly due to limited testing and data flows at this stage; the lack of accurate data rather than the analysis of the data was the principal scientific problem. The SAGE minutes of 13 March 2020 provide[64]:

> "SAGE now believes there are more cases in the UK than SAGE previously expected at this point, and we may therefore be further ahead on the epidemic curve, but the UK remains on broadly the same epidemic trajectory and time to peak. The science suggests that household isolation and social distancing of the elderly and vulnerable should be implemented soon, provided they can be done well and equitably. Individuals who may want to distance themselves should be

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[61] See for example, the contemporaneous email exchange between Sir Patrick Vallance and Ben Warner of 27 February 2020 [INQ000195863]; the oral evidence of Boris Johnson ("*all your conditionals I would delete, except the one about the data. I think that that was the key thing…that SAGE lacked, and it was -- it was the sudden appreciation that we were much further along the curve than they'd thought*" [6 Dec/144/14]); Dominic Cummings ("*you suddenly had these two completely divergent sets of graphs*" [31 Oct/190/3]); Lee Cain ("*the lack of data that we had at that point is absolutely staggering*"[31 Oct/25/15]); Rishi Sunak ("*data was not as good as it could have been at the beginning*" [11 Dec/59/1]); Professor Neil Ferguson ("*the epidemic was effectively hundreds of times larger than we had anticipated. Well, to be fair, probably about 30 to 40 times larger*" [17 Oct/164/16]); and Professor John Edmunds' on the impact of data lags [19 Oct/98/6].

[62] [20 Nov/34/4]

[63] [INQ000061521] p.3

[64] [INQ000236391]

advised how to do so. SAGE is considering further social distancing interventions – that may best be applied intermittently, nationally or regionally, and potentially more than once – to reduce demand below NHS capacity to respond."

27. From this point on the advice from SAGE was for rapid action and this advice was relayed by Professor Whitty and Sir Patrick jointly[65]. This increased urgency was at root due to difficulties in getting good data early in the pandemic; had the extensive testing and analytical capabilities present later in the emergency been in existence in the first three months of this new disease the timing of the first wave would have been much easier to determine. The inability to scale up testing and data at this time was in part due to investment decisions prior to the pandemic meaning SAGE and others had to rely principally on hospital data which was comprehensive, but lagged in time. This time lag occurs because it takes time from first infection to people becoming sick enough to be hospitalised[66].

IV. THE 'LOCKDOWNS'

28. Professor Whitty has been candid in his reflections on the timing of the first lockdown. In his Fourth Statement, he stated as follows[67]:

"With the benefit of knowing what transpired and the ability retrospectively to piece together the timeline by which seeding of infection from Europe to the UK resulted in an upswing in domestic transmission the first lockdown and the various steps that led up to it, should have been implemented earlier. How much earlier is more debateable but probably at least seven days. Certainly nobody would argue that it should have been later (except possibly those who argue it should not have happened at all). There was inevitably some delay between scientific advice being given and the implementation of the necessary measures."

[65] [INQ000056210] at §1
[66] See, for instance, the evidence of Professor John Edmunds [19 Oct/99/16]
[67] [INQ000251645] p.116 §8.8

29. The OCMO asks the Chair to consider the full explanation that is set out in that statement and which has been borne out by the evidence of other significant witnesses[68]. Similarly, on the delay in implementation, Lee Cain spoke about a ten-day delay in implementation because a national lockdown was a "*huge undertaking*"[69] and this was echoed by Helen McNamara who said that after the in-principle decision had been taken on 13 March 2020 "*we could not have gone any faster in a safe way*"[70] because of the steps that needed to be taken.

30. In light of the evidence that has been heard in respect of each of the lockdowns, the OCMO would like to make the following points:

31. In respect of the first lockdown (and as already highlighted at [9] to [11] above) the OCMO's advice was (intentionally) directly in line with the central view of SAGE. Both SAGE and policymakers were aware that the most severe NPIs, in particular the closure of schools for what was likely to be a prolonged period and a full 'lockdown', had significant negative outcomes for individuals, families and wider public health. There was therefore a caution about imposing them if they could be avoided, or the time spent in them reduced. The need to exercise caution in their introduction is set out starkly in the record of the central views of SAGE and was certainly not the view only of Professor Whitty and OCMO[71].

32. This is evident from, for example, the SAGE minutes of 16 March 2020[72]. Whilst recognising that "*on the basis of accumulating data…the advice from SAGE has changed regarding the speed of implementation of additional interventions*" and that "*there is clear*

[68] See, for instance, the evidence of Sir Patrick Vallance (in response to a question from CTI summarising the evidence in his witness statement that the first lockdown was imposed a week too late [20 Nov/49/1]); Professor Van-Tam ("*With the benefit of hindsight I think I reflect that these measures would have all better kind of certainly seven days earlier than they were, possibly a little longer than that*" [22 Nov/189/6]); and Sir Christopher Wormald ("*as I've said in my statement, with hindsight we were at least a week late at all points of the NPI decisions*" [2 Nov/149/6]).
[69] [31 Oct/31/18]
[70] [1 Nov/40/10]
[71] See, for instance, the minutes of SAGE 10 which noted: "*SAGE agreed that a balance needs to be struck between interventions that theoretically have significant impacts and interventions which the public can feasibly and safely adopt in sufficient numbers over long periods"* [INQ000061522].
[72] [INQ000075664]

evidence to support additional social distancing measures to be introduced as soon as possible", the committee of experts still considered it necessary to further investigate the benefits of school and university closures prior to implementation.

33. In respect of the second lockdown, it is clear from the evidence before the Inquiry that Professor Whitty, the DCMOs and the GCSA advised throughout the summer and early autumn of 2020 that if the Government opened up too fast across too many sectors there would almost inevitably be a significant and larger late autumn or winter wave that would require substantial NPI reimposition[73].

34. The major concern of the OCMO at the time, shared by the GCSA, was that each individual proposal from ministries to open up their sector of the economy was possible, but the cumulative effect of all the decisions was extremely risky. This is set out in the First Statement of Professor Whitty[74] with two pertinent examples set out below:

    - Letter from Professor Whitty, the GCSA and DCMOs to Simon Case of 26 May 2020[75]:

      "We need to think however not only about individual decisions but about the totality of the changes, how they interact in linking households and the pace at which these are planned to occur. Multiple, small changes, appearing reasonable when examined in isolation, can easily lead to R going above 1, and we will be at severe risk of a second wave. There is always a temptation to push the risk just a little bit further on every decision; this is happening across government, often by people unaware of the other changes."

    - Email from Professor Whitty to Simon Case of 10 July 2020[76]:

      "As you know I think there are 4 risks that are the short term backdrop, and several opportunities from science in the longer term. Resurgences may occur

[73] Examples include [INQ000203894], [INQ000069418], [INQ000069669], [INQ000070032], [INQ000070050], [INQ000070070], [INQ000070086], [INQ000070240], [INQ000070966] and [INQ000071071]
[74] [INQ000248853] p.49 §§5.158 and 5.159
[75] [INQ000069418]
[76] [INQ000070050]

> in winter/early spring (seasonal advantage to the virus and disadvantage to the NHS test and trace), autumn (schools + season), because we lift restrictions too fast or too completely, or because another global wave hits us…. So up to next year it is hard to paint a particularly optimistic picture; from next spring that becomes a lot easier to sustain…. We will however have to assume we go into this autumn and winter with the tools we have now, and they are the societal restrictions which make it hard for the virus to get a hold. We must be self disciplined about social distancing, self isolation etc, because the virus certainly has not gone away, and as we see around the world a period after restrictions are eased has significant risks. Let down our guard too much or too fast and resurgence is not just likely, but inevitable."

35. Where the OCMO was not consulted about a particular initiative it is not appropriate to place a burden on the OCMO (individually or collectively) or any other official after the initiative has been announced publicly by Ministers to then "*raise concerns*"[77], unless they were asked to do so or were present at a meeting where it was discussed, particularly in light of the advice from Professor Whitty and others that it was the "*totality of the changes*"[78] that needed to be considered by decision-makers rather than individual policy decisions. It would be a very unhelpful development of Government in the view of OCMO if scientific advisers or senior officials saw it as their responsibility retrospectively to do a running commentary on their concerns about the decisions Ministers have already taken and announced.

36. In respect of the third lockdown the evidence is that this was inevitable because of the emergence of a substantially more transmittable variant[79]. Previous measures that could have held the original Wuhan variant at R below 1 were unable to do so for this more transmissible variant. The principal lesson from this is that viral evolution may overcome NPIs and indeed medical countermeasures so that even when an apparently successful strategy has been devised and put into action, sudden changes of policy may be needed in response to biological evolution of an infectious epidemic.

[77] [11 Dec/124/21]
[78] [INQ000069418]
[79] [22 Nov/66/3] and [1 Dec/16/17]

V. THE FOCUS ON PANDEMIC FATIGUE

37. One feature of the oral hearings that was not expected by the OCMO was the focus on pandemic fatigue, also called behavioural fatigue. This had been addressed by Professor Whitty in his Fourth Statement[80] where he accepted having made a communication misstep in a March 2020 press conference in his reference to fatigue. Professor Whitty's evidence was to the effect that: (1) whilst it had not been his intention, this was read to imply, understandably, that it had arisen from advice from SPI-B and (2) it implied that it was a major part of the caution about beginning the lockdown too early whereas "*the debate had almost no relevance to the scientific advice on decisions about the precise date to start the first social measures including lockdown*".

38. In light of the surprising prominence of this matter at the oral hearings, the OCMO considers it helpful to draw to the Chair's attention the following three points:

39. **First**, as explained in Professor Whitty's Fourth Statement, the self-reflection as to the misstep at a press conference does not mean that there is not good evidence that "*over time some populations, population groups and individuals become less enthusiastic about social measures*" and that this "*was important as a long term consideration; maintaining public support over the whole arc of the pandemic was important to think about from the beginning and a reasonable thing to identify to decisionmakers*"[81]. Indeed, large studies have been conducted internationally, published in major peer-reviewed journals, examining pandemic fatigue most of which have demonstrated some or considerable waning of popular support for NPIs over the course of the pandemic[82] (and those studies would merit consideration in full in the event that this is a matter in dispute).

40. The World Health Organization held a conference on this subject and subsequently produced a document in October 2020[83] noting "*many countries have been reporting an increase in 'pandemic fatigue'*". It was therefore reasonable to put this issue before

[80] [INQ000251645] at §§7.161 to 7.165
[81] [INQ000251645] at §7.163
[82] [INQ000375349] and [INQ000375351]
[83] [INQ000236430]

Ministers, as both the CMO and GCSA did in early COBR meetings[84] as an issue to consider; this was quite a widespread view. The then Prime Minister explained in his oral evidence: "*it was the prevailing view for a long time, and it wasn't just the CMO who articulated the concept of behavioural fatigue*"[85]. It is also noteworthy that in January 2023, a committee of the World Health Organization recorded that pandemic fatigue had become a factor in the "*drastically reduced use of public health and social measures*"[86].

41. **Second**, any confusion on the part of decision-makers as to its relative importance with regard to specific timing could only have been brief. The press conferences were on 9 and 12 March 2020. This led to discussion at SAGE the very next day and to the clarification within the SAGE minutes[87] that: "*Difficulty maintaining behaviours should not be treated as a reason…to delay implementation where that is indicated epidemiologically*". That meeting was attended by, among others, Ben Warner from No.10 and the minutes were circulated widely[88] and published. The same point was made in email correspondence to No.10 and others on the day after SAGE met[89]. The SAGE position was reflected by the CMO. There is no evidence we have seen to suggest that pandemic or behavioural fatigue was considered beyond that point.

42. **Third**, and in any event, the CMO's communication misstep did not in fact influence the timing of NPIs or lockdown. The then Prime Minister Boris Johnson was explicit on this point. Invited by the Counsel to the Inquiry to say if he was '*blindsided to some extent by the debates about herd immunity and not going too early and behavioural fatigue*'[90] and as a result went into lockdown too late, he said: "*all your conditionals I would delete, except the one about the data. I think that that was the key thing that the -- that SAGE lacked, and it was -- it was the sudden appreciation that we were much further along the curve than they'd thought, we weren't four weeks behind France or Italy, we were a couple of weeks, maybe less, and they were clearly wrong in their initial estimation, we were clearly wrong in our*

[84] [INQ000056219] at §6, [INQ000056221] at §4.
[85] [6 Dec/94/25]
[86] [INQ000375350]
[87] [INQ000236391] at §30
[88] For instance, Mr Cummings said in his evidence: "*I sent Ben Warner to attend the meetings and discuss them. I listened to some of them myself*" [31 Oct/135/18].
[89] [INQ000281352]
[90] [6 Dec/144/8]

estimation of where the peak was going to be". OCMO considers this an accurate reflection of the reality.

VI. MATTERS OF CLARIFICATION

43. Finally, there are a small number of matters that the OCMO considers might merit clarification in light of some of the evidence that has been given or because of the way in which certain issues appear to have fallen.

44. **Asymptomatic transmission**. This is addressed in detail in Professor Whitty's First Statement[91]. This explains that it was recognised at an early stage of the initial outbreak that asymptomatic transmission could be a possibility but that the exact extent of asymptomatic transmission (and by implication, its significance) has still not been established beyond doubt and has likely changed over time.

45. Whilst it may not be material to any of the Chair's conclusions, it was put to Professor Whitty during his oral evidence that it was "*abundantly clear by the last week in February that…this virus was hugely transmissible, and had significant – around 30% - asymptomatic transmission*"[92]. The suggestion appears to be that this rendered redundant the policy of concentrating on isolating those who were symptomatic. The 30% figure appears to have been taken from a paper of 7 February 2020 entitled *Feasibility of controlling 2019-nCoV outbreaks by isolation of cases and contacts*[93]. For the avoidance of doubt, this early study is a modelling exercise whereby the authors modelled scenarios based on 0%, 15% and 30% of transmission before symptom onset (not asymptomatic transmission). It is in no way evidence that it was clear that there was significant asymptomatic transmission. Nor would it have been technically feasible to identify asymptomatic people who should be isolating in advance of there being widespread testing.

[91] [INQ000248853] p.100 §§6.55 to 6.63
[92] [21 Nov/181/3]
[93] [INQ000092645] and see [19 Oct/63/9]

46. Whilst Professor Whitty's explanation should be considered in full, the following is particularly pertinent:

> "Whether, and to what extent, there was asymptomatic infection and asymptomatic or pre-symptomatic transmission was debated from the beginning of the epidemic, with robust data accumulating slowly in the global literature. This gradual accumulation is laid out in the Technical Report to future CMOs and GCSAs… This was a global view- for example on 9th June 2020 Dr Maria Van Kerkhove, the WHO's technical lead on the COVID-19 pandemic, made it clear that the actual rates of asymptomatic transmission were not yet known.
>
> For SARS and MERS, two other coronaviruses which emerged recently, asymptomatic and pre-symptomatic transmission is thought to be very rare although asymptomatic infection without transmission may occur. This influenced initial thinking. Diseases where a small proportion of infected people are infected from an asymptomatic source, even when it occasionally occurs, can be controlled by removing only those who are symptomatic as this would be likely to pull R below 1 and end an epidemic.
>
> Asymptomatic infection and asymptomatic transmission are different and care is needed not to conflate them. Asymptomatic infection is where a person has acquired the virus but does not have symptoms; it occurs in many diseases. Asymptomatic viral transmission occurs when the infected but asymptomatic person passes the virus on to someone else. Asymptomatic infection does not necessarily lead to asymptomatic transmission (though it is a prerequisite). In principle it is possible to have extensive asymptomatic infection with almost no asymptomatic transmission."

47. **Treatment of scientists.** The OCMO is grateful to the Chair for expressing her concerns at the public hearings regarding the abuse that Professor Whitty, Professor Van-Tam and other scientists and their families received. A Guardian article dated 31 December 2021 refers to three quarters of a cohort of 100 scientific and medical advisers to Government reporting experiencing abuse and harassment – some of it misogynistic in character[94]. Scientific endeavour and debate encourage challenge and it was and is perfectly appropriate for the advice provided by scientists to decision makers and the public to be scrutinised. As the Chair remarked, what is not appropriate is when public criticism descends into abuse and threats.

[94] [INQ000340402]

48. The OCMO would like to make clear (simply because it was not a matter put to Professor Harries or other female scientists by CTI but recognising that it is something that the Chair will no doubt have well in mind in any event) that Professor Harries also suffered considerable abuse much of it, in the view of OCMO, misogynistic. That female scientists, including Professor Harries, received particular abuse is, in OCMO's collective view, important to highlight. OCMO would welcome any recommendations that address the potential and consequent disincentive for (in particular, though by no means exclusively) women to take on scientific leadership positions and a public facing role in emergencies of this kind. This is of particular relevance given the acknowledged under representation of women in leadership roles internationally during the early phase of the COVID-19 pandemic and in senior scientific roles.

VII. CONCLUSION

49. The OCMO looks forward to receiving the Chair's factual findings and recommendations in respect of this Module and Module 1 in due course. Learning lessons from this pandemic is essential in improving public health in the United Kingdom for future pandemics and major epidemics. The OCMO continues to provide disclosure and evidence to support the future Modules and stands by to assist the Chair in order to ensure they have the maximum public health impact.

Bilal Rawat
Julian Blake
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15 January 2024