

Witness Name: Dr Edward
Hayden
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UK COVID-19 INQUIRY

WITNESS STATEMENT OF DR EDWARD HAYDEN

1. I have produced this short supplementary corporate statement to provide further detail on a number of issues which have arisen during Module 2 of the Covid-19 Inquiry (“the Inquiry”) which relate to the Government Office for Science (“GO Science”).
2. In June 2023, I succeeded Dr Stuart Wainwright OBE as Director of GO Science. As I took on this role following the Covid-19 response, the facts in this Statement come from the records rather than from my own recollection. I am duly authorised to make this statement on behalf of GO Science.
3. This statement addresses three related topics: the devolved administrations’ (“DAs”) participation in SAGE meetings; the production and nature of SAGE minutes; and GO Science’s knowledge of non-SAGE meetings.

SAGE Participation – Devolved Administrations

4. A detailed description of the Scientific Advisory Group for Emergencies (SAGE) is found in Dr Wainwright’s first witness statement [EH/1 **INQ000252449**], at section 2. Guidance on participation is available in the ‘Enhanced SAGE Guidance’ document at [EH/2 **INQ000218362**], also publicly available on GOV.UK.
5. I understand that the Inquiry has heard evidence and submissions regarding the level of participation at SAGE by individuals from the DAs.
6. SAGE is not, and is not intended to be, a geographically representative body. I adopt the evidence of Sir Patrick Vallance, who said in his second witness statement at paragraph 660 “*SAGE is a body tasked with providing scientific advice to the UK Government through established structures. It is not a representative body, but is constituted to bring together the requisite scientific expertise that is needed to provide advice.*” [EH/3 **INQ000238826**].

7. Dr Wainwright, in his evidence to the Inquiry, discussed the involvement of individuals from the DAs in SAGE.¹ His recollection was that invitations were extended to all DAs from 11 February 2020 (SAGE 6) onwards. He noted that prior to that date, the SAGE minutes would have been circulated to the DAs via a number of routes including via COBR ‘CRIPs’, and through the CSA network. As Northern Ireland did not have a CSA at that time, the latter route would not have included Northern Ireland. This is discussed in more detail in Sir Patrick’s second witness statement [EH/3 **INQ000238826**, para 661]. From SAGE 6, all the DAs would have received SAGE minutes, by virtue of receiving an invitation to the meeting.
8. Sir Patrick also confirmed in his evidence that the DAs were invited to all SAGE meetings from SAGE 6 on 11 February 2020, with each nation choosing its attendee. Often more than one individual from each DA would attend. Sir Patrick noted that, unfortunately, early SAGE minutes did not record all those who were present at each meeting, although by March 2020, the DAs were all listed as regular attendees [EH/3 **INQ000238826**, para 663].
9. GO Science has now reviewed the list of invitees to SAGE, along with the records of attendance, to provide further assistance to the Inquiry on this question.
10. Table 1 is a list of individuals from the DAs who were invited to SAGE meetings in January and February 2020. The information is drawn from “calling notices”, held on GO Science’s computerised diary system. These are effectively email invitations to join each SAGE meeting. Sir Patrick addressed the reasons for the minimal involvement of DA representatives in the first five SAGE meetings, up to 6 February, in his witness statement at para 661 [EH/3 **INQ000238826**].

¹ 12 October 2023, Dr Stuart Wainwright OBE, 46/5-20; 58/18-23

Table 1: DA invitees to SAGE, January - February 2020

SAGE meeting	Devolved Administration	Invitee
SAGE 1 22.01.2020	Scotland	Dr Jim McMenamin, Health Protection Scotland
SAGE 6 11.02.2020	Northern Ireland	Professor Sir Michael McBride, Chief Medical Officer of Northern Ireland at Department of Health Northern Ireland
	Scotland	Dr Catherine Calderwood, Chief Medical Officer for Scotland (Feb 2015 – April 2020)
		Dr Jim McMenamin, Health Protection Scotland
		Professor Sir Gregor Smith, Deputy Chief Medical Officer dCMO (2015 – April 2020), Chief Medical Officer (April 2020 – present)
	Wales	Dr Rob Orford, Health CSA
		Sir Frank Atherton, CMO
SAGE 7 13.02.2020	Northern Ireland	Professor Sir Michael McBride, CMO
	Scotland	Dr Catherine Calderwood
		Dr Jim McMenamin
		Sir Gregor Smith
	Wales	Dr Rob Orford
		Sir Frank Atherton
SAGE 8 18.02.2020	Northern Ireland	Professor Sir Michael McBride
	Scotland	Dr Catherine Calderwood
		Dr Jim McMenamin
		Sir Gregor Smith
		Professor David Goldberg, Health Protection Scotland
	Wales	Dr Rob Orford
		Sir Frank Atherton

SAGE 9 20.02.2020	Northern Ireland	Professor Sir Michael McBride
	Scotland	Dr Catherine Calderwood
		Dr Jim McMenamin
		Sir Gregor Smith
		Professor David Goldberg
		Dr Lisa Richie, Health Protection Scotland
	Wales	Dr Rob Orford
Sir Frank Atherton		
I SAGE 10 25.02.2020	Northern Ireland	Professor Sir Michael McBride
	Scotland	Dr Catherine Calderwood
		Dr Jim McMenamin
		Sir Gregor Smith
		Professor David Goldberg
		Dr Lisa Richie
	Wales	Dr Rob Orford
Sir Frank Atherton		
SAGE 11 27.02.2020	Northern Ireland	Professor Sir Michael McBride
	Scotland	Dr Catherine Calderwood
		Dr Jim McMenamin
		Sir Gregor Smith
		Professor David Goldberg
		Dr Lisa Richie
	Wales	Dr Rob Orford
Sir Frank Atherton		

11. Table 2 details DA participation in SAGE during the Covid-19 response, and provides a summary of the individuals' attendance following their first SAGE meeting.
12. The information is drawn from SAGE minutes which, as above, did not initially record all attendees. The table below (Table 2) records actual SAGE participants from the DAs and therefore does not list any individuals who attended purely as observers. Like UK government departments, the DAs had the opportunity to send observers to SAGE meetings, and did so on many occasions.

Table 2: SAGE attendance by DA representatives

Northern Ireland		
Professor Ian Young ²	Health CSA	First attended: SAGE 20 (29.03.2020) Thereafter: Attended most SAGE meetings
Dr Declan Bradley	Health dCSA	First attended: SAGE 77 (21.01.2021) Thereafter: Also attended SAGE 80, 84 and 95
Scotland		
Dr Jim McMenamin	Health Protection Scotland	First attended: SAGE 1 (22.01.2020) Thereafter: Attended around half of all SAGE meetings
Sir Gregor Smith	dCMO (2015 – April 2020) CMO (April 2020 – present)	First attended: SAGE 12 (03.03.2020) Thereafter: Attended around 10 further SAGE meetings
Professor Andrew Morris	Chair, Scottish Government CMO Advisory Group	First attended: SAGE 20 (29.03.2020) Thereafter: Attended most SAGE meetings

² NB returned to work on 23 March 2020.

Professor Nicola Steedman	dCMO (early 2020 – present)	First attended: SAGE 27 (21.04.2020) Thereafter: Attended many SAGE meetings
Professor Sheila Rowan	CSA (June 2016 - June 2021)	First attended: SAGE 29 (28.04.2020) Thereafter: Attended many meetings from SAGE 29-89
Dr David Crossman	Health CSA	First attended: SAGE 51 (13.08.2020) Thereafter: Attended 7 meetings from SAGE 51 - 102
Professor Julie Fitzpatrick	CSA (June 2021 – present)	First attended: SAGE 93 (07.07.2021) Thereafter: Attended most SAGE meetings
Wales		
Dr Rob Orford	Health CSA	First attended: SAGE 13 (05.03.2020) Thereafter: Attended most SAGE meetings
Felicity Bennée	Co-chair of Technical Advisory Group	First attended: SAGE 25 (14.04.2020) Thereafter: Attended most SAGE meetings

13. This statement does not set out other methods by which the DAs were involved in the science advisory response, such as through the CSA network, the group of four CMOs (convened by Sir Chris Whitty), and the science advisory groups established by the DAs themselves. This has been covered in more detail in others' evidence in Modules 1 and 2.

SAGE Minutes

14. The format and production of SAGE minutes has been covered in detail by Sir Patrick Vallance and Dr Stuart Wainwright in their witness statements for both

Modules 1 and 2. I am aware of many other witnesses who have given their views on the SAGE minutes produced during the pandemic response. I would like to add the following important context, from GO Science's current perspective.

15. The genesis of the consensus statement approach. The Hine Review into the response to the A(H1N1)pdm09 (Swine Flu) pandemic recommended that a process should be devised, by the Cabinet Office, the GCSA and the four CMOs, *"through which UK government ministers and the devolved administrations are presented with a unified, rounded statement of scientific advice"* [EH/4 **INQ000035085** - Recommendation 10]. The SAGE minutes and the consensus statement approach seek to fulfil this recommendation, and is standard practice for scientific advisory committees.
16. Sir Patrick's second witness statement sets out the important method by which advice is given by way of such a *"unified, rounded"* summary, reflecting the current state of understanding, including the uncertainties and unknowns, and drivers of any uncertainty [EH/3 **INQ000238826**, paras 35 – 37]. Dr Wainwright has also described how confidence levels are expressed in SAGE minutes, by way of *"'high', 'medium' and 'low' confidence statements"* [EH/5 **INQ000252450**, para 1.3], as seen for example in the minutes of SAGE 57 on 17 September 2020, at paras 6, 8, 10, 15, 26, 38 and 40-48 [EH/6 **INQ000061565**].
17. The purpose of the approach. SAGE must provide coordinated, timely scientific and technical advice for decision-makers to support UK cross-government decisions – including DAs – in COBR. To meet this goal, SAGE produces a single consensus document from each meeting. This is standard practice for all SAGE activations and is consistent with operation of other UK Science Advisory Committees and Councils. Given the inherent emergency nature of SAGE activations, the speed at which this advice is produced and provided to decision-makers is crucial. The Cabinet Office document *"Responding to Emergencies, The UK Central Government Response: Concept of Operations"* [EH/7 **INQ000096875**, p.71-072 "Con Ops"] sets out at Annex D SAGE's broad responsibilities during an emergency (my emphasis):

- *identify where scientific and technical advice is likely to be needed (in consultation with Cabinet Office and LGD and other relevant policy leads) and prioritise and steer efforts as necessary to fill gaps or meet ministers' needs;*
- **provide a common source of science and technical advice for crisis managers in departments and COBR when activated;**
- *advise on the likely development of the emergency and any planning assumptions that should guide the response;*
- *liaise with national specialist advisors from agencies represented in the SAGE and, where warranted, the wider scientific and technical community to ensure the best possible advice is provided;*
- **clarify any divergence of opinion and as far as possible, provide a common view on the scientific and technical merits of different courses of action;**
- *monitor the scientific information being provided by individual organisations in order to identify emerging differences and consider how these might best be addressed;*
- **ensure consistent advice is presented nationally, and where appropriate, locally; and**
- **ensure that scientific information is understandable by policy makers and, where appropriate can be understood by the public.**

18. The practical use of the SAGE minutes. It is relevant to consider how the SAGE minutes are used. They must be sufficiently clear and concise to be digestible to the non-expert reader, who will inevitably be considering them in the context of an emergency. However, they are not the sole medium by which SAGE output is communicated. During the Covid-19 response, the GCSA and CMO delivered SAGE consensus advice to decision-makers verbally. Observers from across government were welcome to attend SAGE in the expectation that they would report back to their home departments on the discussions that they heard, and I understand that the Inquiry has seen evidence of how that was done. The papers on which the SAGE discussions drew, including papers deriving from sub-groups, were available to Government departments and were published in due course (subject to a very small number of exceptions). The minutes contain a clear, succinct and accurate written record of the central evidence and advice. Where a decision-maker or department required further detail, background or context they could seek that through the other means set out above.

19. It has been suggested, during the course of Module 2 hearings, that an alternative option to the consensus statement might be a fuller minute of the discussion at SAGE, which may attribute different positions to different participants. The experience of GO Science during the Covid-19 pandemic suggests that to do so would give rise to a number of drawbacks.

20. Presenting an unattributed consensus statement establishes collective responsibility and preserves the space for full and frank discussion of the matter in hand. This must be balanced with the need for transparency. During the Covid-19 response, this balance was struck by publishing the consensus statement as drafted, the names of all but a very small number of the participants, and any conflicts of interest. As the Inquiry has heard, even these steps resulted in a lamentable degree of abuse, threat and harassment to the scientists involved. The implications of any departure from this approach through the provision of a more detailed minute would need careful consideration. Even were names anonymised, speculation and (mis)attribution would inevitably follow.

21. The Inquiry has also heard evidence of the “chilling effect” of the publication of SAGE minutes and of SAGE participants speaking in the media. This had the potential to curtail both the discussions within the meetings (if those present did not think that they could speak confidentially) and the willingness of some Government departments and ministers to bring certain matters to SAGE. Again, there is a balance to be struck between transparency and the protection of a safe space for discussion and advice; notably Sir Patrick, Dame Angela McLean, and Dr Wainwright all indicated that they remain strongly in favour of publishing the SAGE consensus statement at an early stage. Disturbing the existing balance by producing fuller and more contentious minutes will, inevitably, increase the risks associated with both aspects of the chilling effect, particularly given the degree of publicity that SAGE minutes will generate (in comparison to, say, the minutes of NERVTAG or other standing science advisory groups).

22. A more detailed and complex minute of SAGE meetings would take longer to produce, yet would not necessarily provide more or better information to decision-makers, nor would they be more likely to be read in an emergency situation. Detailed minutes will take more time and effort to draft and agree, particularly if individual contributions were attributed. To reflect the discussion accurately, the authors of the minutes may have to summarise the technical papers considered at the meeting, thereby duplicating work. Once drafted and circulated, the minutes would require advisers expert in the relevant scientific field working alongside each other and decision-makers to translate the discussion into usable information. This may give rise to inconsistencies across different departments. All of these steps would also cause delay at a time when there is a premium on rapid communication. They will also, inevitably, take scientists who participated in SAGE, and scientifically trained civil servants, away from other work. Put frankly, it is highly likely that in a future emergency that time and resource could be put to better use than producing more complete minutes, particularly when the papers containing the background analysis would also be published.
23. The Inquiry has been informed of the SAGE Development Programme as well as other learning and evaluation which GO Science has embraced during and since the pandemic. This Programme has drawn upon a wide range of sources, including internal and external reviews, suggestions by SAGE participants and others, reflections from those involved within GO Science and elsewhere in government, and careful and frank consideration of the matters that have arisen in the evidence given to this Inquiry. This extensive learning, accumulated over several years, has not previously given rise to a recommendation that the production and nature of SAGE minutes should change. During the pandemic the practical process of producing and verifying the minutes was fine-tuned. It is essential that the Inquiry considers the minutes in the round, not just those from the first three months. The current position on the nature and form of the output, where a consensus statement is reached at the conclusion of a SAGE meeting, and is communicated both in writing and verbally by the Chair(s) directly to the decision-makers, is consistent with the Hine review recommendation, as broadly reflected in Con Ops.

Minutes from non-SAGE meetings

24. Finally, through the course of material provider disclosure, the Inquiry has inevitably obtained a large volume of minutes from other meetings, many of which were attended by the GCSA or others from GO Science.
25. As Sir Patrick notes in his second witness statement, he was not personally provided with formal records of many such meetings, nor did he have access to them before he produced his statement [EH/3 **INQ000238826**, p.7]. In particular, neither GO Science nor Sir Patrick received Cabinet minutes or COBR minutes. It is not clear how soon after each meeting those minutes were produced. Sir Chris Whitty noted in his evidence that: *“One of the interesting things in this process has been reading minutes where my memory of the events is not exactly in accordance with the minutes”* [21 November 2023, p.98, l.23-25]. I understand that this has also been the experience of some of those within GO Science at the time of the pandemic.

Statement of Truth

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

Personal Data

Signed:

Dated: 20.12.2023