

Rt Hon Dame Meg Hillier MP
Chair, Public Accounts Committee (Commons)

By email only

27 January 2022

Dear Chair,

The Permanent Secretary of the Department of Health and Social Care attended the Public Accounts Committee session on 12th January 2022, the session focused on *Government preparedness for the COVID-19 Pandemic: Lessons for government on risk*. He was asked two questions by Sir Geoffrey Clifton-Brown that he said would be better addressed by the Government Chief Scientific Adviser and Chief Medical Officer, and he offered to get that view in writing. Here are those answers, as promised. For clarity the question is set out, as in the transcript.

1. *However, I do not think you should have a member of SAGE, for example, coming on to the media in a private capacity—but saying they are a member of SAGE—and then giving their own particular predilections. Should it not be an absolute given that, if you are a member of SAGE, you only come on to the media to explain what the SAGE line is, not what your own predilection might be?*

The principles of scientific advice set out the rules of engagement between HM Government and those who provide independent scientific and engineering advice:

<https://www.gov.uk/government/publications/scientific-advice-to-government-principles>

The principles offer a foundation on which independent scientific advisers and government departments should base their operations and interactions. The principles set out the roles and responsibilities of these advisers and cover issues of independence, transparency, and openness. Specifically, they say:

‘Scientific advisers have the right to engage with the media and public independently of the government and should seek independent media advice on substantive pieces of work’

Most SAGE participants are independent of Government and provide their expertise on a voluntary basis. They devote considerable time and effort to providing this expertise to Government. This is a

well-established and important principle and helps to ensure that Ministers and other decision-makers receive the best available science advice. We would not want to discourage the best experts from participating, by placing restrictions on their academic independence. The idea that independent scientists should take a predetermined Government 'line' runs counter to normal scientific principles and would be both damaging and unhelpful.

COVID-19 has been unique in recent history in that this was a very prolonged emergency requiring substantial scientific input, with real and legitimate public interest in the emerging science. SAGE would want participants with considerable expertise explaining complex science to the public as well as advising the Government. Very large numbers of the best scientists nationally and internationally advised Government directly and indirectly during the pandemic, including through SAGE and its subgroups; to exclude their perspectives from the media, would run the risk of a situation in which public commentary at a time of considerable uncertainty was not informed by the expertise of our best and most well-informed scientists. What is key, and we agree that this is very important, is that the scientists make it clear when they are speaking as individuals. The output of SAGE, as is the case with most expert committees, should be represented by the Minutes of the meeting and through its Chairs.

Scientists participating in the SAGE Covid activation may discuss their own scientific research and interpretations in the media but should not discuss SAGE deliberations or act as the spokesperson for SAGE. If they choose to engage with the media, they are advised to be clear that they are speaking as individuals from an expert perspective and not on behalf of SAGE or HM Government. Content of meetings is subject to normal confidentiality with the papers and minutes published for transparency and to inform the public.

2. *Again, this is a question for the chief scientist, but let me try you on this. Our Report in July 2020, "Readying the NHS and social care for the COVID-19 peak", instanced the SAGE prediction at the beginning of the pandemic lockdown on 23 March 2020 "that in the worstcase scenario more than 4% of the population"—2.7 million people—"might be hospitalised, and 30% of those"—810,000— "would require critical care and that ICU capacity in London may well be breached by the end of the month"—March—"even if additional measures were in place." How did SAGE get it so wrong, and wasn't that a really scaremongering statement to put out?*

This is a misunderstanding of the SAGE Reasonable Worst-Case scenario (RWCS) 29 March 2020, which can be found [here](#) and contains the correct figures, and indeed a misunderstanding of the RWCS process more generally. A RWCS sets out the worst that could happen if the emergency is not mitigated by actions; they are not meant to set out the central case when mitigated (which is also important but separate and is often also modelled). RWCS are not forecasts or predictions but are designed to represent the worst outcome that could be realistically expected. This enables Government to plan for all eventualities and prevent them, where possible and appropriate. This is a standard approach for emergencies planning around the world. Unfortunately, the media and others will often pick on RWCS numbers and present them as predicted central cases for sensationalist purposes.

In March multiple, substantial non-pharmaceutical interventions (including full lockdown) were put in place by Government and followed by the population in order to avoid unmitigated scenarios coming to pass. It was intended and expected therefore that the RWCS unmitigated scenario models

would differ substantially from the outcome seen following such major interventions. Unfortunately, even with these interventions, ICU in London came under intense pressure by the end of March.

The assumptions and estimates used in the modelling were published with each scenario and were updated as new information came in; all scientists across the world were initially operating in a period of considerable uncertainty. These models set out early key epidemic parameters, based on early observed data, including 5% of those infected being hospitalised and 30% of those who were hospitalised requiring ventilation (numbers that turned out to be very close to the observed rates). Throughout March 2020, SAGE considered different planning scenarios that were updated as new evidence emerged. The SAGE papers for March 2020 can be found on gov.uk [here](#) and many have been published in peer reviewed scientific journals.

The Scientific Pandemic Influenza Group on Modelling (SPI-M), a sub-group of SAGE, brings together a variety of scientific perspectives and models, which have been developed independently by different world-leading UK institutions. SPI-M uses available data from multiple sources in its modelling and projections, with consensus/advice derived from multiple models, from different institutions, using different approaches and making different assumptions. This ensures resultant advice from SAGE will have taken into consideration a range of modelling approaches, data sources and plausible possibilities, not a single result or viewpoint.

RWCS and modelling are of course not the only inputs SAGE uses when providing science advice to Ministers and decision-makers; information on this has been published and is available [here](#). Scientific and clinical advice to Ministers was from multiple scientific disciplines and the job of SAGE is to interpret and integrate this. Ministers then take the scientific and clinical advice alongside social, economic, and operational issues to make their policy decisions. SAGE was responsible for the scientific component.

We hope this has been helpful.

Yours Sincerely,



Patrick Vallance
UK Government Chief Scientific Adviser



Chris Whitty
Chief Medical Officer