

UK COVID-19 INQUIRY
MODULE 2

WITNESS STATEMENT OF DR FERGUS CUMMING

I, DR FERGUS ALEXANDER CUMMING, will say as follows:

0.1 I give this statement in response to the request made to me on 29 August 2023 pursuant to Rule 9 of the Inquiry Rules 2006 – M2/UKHSA/FC/1. I note that the Inquiry wishes to draw upon my personal experiences and reflections whilst working as Deputy Director of Advanced Analytics in the Joint Biosecurity Centre and the UK Health Security Agency.

0.2 Before I begin, I would like to offer my sincere condolences to those who lost loved ones, suffered illness or experienced hardship during the Covid-19 pandemic. I welcome the chance to contribute to the Inquiry to help ensure that we learn lessons and improve our responses to future national emergencies. Although my remarks reflect my personal experience, they are born out of a monumental team effort in response to the pandemic, which spanned healthcare professionals, scientists and countless colleagues across the public sector.

1. Qualifications and experience

1.1 My qualifications include an economics bachelors (BSc) and masters (MSc) from the London School of Economics and a doctorate in economics (DPhil) from the University of Oxford. Before the onset of Covid-19, I worked at the Bank of England (BoE) for just over a decade, initially in the Financial Stability directorate. My latter years at the BoE were spent working on monetary analysis and strategy, with a particular focus on using micro data to inform big-picture analytical issues. I have published several working papers and peer-

reviewed articles on topics in financial stability, monetary policy and the use of micro data in causal inference related to policy.

1.2 In early March 2020 I worked with the UK forecast team at the BoE to develop the BoE's initial macroeconomic projections following the rise of infections across the world. On 27 August 2020 I joined the Joint Biosecurity Centre (JBC) as Head of Advanced Analytics on secondment from the BoE.

1.3 I am currently an employee of the UK Health Security Agency (UKHSA), which subsumed JBC as part of NHS Test & Trace in October 2021. I was appointed to the new role of Deputy Director of Advanced Analytics on 21 December 2020 in JBC. After extending my secondment, my role then moved across to UKHSA and on 1 November 2021 I was appointed as the UKHSA's first Chief Economist, in addition to my other duties. On 8 August 2022 I was permanently appointed Deputy Director of Advanced Analytics and UKHSA Chief Economist, and resigned from the BoE.

1.4 As Deputy Director of Advanced Analytics, I led a team of around 30 economists, scientists and datascientists. I was responsible for delivering high quality analysis using a range of data to provide health advice in a way that complemented the multidisciplinary teams within the organisation.

1.5 I joined JBC around three months after its inception and so I do not feel qualified to comment on its origins. The majority of my interactions during my time at JBC were with JBC senior leadership. As such, I only ever had a partial view of the contributions JBC made to the overall response effort. For a fuller description of the functions of JBC and how it operated with NHS Test and Trace and the wider system, I will kindly refer the Inquiry to the relevant corporate statements. More generally, in this statement I will keep my remarks to responsibilities that I had and things that I have direct experience of.

2. Role in epidemiological modelling

2.1 In early January 2021 I led a project to equip decisionmakers with an understanding of the interrelationship between the transmission of the virus, epidemiological outcomes and non-pharmaceutical interventions (NPIs). The *Toy Model* (later renamed *Simple Model*) was a pedagogical device that helped translate the sophisticated outputs of SPI-M into rough-and-ready intuition for those in government. It was a small piece of the puzzle in the overall analytical infrastructure of the response, but was unusual because the project team spanned JBC, Cabinet Office Covid-19 Taskforce (Taskforce), HMT and Number 10 Datascience.

2.2 Starting on 3 January 2021, I worked with key stakeholders (including the Chief Scientific Advisor (CSA) of the MoD) to build this simple epidemiological model that could be

used at pace to explore how policies might impact key epidemiological variables in the months ahead. The documentation is exhibited at FC2/01 [INQ000273551].

2.3 Strict governance was necessary because the model had important limitations. While it had some similarities with standard epidemiological models, its simplicity meant that its outputs were not appropriate to base policy decisions on. We made that clear in various ways, including often removing important axes from charts so as to focus on rough trajectories rather than precise numbers. As a result, it was primarily used by colleagues in government to shape the questions they asked SPI-M, who could explore the issues in more detail and publish their results through their usual channels.

2.4 I never personally presented the *Toy model* to the Prime Minister but I believe it might have been discussed with the Prime Minister on at least one occasion with colleagues from the Taskforce. As one would expect, this was one of many pieces of analysis channelled through Taskforce in early 2021.

3. Role in economic advice

3.1 To the best of my knowledge, neither I nor my JBC colleagues provided economic analysis and modelling that assisted key decisionmakers in understanding the economic impacts of NPIs throughout the relevant period. My JBC colleagues and I also had no role in working with the Cabinet Office in ensuring external economic analysis was fed into government decision making.

3.2 At various points, I witnessed Taskforce synthesising analysis that could be used to understand the trade-offs involved in certain policies or decisions. But I was never involved in the presentation of that analysis to decisionmakers. As such, I do not feel qualified to comment on the exact role that Taskforce (or other institutions) had in the synthesis and dissemination of analysis.

3.3 As I outlined in Section 1, I contributed to the BoE's UK forecast efforts in early 2020 in my official capacity as a BoE employee. At various points later in the pandemic, I spoke to the Office of Budget Responsibility (OBR) and the BoE to assist them with their epidemiological understanding in their efforts to build economic scenarios. I was one of the few macroeconomists working alongside clinicians, public health experts and scientists in the Covid-19 response. I was therefore well placed (although certainly not the only one) to provide epidemiological advice that they could use in their work. I did not provide economic advice to HMT, Taskforce or any other institutions during the pandemic.

3.4 Given my limited involvement in the provision of economic analysis and modelling, I do not feel well placed to express a view on what worked well and what did not in that area.

4. Governance structures

4.1 The Inquiry asked me for my views on a hypothetical economic equivalent to SAGE. I was never aware of official discussions about the possibility of an economic version of SAGE, but that is not surprising because of the role I was doing at the time. Given all the complexities, I do not feel qualified to opine on whether a hypothetical economic SAGE (*HESAGE*) would have materially enhanced the UK's response to the pandemic. That said, I have three quick personal reflections on closely related issues.

4.2 First, at every SAGE and SPI-M meeting I attended, I was always astonished by the passion, ingenuity, and public spirit on display from all involved. The country owes a great debt of gratitude to the people who gave up their personal time to work tirelessly contributing to these committees. I also have no doubt that colleagues from the academic economic disciplines would have shown as much commitment had they been invited to those or other similar committees.

4.3 Second, in my view, the outputs of SAGE and SPI-M were at their best when the committees were asked targeted and policy-relevant questions that could be tackled in rigorous ways by multiple groups. Had HESAGE existed, I think that would have been true for it too. Specifically, I think economists can help policymakers understand the choices available to them. But it is for elected officials to decide the trade-offs that governments are willing to accept.

4.4 Third, we know that economic experts were engaged by some departments during the pandemic, often in ways consistent with my above reflections (for example, see exhibit FC2/02 [INQ000088016]). An important question for the Inquiry is therefore what advantages a SAGE-like process has for issues of an economic nature.

4.5 Finally and more generally, from the perspective of JBC's relationship with Taskforce and the rest of government, I have no views on obstacles or missed opportunities. From a personal perspective, although I developed good working relationships with many colleagues in Taskforce and HMT in early 2021, I think I could have strengthened those relationships sooner.

5. Lessons Learned

5.1 On the whole, I would like to defer to other Inquiry participants on the key lessons learned related to Module 2. There are many; I only had a partial view of events compared to countless others. My one reflection is that every time I have visited other countries since restrictions have been lifted, it always astonishes me how much we could learn from their responses. In Austria, I heard for the first time about their use of a "gargle" PCR tests. In

Finland, I heard about their national security framework used to help decisionmakers in pandemics. And in South Korea, I heard how public health authorities developed even better contact tracing strategies in 2020, despite their contact tracing experience already being world leading in 2019. Time was an incredibly precious commodity during the UK's pandemic response, but I personally regret not making more time to reach out to international counterparts tackling acutely similar problems.

6. Documents

FC/01 - INQ000273551 – *Toy Model Documentation*, Toy Model Group, 07/02/21

FC/02 - INQ000088016 – *Covid and the UK Economy*, Clare Lombardelli, 30/06/22

Statement of Truth

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

Signed:

Personal Data

Dated: 19 September 2023