

Wednesday, 6 November 2024

1
2 (10.00 am)
3 **LADY HALLETT:** Yes.
4 **MS PRICE:** Good morning, my Lady. May I please call
5 Dr Phin, who will take the oath.
6 **DR NICHOLAS FULTON PHIN (sworn)**
7 **Questions from COUNSEL TO THE INQUIRY**
8 **MS PRICE:** Could you give us your full name please, Doctor.
9 **A.** Nicholas Fulton Finn.
10 **Q.** You have contributed to two witness statements provided
11 on behalf of Public Health Scotland for the purposes of
12 Module 3 of the Inquiry, the first dated
13 27 November 2023, and the second dated 21 May of this
14 year.
15 I'm going to be asking you today about matters
16 covered in the first of those statements. The reference
17 for which is INQ000401271.
18 Just so that everyone understands the reason for
19 that, is it right that although you contributed to the
20 second statement, the detail of the hospital capacity
21 data collected by the Scottish Intensive Care Society
22 Audit Group, which is covered in that statement, is not
23 something you're able to speak to because it falls out
24 your knowledge and expertise?
25 **A.** I can -- if it would help I can give some brief

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1 appointed as deputy director for the National Infection
2 Service within PHE, later UKHSA.
3 I was interim director during the 2009 pandemic
4 and was interim director, along with Susan Hopkins in
5 the current pandemic from January 2020 through
6 till December 2020. I then moved to take up a position
7 in Scotland as Director of Public Health Science with
8 Public Health Scotland and I've been in that role since.
9 **Q.** Moving, please, to the creation of Public Health
10 Scotland. Public Health Scotland was launched on
11 1 April 2020, is that right?
12 **A.** That's right.
13 **Q.** Could you explain briefly, please, the background to the
14 creation of Public Health Scotland and broadly speaking
15 its role and responsibilities?
16 **A.** Public Health Scotland came into being in 2020 following
17 a number of years of consultation about how we could
18 improve the focus for public health within Scotland.
19 As a consequence of various consultations, and
20 papers, it was felt that bringing together the health
21 improvement element which consisted then of Health
22 Scotland and one of the national boards and the
23 divisions within National Services Scotland which was
24 health protection and data and digital, bringing these
25 things together would create a better focus, if you

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1 background and insight but if it's the detail that may
2 be required, I wouldn't be able to do that.
3 **Q.** I understand. Thank you.
4 In terms of the statement we'll be focusing on,
5 that first statement dated 27 November 2023,
6 I understand you have a copy of that in front of you and
7 you're familiar with its contents?
8 **A.** Yes, that's right.
9 **Q.** I'd like to start, please with your professional
10 background and relevant roles you held during the
11 pandemic. Could you summarise briefly, please, your
12 qualifications and professional background prior to the
13 pandemic first of all?
14 **A.** Yes, I qualified as a doctor at Glasgow University back
15 in '81. I worked in public health as a registrar and
16 a trainee. I then for a period was a Director of Public
17 Health in two health authorities in England and Wales.
18 I moved into the Health Protection Agency in 2002 as
19 a consultant, first locally with Cheshire and
20 Merseyside, and then in 2007 I moved to Colindale which
21 is the Centre for Infectious Disease Surveillance with
22 the Health Protection Agency.
23 For a period, for about three,
24 three-and-a-half years I was the interim director of the
25 Centre for Infectious Disease Surveillance before being

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1 like, for public health and allow us to look at public
2 health in a much wider context.
3 The mission of Public Health Scotland is to create
4 a Scotland where everybody thrives and that is our
5 primary goal in the work that we do.
6 **Q.** The November 2023 PHS statement addresses the impact of
7 the timing of PHS' launch, in particular at paragraphs
8 13.1.1 and 13.2. The statement describes responding to
9 the pandemic whilst establishing a new national public
10 health organisation for Scotland as a uniquely and
11 highly challenging scenario. Could you explain, please,
12 what particular challenges this gave rise to?
13 **A.** There are probably two or three. The first one, we were
14 having to create new systems because obviously our
15 governance structures had changed, our management
16 structures had changed so we were creating new
17 managerial systems, we had new finance systems, we had
18 HR issues that needed to be resolved. We needed to look
19 at the structures of this new division because part of
20 the element was about how we bring together the three
21 elements that existed prior to April 2020, and use that
22 to provide something which was more cohesive which
23 addressed the sort of wider issues.
24 So there was that aspect to it.
25 We also had to deal with the fact that we were

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1 having to respond, in a fairly major way, to the
2 pandemic threat which meant that something had to give
3 and as a consequence the focus was, by and large, on
4 responding to the pandemic. But these were big
5 challenges and they've had to subsequently be dealt with
6 in the aftermath of the pandemic.

7 **Q.** To your knowledge, and appreciating you joined PHS at
8 a later stage, did these challenges have any impact on
9 the ability of PHS to contribute to the healthcare
10 response to the pandemic for example in relation to the
11 provision of relevant data to the Scottish Government?

12 **A.** I think one of the things that the creation of Public
13 Health Scotland did was actually create greater
14 resilience in the system. So as an organisation with
15 much larger staffing numbers we were able to draw on
16 staff from different areas to bolster up, to support the
17 efforts. I would say that actually the creation of
18 Public Health Scotland enabled greater resilience and in
19 fact helped the response. One could argue that,
20 you know, over a number of years health protection
21 services have not had the investment that perhaps would
22 have been accorded it but we were able during 2020 to go
23 out and recruit additional staff to make sure that we
24 were able to deliver what I think we saw were essential
25 services during the pandemic.

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1 **Q.** In terms of the ARHAI exception, could we have on
2 screen, please, paragraph 1.1.7 of the November
3 statement, and it's on the screen for us now. Starting
4 four lines down, please:

5 "Prior to 1st April 2020, PHS legacy
6 organisation HPS had a role in Infection Prevention
7 and Control when it encompassed ARHAI. This ceased on
8 1 April 2020 when ARHAI remained within NSS.
9 Professional collaboration between PHS and ARHAI
10 continued throughout the pandemic which is discussed
11 in more detail below. PHS's role in providing advice,
12 guidance and expertise to prevention infection in
13 healthcare settings has been limited since
14 April 2020."

15 We'll come on in due course to look at how PHS
16 collaborated with ARHAI on guidance but put simply, is
17 it right that IPC guidance for healthcare settings was
18 never one of PHS's responsibilities because of the ARHAI
19 transfer exception?

20 **A.** That's correct, as of 1 April that responsibility
21 remained with ARHAI and the focus was solely on ARHAI
22 for IPC in healthcare settings.

23 **Q.** That document can come down now, thank you.

24 In terms of PHS's role in the Scottish Covid-19
25 response plan and arrangements, the PHS statement at

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1 **Q.** PHS brought together three legacy bodies and you've
2 referred to those in brief already. But just to be
3 clear, where they fell, the first of those was
4 NHS Health Scotland which was a national health board,
5 is that right?

6 **A.** That's correct.

7 **Q.** Health Protection Scotland was the second?

8 **A.** That's correct.

9 **Q.** And the Information Services Division, the last two both
10 being components in the public health and intelligence
11 strategic business unit, which itself was part of the
12 national health board NHS National Services Scotland?

13 **A.** Yes.

14 **Q.** Did I summarise that correctly?

15 **A.** Yes.

16 **Q.** Is it also right that all staff and functions from the
17 legacy bodies transferred across to PHS with two
18 exceptions, one relates to corporate services staff who
19 moved from NHS Health Scotland to NHS NSS and the other
20 exception being the Antimicrobial Resistance and
21 Healthcare-Associated Infection function and staff which
22 had been part of the Health Protection Scotland and that
23 remained with the NHS NSS rather than transferring over
24 to PHS; is that, again, a correct summary?

25 **A.** Yes, it is.

6

1 paragraph 1.4.3 describes four response programmes and
2 three enabling programmes in place in June 2020. One of
3 the response programmes was clinical response and
4 guidance, is that right?

5 **A.** Yes, that's correct.

6 **Q.** Although for reasons we've just touched on, this did not
7 include IPC guidance for healthcare settings, and one of
8 the enabling programmes was data and analytics?

9 **A.** Yes, that's right.

10 **Q.** Did this role flow from PHS being the main provider of
11 official health and social care statistics for NHS
12 Scotland?

13 **A.** That's correct.

14 **Q.** The placing of the NHS in Scotland on an emergency
15 footing is dealt with at paragraph 2.2.1 of the November
16 statement and it is explained that this lasted from
17 17 March 2020 to 30 April 2022. Is that right?

18 **A.** Yes, that's right.

19 **Q.** This impacted on PHS's operational autonomy?

20 **A.** Yes.

21 **Q.** In particular in relation to public health advice, is it
22 right that the lead role for the offer of public health
23 advice transferred from Health Protection Scotland,
24 later Public Health Scotland, to Scottish ministers?

25 **A.** Yes, that's right.

8

- 1 **Q.** And this meant, for example, that while PHS continued to
2 offer the Scottish Government advice on the wording of
3 relevant guidance documents, the Scottish Government was
4 under no obligation to accept that wording?
- 5 **A.** Yes.
- 6 **Q.** Were there ever times when the Scottish Government
7 declined to follow PHS advice on matters relevant to the
8 healthcare response to Covid-19?
- 9 **A.** The healthcare response would by and large fall outside
10 our remit. The healthcare provision in Scotland is
11 devolved to boards of which there are 14, and those
12 boards take responsibility for the delivery of
13 healthcare in Scotland, and it's slightly different to
14 England where there is NHS England which has oversight
15 by and large of many of the activities of the health
16 service in England. Therefore, what we would be doing
17 is working very closely with the boards to make sure
18 that any guidance that was issued incorporated their
19 views but ultimately that advice would come from
20 Scottish Government.
- 21 **Q.** PHS sat on the Scottish Government Four Harms Advisory
22 Group, is that right?
- 23 **A.** Yes.
- 24 **Q.** Although you personally did not join that group
25 until April 2020?

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- 1 health and health protection perspective. Was ARHAI
2 also represented on that group?
- 3 **A.** I believe so.
- 4 **Q.** To what extent in principle, understanding that you
5 yourself were not involved, would PHS have questioned
6 the views of ARHAI on Covid transmission in a hospital
7 setting?
- 8 **A.** I wasn't around, as you mentioned, and I'm afraid I'd be
9 unable to comment on exactly the advice that was given
10 at that point.
- 11 **Q.** Moving, please, to the extent to which PHS was
12 responsible for Covid-19 relevant guidance for
13 healthcare settings. Could we have on screen, please,
14 paragraph 3.4.15 of the statement. And the statement
15 here says this:
- 16 "When PHS was formed on 1st April 2020 and ARHAI
17 remained within NSS, guidance documents that had been
18 published previously that included content relating to
19 IPC became jointly owned and maintained by PHS and
20 ARHAI. ARHAI was responsible for the IPC content and
21 for providing healthcare IPC support to local HPTs.
22 PHS was responsible for the wider health protection
23 content within the guidance and outbreak management
24 support for HPTs. While this statement focusses on
25 healthcare settings, where ARHAI led on IPC advice and

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- 1 **A.** Correct. I think it was later than that. April 2020
2 I hadn't moved to --
- 3 **Q.** I'm sorry, if I said April 2020 I meant April 2022.
- 4 **A.** Yes.
- 5 **Q.** Forgive me, if that was my error.
6 Was that one of the forums for PHS to provide
7 strategic advice on managing both the direct and
8 indirect harms to health caused by the pandemic?
- 9 **A.** It was one of the forums, yes.
- 10 **Q.** In what other ways and through what other forums was
11 this advice provided?
- 12 **A.** We were party to the -- the committee that was formed
13 around giving Covid advice which was led by -- sorry,
14 I can't recall his name. It was led by a senior
15 academic and this tried to co-ordinate advice from both
16 academics, clinical colleagues and Public Health
17 Scotland and that was in addition to the four harms.
- 18 **Q.** PHS also sat on the Covid-19 Nosocomial Review Group, is
19 that right?
- 20 **A.** Yes.
- 21 **Q.** Did you yourself ever sit on that group?
- 22 **A.** No, I didn't.
- 23 **Q.** At paragraph 3.3.17 of the November statement it is said
24 that PHS supported consideration of transmission risk in
25 hospitals through expertise and evidence from a public

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- 1 guidance, it should be noted that PHS led on IPC
2 measures in non-healthcare settings."
- 3 The statement goes on, in the next paragraph, to
4 identify three categories of guidance after
5 1 April 2020:
6 "Health protection guidance developed and
7 maintained by PHS.
8 "Health and social care IPC guidance developed
9 and maintained by ARHAI.
10 "Joint outbreak management and IPC guidance
11 developed and maintained in collaboration between PHS
12 and ARHAI."
13 Just taking an example of health protection
14 guidance which was issued by Public Health Scotland for
15 secondary care settings, could we have on screen,
16 please, INQ000189278, and looking at the first page we
17 can see there this is a December 2020 document, Covid-19
18 Guidance for Secondary Care Settings. Did you
19 personally have any involvement in advising on the
20 content of this or other similar guidance for healthcare
21 settings?
- 22 **A.** No, I didn't. That pre-dated my role in Public Health
23 Scotland.
- 24 **Q.** Going to the top of page 5, please, this is
25 an explanation of the scope of the guidance and the

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1 target audience, and it says:

2 "This guidance is to support those working in
3 secondary care settings (eg hospitals) with general
4 public health measures required to manage the spread
5 of COVID-19. This guidance covers key issues for
6 secondary care for a health protection perspective.

7 "This should be read together with the IPC
8 addendum on secondary care."

9 The contents table is on page 4, and we see
10 a fairly wide range of topics covered, including key
11 public health measures to prevent the spread of
12 Covid-19, testing for Covid-19. And then we see there's
13 a section on "Infection prevention and control in
14 secondary care settings", section 7. Could we go to
15 that section, please, it's page 17. And paragraph 7.1
16 says under "Infection prevention and control and PPE":

17 "Staff in secondary care settings should refer
18 to the COVID-19 IPC addendum within the National
19 Infection Prevention and Control Manual ... for all
20 IPC guidance relating to care and provision in
21 the secondary care setting."

22 Was this generally how the division of
23 responsibility between PHS and ARHAI was dealt with in
24 PHS guidance for healthcare settings, that is, by way of
25 a cross-reference in the health protection guidance to

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1 something that's being discussed at the moment to make
2 sure that this gap is addressed, and we're in active
3 discussion with ARHAI, and indeed with
4 Scottish Government about how we address this going
5 forward.

6 But during that pandemic, it was addressed because
7 of the close working relationships that had been
8 developed over many years with staff in ARHAI, and those
9 continued throughout the Covid pandemic.

10 **LADY HALLETT:** Dr Phin, forgive me interrupting. The
11 structure seems unnecessarily confusing for somebody on
12 the outside.

13 **A.** It was not our sort of primary way of putting across,
14 but we had to reflect the fact that there was a shift in
15 responsibilities and we were directed to use the Health
16 Protection Scotland logo and name in any guidance that
17 we used.

18 **MS PRICE:** Did this approach to Covid-19 guidance for
19 healthcare settings which follows from the structural
20 separation of ARHAI from PHS on its creation, create
21 a risk that there would be gaps overlap or duplication
22 in the guidance being issued to healthcare settings?

23 **A.** One of the things that we worked -- well, I understand
24 people worked very actively on was making sure and
25 ensuring there was no duplication, there were no gaps.

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1 the ARHAI-produced IPC guidance for healthcare settings?

2 **A.** That's correct. A decision was taken fairly early on by
3 Scottish Government that Public Health Scotland should
4 continue to use the Health Protection Scotland brand in
5 its documentation and that meant that -- and that was
6 because it was a trusted name, people were familiar with
7 it, knew where to go, they knew how to access it.
8 Therefore, I think it's quite nicely described in the
9 previous slide that you put up where you described the
10 three areas that ARHAI took responsibility, we took
11 responsibility and then where there was joint
12 responsibility.

13 So, yes, there were -- they were published on the
14 Public Health Scotland website under the Health
15 Protection Scotland name but they were jointly developed
16 with ARHAI, with ARHAI taking responsibility for the IPC
17 aspects in healthcare.

18 I think it's important to realise that ARHAI's
19 remit is defined because it's part of the NHS Assure,
20 which is for healthcare-associated infection. That does
21 leave a gap when it comes to community settings which is
22 why in that document we describe the role of Health
23 Protection Scotland in taking the principles that were
24 developed for the healthcare setting, and adapting and
25 trying to use them in those wider settings. This is

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1 And again, I refer back to the relations that had been
2 built up over many years when ARHAI was part of Health
3 Protection Scotland. Those relations continued through
4 into 2020 and beyond, and as my colleague Dr McMenamin
5 said in the last Covid inquiry it was one of the most
6 amicable divorces that he'd ever heard of, so those
7 working relationships ensured that any duplication or
8 gaps were not missed.

9 **Q.** That document can come down now, thank you.

10 Particularly during the transition period, are you
11 aware of there having been any confusion over who was
12 doing what in relation to IPC guidance for healthcare
13 settings?

14 **A.** No, I wasn't aware.

15 **Q.** Did the separation of ARHAI from PHS have any impact on
16 the ability of PHS to fulfil its guidance
17 responsibilities?

18 **A.** Clearly about a third of the health protection staff
19 were involved in ARHAI, which covered not just
20 healthcare-acquired infection but antimicrobial
21 resistance and aspects of animal disease. If you lose
22 a third of your staff that will have an impact
23 potentially on your ability to respond. However, I go
24 back to the point that there were well, strong
25 relationships established and we put aside any sort of

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1 managerial structures to ensure that we worked very
2 closely together and overcame any sort of issues that
3 may have arisen.

4 **Q.** Turning, please, to PHS's role in the relation to the
5 collection and provision of Covid-19 data to relevant
6 healthcare settings.

7 Could we have on screen, please, page 44 of
8 the November statement, paragraph 4.5.1, and the last
9 bullet point here, and the context is the structures and
10 processes that were most critical for the provision of
11 this data, and this is provision of data about
12 healthcare settings to the Scottish Government and other
13 partners:

14 "PHS hosted a daily morning huddle with
15 participation from PHS, Scottish Government and other
16 partners to review daily trends in case numbers,
17 hospital impact, Intensive Care Unit ... cases and
18 deaths to capture occasional data quality issues
19 before officially sharing with Scottish Government
20 more widely to inform the Scottish Government's daily
21 press conferences. For this daily meeting, the RTE
22 team would produce an overview of the data and
23 identify any concerns in trends or issues of note."

24 NHS hospital admissions data is dealt with over
25 the page, towards the bottom, paragraph 4.5.4. And it

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1 and other life support therapies ..."

2 We have an example of a daily report on acute bed
3 occupancy, levels of care, and Covid status of patients
4 made available to the Scottish Government which was
5 exhibited to the second PHS statement of May this year.
6 Appreciating that you may not be able to speak to the
7 detail of the data in it, I'd just like to check with
8 you whether this was the type of daily report being
9 produced.

10 Could we have it on screen, please, INQ000372596.

11 And this spreadsheet provides figures for each
12 hospital grouped by health board and their network, as
13 we can see on the left-hand side. It's from
14 December 2020. Did you personally have any involvement
15 in the collation or presentation of this type of data
16 for these types of reports?

17 **A.** No, I didn't.

18 **Q.** For the day it is dated and the previous day it provides
19 numbers of empty, full, and closed beds; the number of
20 patients at each level of care, so level 0, level 1,
21 level 2 and level 3; and the number of suspected and
22 positive Covid cases. The Inquiry understands that
23 a closed bed is one which is closed due to a lack of
24 staff or equipment to staff the bed. Is that also your
25 understanding?

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1 says:

2 "Timely NHS hospital admissions data was also
3 vital. This was obtained through the RAPID reporting
4 system and Intensive Care Unit ... data provided
5 through the Scottish Intensive Care Society Audit
6 Group ... and, in particular in the early phase of the
7 pandemic, directly from health board service returns
8 to the Scottish Government. National Records of
9 Scotland ... death data linked to COVID-19 testing
10 data was also crucial ..."

11 And then you provide a little more detail about
12 the daily reports which were made available to the
13 Scottish Government at paragraph 4.5.10, page 47:

14 "SICSAG rapidly repurposed its reporting
15 systems, which usually operate on a monthly basis, to
16 develop a daily flow of data from all intensive care
17 units in Scotland. This allowed daily reports to be
18 issued by 9am reporting the number of patients in ICUs
19 across Scotland. This was then linked with data it
20 from testing laboratories to identify ICU patients
21 with a positive PCR test for SARS-CoV-2 allowing
22 a more detail daily report to be issued by 12 noon
23 providing national information on the numbers of
24 patients in Scottish ICUs, their COVID-19 test status,
25 the number of people requiring mechanical ventilation

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1 **A.** Yes, that's correct.

2 **Q.** Is this the daily report which would have been discussed
3 at the daily huddle with the Scottish Government?

4 **A.** Yes, it was.

5 **Q.** Did you personally ever attend those huddles?

6 **A.** No, I didn't. This had become a fairly routine practice
7 at the time I joined Public Health Scotland.

8 **Q.** What this spreadsheet does not do is give any
9 information about whether prescribed ICU trained
10 staffing ratios were being maintained; would you agree?

11 **A.** That's correct, yes.

12 **Q.** It also does not give information about, for example,
13 how many patients were receiving mechanical ventilation
14 or other respiratory support, does it?

15 **A.** No, it doesn't.

16 **Q.** Or whether the empty beds were level 0, 1, 2 or 3 beds?

17 **A.** That's correct.

18 **Q.** It also doesn't give any figures for bed occupancy as
19 a percentage of baseline or surge capacity; would you
20 agree?

21 **A.** Yes.

22 **Q.** Do you think it would have been helpful if these daily
23 reports had contained such further data?

24 **A.** I think it's worth me just explaining a little bit, this
25 report that you see was the one that was submitted and

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1 sent in to Scottish Government at fairly high level. We
2 tried to keep it as simple as possible and this had been
3 evolved since April through to May with
4 Scottish Government where they were clear about the
5 information they wished to have.

6 There was a separate report produced each day
7 which was certainly for intensive care consultants for
8 the co-ordinator of intensive care across Scotland, and
9 that provided the detail you've just described, it
10 talked about the staffing ratio, it talked about the
11 types of ventilated beds, etc. So that detail was
12 available. It was a second report that was not
13 circulated to Scottish Government.

14 It was very operational and it was felt it could
15 be potentially confusing, and it was really about how
16 the clinicians and the operational management of the
17 units were working.

18 I think it was important that Scottish Government,
19 at their request, were clear about how many beds were
20 full, how many were closed because of staffing potential
21 issues, and those that were empty and that would allow
22 them to understand where the pressures were in the
23 system.

24 **Q.** Stepping back and looking at this document and you've
25 indicated it was intended to be fairly high level for

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1 coping with demand for government, so not those,
2 you know, involved in the management of the hospitals
3 but government, how would you propose this document is
4 improved?

5 **A.** Well, as I said initially, the work started in April and
6 throughout April and May there was -- there is an
7 enormous amount of data collected through this system,
8 and throughout April and May there was a lot of toing
9 and froing and discussion about being clear about what
10 data Scottish Government needed in order to understand
11 and to help them develop their policy and their
12 understanding of what was happening. So, the data you
13 have is the data that they requested that they would
14 need in order to make those decisions.

15 Behind the scenes there were professional advisors
16 in Scottish Government through the Chief Medical
17 Officers Office, who would have probably been able to
18 look at this and make a sort of -- more of a clinical
19 judgment, and would then influence any, or answer any
20 questions that may have been addressed by either senior
21 civil servants or ministers.

22 **Q.** That document can come down now, thank you.

23 Turning, please, to testing and surveillance. You
24 have dealt quite comprehensively with your colleagues
25 with the early work which was done on testing and

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1 Scottish Government but it's not easy at a glance, is
2 it, to understand how well hospitals were coping with
3 demand. Would you agree?

4 **A.** Yes, although in trying to -- if you look at the
5 column of "closed", that's giving you an indication of
6 beds that could be available but were unavailable
7 because of staffing. So, for instance, level 3 bed
8 requires one-to-one nursing care. A level 2 will
9 require two members of staff. And that second member of
10 staff could be staff more generally from the hospital.
11 And what it's saying in fact that there are closed beds
12 that there is staffing issues within that hospital in
13 trying to maintain the capacity it could provide should
14 the staffing have been available.

15 **Q.** Again, there's no breakdown there, is there, of various
16 of the closed beds as to what level of care they relate
17 to?

18 **A.** No. There's no level -- that isn't available in this
19 report. It would have been available in the second
20 report that was produced and I'm very happy to produce
21 a copy -- and example of that if that would be helpful
22 to the Inquiry.

23 **Q.** That would be helpful. Thank you. In terms of how
24 an at-a-glance, one-page spreadsheet like this could be
25 improved, to give a view of how well hospitals are

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1 capacity and capability in the November statement and
2 I'd urge anyone interested to look at paragraphs 5.1.27
3 to 5.1.31 and 5.2.3 to 5.2.4 in particular.

4 In the interests of time I'd like to focus,
5 please, on whole genome sequencing and its role in
6 identifying or ruling out nosocomial infections. Is it
7 right that PHS contributed to the development of a UK
8 service offering rapid sequencing of Covid-19 samples so
9 that genome types of the virus that is the genetic
10 fingerprint could be compared to other samples?

11 **A.** Yes, I think I just need to explain that in a little bit
12 more detail. At the beginning of the pandemic the
13 capacity within Scotland to undertake whole genome
14 sequencing was very rudimentary, if almost non-existent.
15 What was created in the early months of the pandemic was
16 COG-UK, which was a collaboration of academic and other
17 organisations which provided a service to Wales,
18 Northern Ireland, Scotland and England in terms of
19 increasing the capacity to undertake whole genome
20 sequencing.

21 Throughout 2020, my colleagues worked with
22 Scottish Government to get the funding and the resource
23 they did to introduce whole genome sequencing as
24 a sustainable service into Scotland, and then to expand
25 that, and our reliance on COG-UK diminished over time as

24

1 our own service developed in Scotland.

2 **Q.** I see. So the service that was launched on
3 2 December 2020, is that the UK-wide service?

4 **A.** No, that was the Scottish service.

5 **Q.** Can you explain, please, how that service helped
6 infection prevention and control and public health teams
7 to investigate community and hospital based outbreaks?

8 **A.** There's been a lot of discussion about whether or not
9 let say an infection identified in the community was
10 either taken into the hospital or whether the hospital
11 contributed to development in the community, or whether
12 indeed, I think, as I previously said in the last
13 inquiry, hospital patients had actually ceded outbreaks
14 in care homes. What the whole genome sequence does is
15 provide a genetic finger if you've got two samples with
16 the same sequence they're somehow related or linked.
17 What it doesn't do is tell you the direction in which
18 that relatedness exists.

19 So it can't say this has come from the hospital
20 and gone into the community, or vice versa. For that,
21 you need the detailed epidemiology to understand when
22 an individual was infected and could have been acquired
23 in the community, and brought into the hospital.

24 So it's a good example of why epidemiology and
25 microbiology need to work together than service needed

25

1 strain affecting all of the 15 people, they'd then be
2 able to look at the practice and see whether there had
3 been any breakdown in what had been done, and it would
4 enable them to then look at how they could strengthen or
5 improve infection control in that particular setting.

6 So it was useful in identifying gaps and
7 weaknesses, and providing also the assurance, where that
8 wasn't an issue, about the adequacy of infection
9 prevention controls.

10 **Q.** Moving, please, to data on nosocomial infections.
11 PHS worked closely with ARHAI on a report called
12 Changes to the Severity of Covid-19 and Impact on
13 Hospitals in Scotland which provided some statistics on
14 nosocomial infections, is that right?

15 **A.** I don't recall that report, but if it --

16 **Q.** If it assists you, it's paragraph 5.5.14 in the
17 statement in front of you. We don't need to display it,
18 but that might assist you if you want to refer to it.
19 Paragraph 5.5.15 of the statement and in fact let's have
20 that on screen, please, page 70. For completeness if we
21 can go up to the paragraph above that just explains the
22 report. So this section explains, 5.5.13 at the top,
23 please that:
24 "PHS does not hold data on hospital-acquired
25 infections. ARHAI is responsible for routine

27

1 to be developed.

2 **Q.** So is it right that whole genome sequencing was most
3 helpful in ruling out nosocomial infection rather than
4 ruling it in, so to speak?

5 **A.** Yes, that would be one use. But as I say, it simply
6 determined the degree of relatedness between samples.
7 You needed to understand the sequence of events in order
8 to draw a potential conclusion about which direction
9 that infection had happened.

10 **Q.** But if you had, for example, 15 people in a ward, and
11 their samples were different looking at that genetic
12 fingerprint, that would assist, wouldn't it, in terms of
13 whether it was a nosocomial infection outbreak or not?

14 **A.** Absolutely. You'd be talking about 15 separate
15 introductions.

16 **Q.** How did whole genome sequencing improve nosocomial
17 infection prevention practices? The statement indicates
18 that it did.

19 **A.** Well, I think it would be along the lines that you've
20 suggested, it would be useful in looking at outbreaks to
21 determine whether or not this could feasibly have been
22 nosocomial transmission or it could have been, let's
23 say, 15 different introductions. After understanding
24 that, it would allow the team to look at infection
25 control practice, and if there had been one single

26

1 monitoring and reporting ..."

2 But, the paragraph below:
3 "PHS worked closely with ARHAI on the
4 report ..."

5 I've just referred to.
6 And then 5.5.15 gives a summary, some headline
7 figures from the report:
8 "The report found that between December 2021 and
9 mid-May 2022, there [were] 14,215 hospital admissions
10 (all admission types) and of these 5,644 were
11 probable/definite hospital onset."

12 Just to be clear what definition of nosocomial
13 infection was used for that report, which is explained
14 in the paragraph above, these were defined as having
15 probable or definite hospital onset with probable onset
16 defined as the test taken 8 to 14 days after admission
17 and definite onset being defined as the test being taken
18 15 days or more after admission, is that right, looking
19 at the statement?

20 **A.** Yes, that's right.

21 **Q.** And so looking at that figure, the 14,215 figure, can
22 you help with whether that is the total number of
23 hospital admissions for a person with a positive
24 Covid-19 test? It would seem to follow from the
25 explanation given in those paragraphs.

28

1 A. I'm not familiar with the report. I'm afraid I wouldn't
 2 be able to comment on that, I'm sorry.

3 Q. Okay. If that were correct that that is the total
 4 number of hospital admissions for a person with positive
 5 Covid-19 -- with a positive Covid-19 test, that would
 6 mean a figure for her Ladyship to take from this of
 7 nearly 40% of that 14,215 by my calculation, being
 8 probable or definite hospital onset cases?

9 A. Yes, I'd agree with that.

10 Q. That can come down now, thank you.
 11 Paragraph 5.6.14 of the November statement
 12 explains that PHS does not hold or have access to data
 13 around the proportion of patient deaths within
 14 healthcare settings in Scotland which are attributable
 15 to patients having died with hospital-acquired Covid-19
 16 infection, is that right?

17 A. Yes.

18 Q. Can you explain, please, why that is?

19 A. The information on hospital-acquired infections is
 20 basically stored in the system called ICNET or -- of
 21 which, I think about 11 or 12 of the boards have
 22 adopted. There are three or four boards which use their
 23 own system. ICNET is not accessible from -- by PHS
 24 because obviously it contains patient detailed
 25 information. We would therefore be reliant on working
 29

1 to patients having died with nosocomial infections, or
 2 is it the case that that is information held by another
 3 organisation within Scotland?

4 A. I think it's not possible at the current time.

5 Q. I'd like to come, please, to the risk for healthcare
 6 workers and their households.
 7 Could we have on screen, please, page 85 of
 8 the November statement. Paragraph 6.7.4, please:
 9 "PHS was included in the REACT-SCOT consortium
 10 looking at the risk of Covid-19 hospitalisation among
 11 healthcare workers (18-65 years old), their households
 12 and other members of the general population. Work prior
 13 to this was insufficiently robust or comparable and
 14 there was a lack of studies evaluating the risk of
 15 Covid-19 infection in household members of healthcare
 16 workers."
 17 And the next paragraph, please:
 18 "The findings, published in on 28 October 2020
 19 in the BMJ ... showed that during the first peak of
 20 the pandemic, whilst the absolute risk remained low,
 21 patient-facing healthcare workers were at three-fold
 22 higher risk of hospitalisation with COVID-19 than the
 23 general population and individuals living in the same
 24 households as a patient-facing healthcare worker were
 25 at two-fold higher risk than the general population.
 31

1 with ARHAI, which is where the close collaboration would
 2 come in, to make those sort of links and to use that
 3 data.
 4 We can only make inferences and one of the -- at
 5 the beginning until we changed our definition of how we
 6 would identify a Covid-related death we were using
 7 a definition of someone who was Covid-positive and died
 8 within a certain period of that diagnosis being made.
 9 That tended to over-emphasise, if you like,
 10 because many of the people who actually developed Covid
 11 had many comorbidities and it may have been another
 12 cause which eventually led to their particular death.
 13 So that was refined over time and we adopted the
 14 National Records of Scotland, NRS, data which was that
 15 we would only use deaths ascribed to Covid if they were
 16 included in the death certificate.
 17 There are challenges then in trying to link that
 18 back to the hospital data given that we're talking about
 19 three different datasets.
 20 There is work underway to look at how we can make
 21 that data more accessible and in one place and that is
 22 work in progress that is being undertaken at the moment.

23 Q. So is it the case that it's simply not possible to say
 24 at the moment the proportion of patient deaths within
 25 healthcare settings in Scotland which are attributable
 30

1 The study found that healthcare workers and
 2 individuals living in their households accounted for
 3 one in six of all individuals hospitalised with COVID
 4 in Scotland. The study highlighted that whilst the
 5 risk for many healthcare staff is similar to that of
 6 the general population, there is higher risk to some
 7 staff. The results helped to inform action to protect
 8 those healthcare workers at greatest risk."
 9 Can you help, please, with how the results helped
 10 inform action to protect those healthcare workers at
 11 greatest risk?

12 A. I'm afraid this publication and the results and the
 13 implementation happened prior to my appointment in
 14 Public Health Scotland. What I do know is that using
 15 information that was coming out of studies like this we
 16 were able to stratify potential risk factors that might
 17 put people at greater risk and I would have expected
 18 that then to have been part of an occupational health
 19 assessment for people who were either dealing, perhaps,
 20 with a cohorted ward where Covid-19 patients were being
 21 managed, or in frontline staff.
 22 So there would have been an occupational health
 23 assessment to determine those at greatest risk and
 24 advise them appropriately.

25 Q. That document can come down now, thank you.
 32

1 The next topic I'd like to you ask about is work
2 done by PHS on health and healthcare inequalities.
3 Pre-pandemic health inequalities are dealt with at
4 paragraphs 8.2.1 to 8.2.2 of the statement, if that
5 assists you. The position is put fairly starkly,
6 Scotland went into the pandemic with the worst health
7 inequalities in western and central Europe and the
8 lowest life expectancy in western Europe.

9 Just to be clear on terminology. There's
10 an important difference, isn't there, between health
11 inequalities and healthcare inequalities? Can you just
12 explain that difference, please?

13 **A.** Well, health inequalities would be those inequalities
14 that people experience through either their environment,
15 their income, the habits, what they do, etc, so it's
16 a very generic term influenced by many factors.

17 Healthcare inequality would be people where there
18 were situations where people were unable to access or
19 where there were challenges in the provision of
20 healthcare in an equitable way. So one is about
21 a general responsibility. The second one is about
22 potentially systems, and how we go about providing
23 access and engaging with patients.

24 **Q.** And this section of the statement is dealing here with
25 health inequalities, isn't it?

33

1 those or, as we would be trying to do in Public Health
2 Scotland, to try and take every effort to ensure that
3 those inequalities are minimised generally in everything
4 we do.

5 **Q.** Was any planning done pre-pandemic to ensure that
6 mechanisms for mitigating such an exacerbation could
7 quickly be put in place in the event of a pandemic?

8 **A.** The pandemic plan that was developed for the UK was in
9 2011, and that described very much the response that
10 should be taken to manage the pandemic. I can't recall
11 whether there were any specific measures about what we
12 might do regarding the work situation or how we might
13 help those in deprived communities but certainly some of
14 the measures that were introduced during the pandemic
15 were designed to try and mitigate that and that was
16 furlough where people who were unable to work, either
17 through Covid or for whatever reason, were provided with
18 an income to ensure at least they had some resource of
19 finance.

20 **Q.** Looking at the impact of Covid-19 on health
21 inequalities, PHS undertook analysis of the inequalities
22 relating to the direct and indirect health harms and the
23 statement indicates that this was led by colleagues from
24 NHS Health Scotland who had been involved in
25 pre-pandemic health inequalities work, is that right?

35

1 **A.** Yes, it is.

2 **Q.** It is clear from the reference in the paragraphs which
3 follow from the reference to work done in 2013 and 2019
4 on the causes and solutions to health inequalities that
5 there was an awareness of the state of health
6 inequalities in Scotland pre-pandemic, is that right?

7 **A.** Yes.

8 **Q.** Was there also an awareness pre-pandemic that a pandemic
9 would be likely to exacerbate existing health
10 inequalities?

11 **A.** There should have been. I mean, if we look at the
12 history of pandemics and we go back to 1892 to the
13 Russian pandemic and again in 1918 to the Spanish flu
14 pandemic, the groups that were most affected were those
15 in, you know, conditions of overcrowding, typically the
16 situations we describe as deprivation.

17 A feature of the 1892 pandemic was that it was
18 felt that a major factor in the rapid transmission of
19 the pandemic was the fact that people needed to work, if
20 they didn't work they didn't get paid, therefore they
21 were turning up to work with symptoms, they were
22 infecting their colleagues. So it's been well
23 recognised that health inequalities will be exacerbated
24 during a pandemic and we need to be thinking about what
25 measures should be put in place to try and minimise

34

1 **A.** That's right, yes.

2 **Q.** When did that work start? And appreciating you may not
3 have been there at the time.

4 **A.** This was in relation to the pandemic itself in 2020?
5 I think it started fairly quickly because the colleagues
6 in question, this had been something they had been
7 working on for many years in respect to health
8 inequalities and therefore they were well placed to
9 rapidly identify and adapt the work they were doing to
10 look into this further. But I can't recall exactly when
11 it happened. As you say, I wasn't there at that
12 particular time.

13 **Q.** Could we have on screen, please, paragraph 8.4.4 of the
14 November statement. The findings of a PHS paper are
15 summarised here. And from that paper it was clear that
16 people living in more deprived circumstances were more
17 likely to be exposed, infected, become unwell and to die
18 from Covid-19 because of socioeconomic inequalities and
19 that the measures put in place to control the pandemic
20 are also likely to have had disproportionate impacts on
21 the most deprived groups.

22 There's no date given for that paper here. Can
23 you help at all with the date of that paper?

24 **A.** I have a feeling that paper was in April 2020 but again
25 I can look into that and provide a copy of the paper to

36

1 the Inquiry. Just commenting on it, as I've said, the
2 impact that pandemics have had in people in
3 socioeconomic and deprived situations is well
4 recognised, one only needed to look at the mortality
5 data coming out of both of those pandemics that
6 I mentioned to see that.

7 So this is well recognised, and perhaps what it
8 highlights is that maybe the emphasis was on looking at
9 the response and not thinking about what we might do
10 more generally in society.

11 **Q.** Well, let's look on at a little more detail. Going over
12 the page, please, there is a diagram, which we don't
13 need to go to the detail of now there, indicating direct
14 health impacts and indirect health impacts. And then at
15 paragraph 8.4.7, data relating to occupation is
16 addressed. And it says "The briefing referred to
17 above," and looking back up that appears to be
18 a reference to the briefing for -- forgive me, we don't
19 need to go to it on the screen, but at paragraph 8.3.5
20 of the statement there is reference to a briefing for
21 Scottish Government ministers taking place in June 2020.

22 Can you help with whether that is the briefing
23 referred to above?

24 **A.** I can't at this point in time but again I can clarify
25 with you and provide that information after today.

37

1 In terms of inequalities in indirect health harms,
2 over the page, please, 8.4.13, this is an assessment
3 from May 2020, as we can see from the paragraph above,
4 and it indicates here that:

5 "The assessment looked at a range of mechanisms
6 through which physical distancing measures could impact
7 on health including economic impacts, social isolation,
8 health-related behaviours and disruption to essential
9 services. Potential impact identified in relation to
10 disruption to health and social care services include:

11 "The potential for the cancellation of
12 face-to-face appointments to lead to inappropriate care
13 or barriers to care for people who require interpreting
14 services including Deaf people who use British Sign
15 Language."

16 And then:

17 "The potential for delays to non-urgent
18 healthcare provision detrimentally impact on people
19 with long-term health conditions. It was suggested
20 that delays to treatment could result in ongoing
21 unresolved morbidity and delays to prevention
22 activities such as cancer screening, which could
23 result in longer-term adverse health impacts."

24 So it appears that the analysis done by PHS
25 by May/June time in 2020 led to a tolerably clear

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1 **Q.** So the briefing for which may be the briefing for
2 Scottish ministers in June 2020 found that:
3 "... using occupation as an individual marker of
4 socioeconomic position, and data between March
5 and December 2020, the COVID-19 death rates for
6 working-age adults employed as 'process, plant and
7 machine operators' was eleven times higher than those
8 working in 'professional occupations', while all-cause
9 deaths was 5.3 times higher."

10 The next paragraph addresses other groups for whom
11 Covid-19, direct Covid-19 mortality is higher. So:

12 "Direct COVID-19 mortality is also substantially
13 higher for those in some ethnic minorities in Scotland
14 ... with increasing age, amongst men compared to women,
15 and for those with pre-existing health conditions.
16 Early analysis of data on mortality from COVID-19 for
17 people with learning difficulties suggests that this
18 might be three times higher than in the general
19 population."

20 And then at 8.4.9 there is this:

21 "In addition, the COVID-19 mortality rates have
22 been found to be higher in some local authority areas
23 than others. Data from the first wave of the pandemic
24 show that this can be explained by higher income
25 deprivation levels and household overcrowding ..."

38

1 picture of particular groups being disproportionately
2 affected both in terms of direct and indirect health
3 harms caused by Covid-19, is that fair?

4 **A.** Yes, that is fair.

5 **Q.** And that picture was shared with the Scottish Government
6 at the time, was it?

7 **A.** Yes.

8 **Q.** There was in fact a meeting of the Scottish Government
9 Covid-19 advisory group which took place on 9 April 2020
10 and that's addressed at paragraph 8.7.1 of the November
11 statement. Could we go to that, please, it's page 114.

12 This paragraph explains that at this meeting,
13 a paper entitled "Calibrating the impacts of COVID-19
14 with the impacts of its control measures: informing
15 decision-making on ... (NPIs)", it was a paper authored
16 by Dr Gerry McCartney, who was an inequalities expert
17 and a consultant in public health at PHS, was considered
18 at that 9 April 2020 meeting.

19 And looking towards the bottom of the page, the
20 last bullet point on the page highlights a particular
21 aspect of the paper:

22 "There are difficult decisions to be made on
23 when and how to reduce NPIs. These will need to
24 balance the potential impacts of Covid-19 mortality
25 and morbidity, pressures on health and social care

40

1 services, and the unintended against consequences
 2 across society (including on population health and
 3 health inequalities). Further work can and should be
 4 done to estimate the intended impacts of NPIs on
 5 COVID-19 and the unintended impacts on health and
 6 other outcomes urgently to inform this
 7 decision-making. There is a risk that, on many
 8 measures, the impact of the NPIs for Covid-19 could be
 9 more deleterious than the impact of a less mitigate
 10 aid approach to COVID-19. This balance requires
 11 careful ongoing monitoring and consideration."

12 Appreciating you had not joined PHS by this point,
 13 I'd just like to ask you about the response of the
 14 Scottish Government to this paper and your
 15 understanding, if you can help, of action taken in
 16 response.

17 At paragraph 8.7.2, just scrolling down:

18 "The minutes of the meeting noted that 'government
 19 is considering points raised in the paper and expressed
 20 that the paper should feed into broader thinking' and
 21 that while long-term issues are clearly incredibly
 22 important, there are urgent issues also to address. In
 23 the last week of full reporting there were almost 800
 24 care home outbreaks in England. It is important that we
 25 address the issues of today as well as tomorrow."

41

1 So there is a sense that some of these measures
 2 that were introduced, there had not been the work -- the
 3 work had not been done beforehand to try and estimate
 4 what the impact could be, and whether any other measures
 5 may have been as effective, or could have worked in this
 6 situation.

7 **Q.** This statement deals with a study on which PHS
 8 collaborated, looking at ethnic inequalities in positive
 9 SARS-CoV-2 tests, infection prognosis, Covid-19
 10 hospitalisations and deaths, covering a period
 11 of March 2020 to April 2022.

12 Can we look, please, to the summary of the
 13 findings which is paragraph 8.8.3, page 116.

14 "There is [a risk] therefore that most ethnic
 15 minority groups were at increased risk of adverse
 16 COVID-19 outcomes in Scotland, especially White
 17 Gypsy/Traveller and Pakistani groups. Ethnic
 18 inequalities persisted following community infection but
 19 not following hospitalisation, suggesting differences in
 20 hospital treatment (healthcare inequalities) did not
 21 substantially contribute to ethnic inequalities."

22 I think that might be "ethnic health
 23 inequalities".

24 To what does PHS attribute the ethnic inequalities
 25 in health outcomes, given that the conclusion of this

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1 What is your understanding of what, if any, action
 2 was taken by the Scottish Government in response to the
 3 suggestion in the paper in particular that further work
 4 could and should be done to estimate the unintended
 5 impacts on health and other outcomes urgently to inform
 6 decision-making?

7 **A.** I'm afraid I can't comment on that, but again I could
 8 seek to clarify that and would provide a written
 9 response to the Inquiry if that would be helpful.

10 **Q.** We'll come on to specific action taken on ethnic health
 11 inequalities in due course, but in terms of the general
 12 position, you can't take that any further for us today?

13 **A.** No, I think what you've described is a real dilemma
 14 between, on the one hand, do we try to take measures
 15 which will impact on the speed or the size of the
 16 pandemic, and trying to weigh that up against the
 17 potential disbenefits or impact it could have on certain
 18 groups.

19 And I think it would be fair to say that the
 20 pandemic planning that had been done prior to 2020,
 21 things like lockdown, some of the measures that had been
 22 taken had not been part of that initial planning
 23 assumptions, albeit it wasn't the basis of a flu
 24 pandemic which, to some extent, one would be very
 25 similar.

42

1 study is that healthcare inequalities did not
 2 substantially contribute?

3 **A.** I think this is a very complex area and certainly I can
 4 recall in England when the first data started to emerge,
 5 that there seemed to be an adverse impact on ethnic
 6 groups from Covid which would be March/April 2020 time.

7 I think also what's interesting is that as you
 8 went through the pandemic, the impact on ethnic groups
 9 diminished such that when we got to the Omicron wave,
 10 which was, I think, in 2021, or -- yes, 2021, the
 11 inequalities for Covid had reversed, and the white
 12 British population were sustaining the biggest impact,
 13 which suggests that there may be a factor in the virus
 14 itself or some genetic predisposition that could lead to
 15 that.

16 There were also differences in habits, smoking,
 17 drinking. Alcohol tends to be lower in certain ethnic
 18 groups, which might counterbalance some of the
 19 deprivation indices that one would normally expect to
 20 see. And we know that certain groups have a certain
 21 predisposition to certain conditions such as
 22 cardiovascular disease, diabetes, which were factors
 23 which contributed to serious illness and mortality.

24 So I think it's a very complex picture. We do
 25 know that when we looked at offering vaccination, there

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1 were differences in uptake in ethnic groups, and
 2 vaccination was a key measure which was introduced to
 3 protect the population, and therefore, if ethnic groups
 4 aren't -- were not able to get that group vaccinated,
 5 then one would expect to see an adverse outcome there as
 6 well.

7 So I think it's multi-factorial, and I think to
 8 try and pin it down on one specific issue would not be
 9 feasible or credible, in my view.

10 **Q.** That document can come down now, thank you.

11 Paragraph 8.8.5 of the November statement deals
 12 with the establishment by the First Minister of
 13 an expert group to consider the impact of Covid-19 on
 14 ethnic minorities in June 2020. Can you explain,
 15 please, what work that group did and what
 16 recommendations it made particularly in relation to
 17 ethnicity data?

18 **A.** Yes. The work -- the group was comprised of a number of
 19 key members, both from Public Health Scotland and also
 20 representatives of various ethnic groups within
 21 Scotland. There were essentially two sub-groups. One
 22 group was looking at data, the other group was looking
 23 at systems and what could be done to try and assess any
 24 adverse impact that healthcare systems might have.
 25 A particular group looking at data raised the issue that

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1 that there needs to be some explanation, because
 2 although a field is completed, people have the option to
 3 opt not to say what their ethnicity is, so therefore
 4 there was a concern that that field may bias any
 5 interpretations in any one particular group.

6 So that work is ongoing and there are long-term
 7 plans in a group led by Scottish Government looking at
 8 how we use something called CHI, which is the Community
 9 Healthcare Index, which is a unique system in Scotland,
 10 it's a 10-digit code which every person using the
 11 healthcare system has and that -- if we can modify that
 12 and include ethnicity data with that then that should
 13 provide a fairly comprehensive way of looking at
 14 ethnicity going forward which would allow us to look at
 15 things like access to healthcare, use of healthcare,
 16 etc, in a much wider and holistic way.

17 **Q.** The group you've just referred to, is that the same as
 18 the Racialised Inequalities in Health & Social Care in
 19 Scotland Steering Group --

20 **A.** Yes, I believe so.

21 **Q.** -- or is that different?

22 **A.** I believe so.

23 **Q.** It's the same. Can you help, please, with anything
 24 additional from the work of that group or
 25 recommendations which you think is relevant for

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1 the collection of ethnicity has been for many years and
 2 was at that particular point a challenge both in terms
 3 of completeness and the quality of data, therefore being
 4 able to accurately describe the impact that Covid and
 5 other factors would have on ethnic groups was
 6 challenging. I think there were 16 recommendations that
 7 came out of that particular group, and currently my
 8 colleague Scott Heald is co-chairing a group which is
 9 looking at how we implement changes that will improve
 10 the quality of that data.

11 In the meantime, Public Health Scotland is using
 12 data linkage using somebody called SMR01 which is the
 13 routinely collected healthcare data which is reasonably
 14 complete as a consequence of action taken by the health
 15 service, and also vaccination data, because we moved
 16 over to a new system in Scotland whereby all vaccination
 17 data was collected on a new tool. And this provided
 18 an opportunity, given that most of the population in
 19 Scotland had been vaccinated, somewhere in the region of
 20 90%, used this as an opportunity to make sure ethnicity
 21 was gathered and collected.

22 So we're using that data as an interim measure and
 23 linking that back to healthcare data, and that is
 24 being -- the plan will be that that is introduced to the
 25 various groups. People on the data plan were concerned

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1 her Ladyship to know about in addition to those -- that
 2 work on data?

3 **A.** I think the other group which is looking more at the
 4 systems and what could be done to improve access or at
 5 least to understand what the access issues might be,
 6 I think there were something like 11 or 14
 7 recommendations which ranged from improving education,
 8 providing people with appropriate training, dealing with
 9 unconscious bias, looking at how information may be
 10 conveyed, recognising both the cultural and language
 11 issues that may be at play.

12 So again, that group and the recommendations
 13 I believe that work is being taken forward but the data
 14 is primarily the concern of Public Health Scotland.

15 **Q.** How are any changes to the data being monitored for
 16 their effectiveness?

17 **A.** Well, we don't have the systems in place yet so it would
 18 be -- we will have to wait until that is introduced and
 19 one of the ways that we have been looking at the
 20 completeness of the data is comparing that to census
 21 data which is reasonably complete, well is the most
 22 complete and most accurate picture of ethnic information
 23 we have and so looking at completeness and coverage with
 24 that should give some assurance around the completeness
 25 of the data.

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1 **MS PRICE:** My Lady, I've reached the end of a topic. Would
 2 it be a convenient time for the morning break?
 3 **LADY HALLETT:** Of course. I shall return at 11.30.
 4 (11.13 am)
 5 (A short break)
 6 (11.31 am)
 7 **LADY HALLETT:** Ms Price.
 8 **MS PRICE:** Dr Phin, I'd like to turn, please, to shielding
 9 and in particular evaluation of the shielding programme.
 10 PHS was commissioned by the Scottish Government in
 11 2020 to develop an evaluation framework for the
 12 shielding programme, is that right?
 13 **A.** That's correct.
 14 **Q.** Could we have on screen, please, paragraph 9.3.1 of
 15 the November statement. The aims of the evaluation are
 16 set out here. They were to evaluate the effectiveness
 17 of the shielding programme, inform the advice,
 18 information and support offered to individuals in the
 19 shielding group during the pandemic, inform the advice,
 20 information and support offered to people at risk more
 21 widely during the pandemic, identify lessons learnt for
 22 future pandemic planning, and identify lessons learnt
 23 for work with at-risk groups.
 24 Outreach mechanisms are dealt with in the next two
 25 paragraphs and these included establishing a lived
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1 which ran between 25 October 2021 and 7 November 2021.
 2 In terms of the key findings of the evaluation,
 3 and focusing, please, on healthcare, dealing with the
 4 first stage and findings from the 2020 work,
 5 paragraph 9.3.11, please. The findings were these:
 6 "The evaluation considered the issue of access to
 7 healthcare and related unmet support needs. Healthcare
 8 appointments being postponed, cancelled or not available
 9 featured more prominently as a concern than individuals
 10 being dissuaded from accessing healthcare because of the
 11 advice to shield. A July 2020 Scottish Government
 12 survey of individuals on the shielding list (included in
 13 the January 2021 PHS evaluation report) suggested that
 14 almost one in five respondents had had a healthcare
 15 appointment postponed or cancelled; 2% had decided
 16 against attending an appointment because of safety
 17 concerns. The PHS evaluation findings about the
 18 difficulties individuals experienced in accessing
 19 healthcare were highlighted the Scottish Government
 20 across the different PHS evaluation reports."
 21 Can you help, please, with what action was taken
 22 by the Scottish Government in response to these
 23 healthcare access difficulties highlighted at all stages
 24 through this evaluation?
 25 **A.** My understanding is that this information was made
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1 experience panel to advise on the design and
 2 implementation of the evaluation. The panel had ten
 3 members including a black or ethnic minority individual
 4 with -- people with mobility and sensory impairments,
 5 three older people, and the carer of a disabled person.
 6 The panel also had a practitioner representation,
 7 a social worker supporting three shielding clients,
 8 including somebody with a history of criminal justice
 9 involvement and substance use, and an older person in
 10 sheltered housing. And it was said that this enabled
 11 the evaluation to capture the voice of individuals who
 12 would have struggled to engage directly with PHS
 13 including those from disadvantaged socioeconomic
 14 backgrounds.
 15 Is it right that eight members of the panel
 16 attended a meeting online in July 2020 to help identify
 17 those evaluation questions that mattered most to
 18 individuals who were shielding, or caring for someone
 19 who was?
 20 **A.** That's my understanding.
 21 **Q.** There were three parts to the evaluation: an online
 22 survey that ran between 1 and 14 June 2020 with findings
 23 published in September 2020; a rapid evaluation
 24 undertaken between March and November 2020 using mixed
 25 methods including focus groups; and an online survey
 50

1 available to health boards and it would be for
 2 individual health boards to look at the way they
 3 operated their services and how they could address some
 4 of the concerns that were being raised. I'm not aware
 5 of what action Scottish Government actually took.
 6 I simply understand that given the devolved
 7 responsibility of healthcare within Scotland to boards,
 8 that the operationalising that would be the individual
 9 boards' responsibilities.
 10 **Q.** Looking, please, to paragraph 9.3.16. This deals with
 11 evaluation findings looking to the future:
 12 "The PHS evaluation also found that the
 13 shielding guidance was neither necessary nor
 14 sufficient to change behaviour in all instances. The
 15 conclusion was that a repeat of shielding, in its
 16 initial form, was not recommended and that any future
 17 approaches would need to give greater consideration to
 18 personal choice, the multifaceted nature of risk, and
 19 hospital-onset infections. The evaluation thereby
 20 helped the Scottish Government to shape and evidence
 21 their support for people on the Highest Risk List.
 22 PHS was advised that Scottish Government colleagues
 23 used findings from the evaluation to input into
 24 cabinet papers around the removal of legislative
 25 COVID-19 restrictions."
 52

1 Do you agree with the recommendation that future
2 programmes should consider more fully the risk of
3 hospital-onset infections?
4 **A.** Yes, I think this was rather a blunt instrument. It
5 hadn't really been introduced, although notions of
6 cocooning had been tried in other countries where you're
7 trying to either ring-vaccinate vulnerable individuals
8 in their household or looking at ways of trying to
9 minimise spread. So this had not been done before and
10 I think one of the key issues is that it was done, it
11 has been reviewed and there are lessons identified in
12 that that need to be taken account of in any future
13 pandemics.
14 **Q.** Particularly focusing on the risk of hospital-onset
15 infections, are you aware of any resultant review of
16 safety measures in place in healthcare settings or
17 consideration of changes which should be made to reduce
18 the risk of nosocomial infections for the clinically
19 vulnerable when accessing healthcare?
20 **A.** I'm not personally aware of this but, again, that is
21 something I could look into and provide information to
22 the Inquiry.
23 **Q.** More widely, can you help with how the findings of the
24 evaluation were used by the Scottish Government to
25 mitigate the impact of Covid-19 on the lives of the

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1 understands it, is that right?
2 **A.** I ...
3 **Q.** The Inquiry has received evidence that that is the date
4 on which --
5 **A.** Yes, sorry.
6 **Q.** -- it was commissioned. If you have other evidence to
7 suggest it wasn't, please do tell her Ladyship about it.
8 **A.** No, that's correct, I was confusing this. Sorry.
9 **Q.** The need for a clinical guideline for Long Covid has
10 been recognised in Scotland since September 2020 and
11 a clinical guideline was in place by December 2020. Can
12 you help with why the NSN on Long Covid was not
13 commissioned sooner?
14 **A.** I think one of the challenges in this area and -- while
15 I think post-viral syndrome, of which Covid is one, has
16 been recognised for many years, following infections
17 like flu, Epstein-Barr virus and a variety of other
18 viral infections, and I think what it's done is
19 highlighted the frequency of which post-viral syndrome
20 occurs and to some extent the lack of support and
21 infrastructure that exists.

22 Part of the problem, I think, with Long Covid is
23 that there's no clear definition of Long Covid. There
24 are no clear biomarkers, there are no understanding of
25 the pathology or how it's caused, which makes coming up

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1 clinically vulnerable?
2 **A.** We do not usually have access to cabinet papers,
3 therefore I've not seen the content of the cabinet paper
4 referred to. Therefore, it would be difficult for me to
5 comment on how the findings were used.
6 **Q.** I'd like to move now to Long Covid, please. Could we
7 have on screen, please, paragraph 2.4.9 of the November
8 statement, page 19, and you say here:
9 "NSS has set up a long COVID programme and
10 a governance structure to facilitate the work of
11 a National Strategic Network on long COVID. The
12 network supports NHS Boards and health and Social Care
13 Partnerships to deliver services for people
14 experiencing long COVID. PHS Chief Officer
15 Manira Ahmad chairs the Strategic Oversight Board ...
16 for the network. Reporting to the Cabinet Secretary
17 for Health and Social Care via the Scottish Government
18 Directorate for Healthcare Quality and Improvement,
19 the SOB leads and directs the work of the network on
20 behalf of the Scottish Government. As well as
21 chairing the SOB, PHS provide public health expertise
22 to the Steering Group that oversees the activities of
23 the network's workstreams."

24 The National Strategic Network on Long Covid was
25 only commissioned in March 2022, as the Inquiry

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1 with clinical guidance on how to manage it challenging,
2 and the guidance you are referring to was actually
3 a joint guidance by NICE and by SIGN which is the
4 Scottish Intercollegiate Network which comes together.
5 I can't comment on, you know, the gap between that
6 report being produced and the network being established.
7 I do know that £10 million was made available to boards
8 and other organisations to apply to this board. There
9 have been challenges because this was a three-year
10 project and obviously employing people on a fixed-term
11 contract, recruitment is challenging and I know that
12 that has been extended for another year to try and take
13 account of that. But as to why no action was taken at
14 the end of 2020 until 2022, I'm afraid I can't comment.
15 **Q.** The statement refers in the paragraph above to
16 a commitment made to September 2021 to establishing
17 an expert group to identify the capacity needs of NHS
18 boards and staff in delivering safe and effective and
19 person-centred support for people living with
20 Long Covid. Why was such a group considered necessary?
21 **A.** I think it goes back to the point I was just making that
22 this was something that I think was somewhat of
23 a surprise but on reflection given that flu is also
24 recognised to be associated with post-viral syndrome
25 then it is probably something that should have been

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1 anticipated. The challenge here is understanding the
2 actual physiological and biological mechanisms, so
3 knowing what would make a difference, what could be done
4 to try and minimise it.

5 What we do know is that vaccination has a positive
6 impact on the development of Long Covid, something like
7 only 8 to 12% of people that were vaccinated who were
8 hospitalised actually ended up with Long Covid. And
9 this compares with 50 to 80% of people that were
10 unvaccinated and hospitalised with Covid.

11 So vaccination is a positive intervention that can
12 be offered.

13 With respect to what other treatments could be
14 offered is mainly psychological support is seen as a key
15 issue because fatigue, this sort of brain fog which is
16 a common description of how people feel when they get
17 Long Covid, or even Covid, so psychological support was
18 a feature.

19 And some form of physiotherapy to try and
20 rehabilitate people. So I think the absence of
21 an understanding of what caused it made -- well,
22 presented challenges in coming up with or developing
23 services to be able to respond to people who suffered
24 from this.

25 **Q.** This refers to the point of the expert group being to

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1 outcomes and determinants of outcomes including
2 accessibility and quality of healthcare provision."

3 Can you help please what about the healthcare
4 response to Covid-19 in Scotland prompts PHS to stress
5 the importance of this?

6 **A.** This review of the lessons learned relates to the
7 national incident management arrangements which was
8 convened under the auspices of the health protection
9 guidance around the management of incidents. So, this
10 is looking at -- this report was looking at how that
11 functioned, what could have been done better, and by
12 inference what the obstacles were to actually making
13 this happen. My feeling is that this is implying that
14 there were underlying resilience issues. We tend to
15 operate healthcare services at 85-90% capacity which
16 actually leaves little room for expansion to deal with
17 critical incidents. And that's good if you're actually
18 running a system where you're trying to maximise your
19 efficiency and effectiveness. What it doesn't help with
20 is where you're suddenly having to respond to
21 an incident.

22 And I illustrated in the information around the
23 SICSAG intensive care report that required a rapid
24 expansion of intensive care facilities, but the one
25 thing that hampered the actual provision was actually

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1 assess or identify capacity needs. Is that the type of
2 capacity you're referring to, understanding what service
3 to provide as opposed to how to use resources to
4 provide it?

5 **A.** My understanding is that this was about the services to
6 provide rather than the capacity --

7 **Q.** I see.

8 **A.** -- to provide those services -- that would be a separate
9 issue, or a separate argument -- I think established
10 what could offer support and benefit.

11 **Q.** There is a reference here to PHS and NSS working
12 together, are working together, to deliver on this
13 commitment. Has the expert group been set up?

14 **A.** I'm afraid I'm going to have to come back to you on
15 that. I can't recall. But I will come back and provide
16 that information.

17 **Q.** Turning finally, please, to the specific lessons learned
18 issues raised in the November 2023 statement. Could we
19 have on screen, please, paragraph 13.4.2. This is under
20 the heading of "Essential services":

21 "It is important that in planning for healthcare
22 system resilience that decision-makers have
23 an explicit and shared understanding of what
24 constitutes an essential service, that this includes
25 ongoing surveillance of inequalities in wider health

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1 having the staff necessary to be able to make it
2 function.

3 It's one thing to have a bed, but if you don't
4 have the staff able to operate it and to look after the
5 patient, then that's a problem.

6 So that's one inference. The second one really is
7 highlighting the need for the prompt reporting of data,
8 SMR01, which is one of the main sources of data that we
9 tend to use, can take several weeks to come through once
10 it's been recorded and checked. So looking at how we
11 can improve the speed with which SMR01 which describes,
12 you know, a patient's condition, where they were
13 admitted to, the treatment they received, would be one
14 way of trying to improve the resilience and improve that
15 understanding.

16 And finally, again, this ongoing issue around data
17 requirements, having things like ethnicity better
18 collected, better completed, and other issues around the
19 link to deprivation, would have enabled us to identify
20 problems should they have occurred at an early point in
21 time.

22 **Q.** The two other points that are made beneath on behalf of
23 Public Health Scotland relate to data infrastructure.
24 We've dealt in some detail with data issues and whole
25 system working, and the importance of that.

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1 Dr Phin, are there any other lessons that PHS or
2 you personally have taken from the pandemic which are
3 relevant to the healthcare response which you'd like to
4 share with her Ladyship?

5 **A.** In terms of the healthcare response, one of the issues
6 that I was struck when I moved from England to Scotland
7 is the difference in the way that the NHS is delivered
8 operationally. In England we had NHS England which was
9 a separate management structure to the trust, and really
10 took an overview, an oversight of -- and reached very
11 rapidly a consensus on what should be in place to
12 deliver the response to an incident. Things like HCID,
13 high consequence infectious diseases, that is managed by
14 NHS England.

15 There is no similar body in Scotland. You have to
16 go to, I think it's 22 boards: 14 national boards --
17 sorry, 8 national boards and 14 local boards to reach
18 a consensus and agreement before you can get something
19 fully implemented.

20 And while this can be really helpful when you're
21 allowing autonomy to deal with issues locally, trying to
22 present a national picture of which prevents
23 inequalities happening inadvertently is really, really
24 important, both in terms of delivering consistent care,
25 and responding to a level of -- providing a level of

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1 resilience in the system.

2 So as an organisation with a much larger staffing
3 numbers, we were able to draw on staff from different
4 areas to bolster up to support the efforts. I would say
5 that actually, the creation of Public Health Scotland
6 enabled greater resilience and in fact helped the
7 response.

8 Now, you gave evidence also in January of this
9 year to the Inquiry at Module 2A, yes? Yes?

10 **A.** Yes, sorry.

11 **Q.** And in that, you were asked by counsel to the Inquiry at
12 the time about the creation of Public Health Scotland
13 and the issues that that caused. And counsel to the
14 Inquiry Mr Dawson said:

15 "Professor Phin, we were asking you about this
16 administrative change and in particular in light of
17 the evidence that Dr McMenamain has already given about
18 the earlier period before April and the extent to
19 which the pressures had driven Health Protection
20 Scotland service to near breaking point have on the
21 effectiveness of the response."

22 And your answer was:

23 "Answer: Yes, I think people maintained
24 a very professional approach to the separation. They
25 tried not to let it get in the way of any sort of

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1 care consistent with the need across Scotland.

2 So one of the issues that were around healthcare
3 would be to look at how we better co-ordinate an NHS
4 response in that situation.

5 **MS PRICE:** My Lady, those are all the questions I have.

6 **LADY HALLETT:** Thank you, Ms Price.

7 Ms Mitchell, do you have any questions?

8 **Questions from MS MITCHELL KC**

9 **MS MITCHELL:** The questions that I was going to ask this
10 witness, I don't think he will be able to answer because
11 of when he arrived at Public Health Scotland. I do,
12 however, have one question in relation to a matter that
13 arose this morning in terms of resilience and staffing,
14 if I might be able to ask that.

15 **LADY HALLETT:** I was alerted to that fact. Yes, you may,
16 Ms Mitchell.

17 **MS MITCHELL:** I'm obliged, thank you.

18 Dr Phin -- sorry, Professor Phin, we heard earlier
19 this morning when you were asked about Public Health
20 Scotland taking over from its predecessor, and whether
21 or not there was any challenges on the impact of the
22 ability of Public Health Scotland to contribute to the
23 healthcare response to the pandemic. And your response
24 to that was one of the things that the creation of
25 Public Health Scotland did was actually create greater

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1 barriers to useful working. However, what effectively
2 happened was that Health Protection Scotland lost
3 a third of its workforce in -- when we became Public
4 Health Scotland and over the period of the pandemic we
5 found ourselves going after the same group of staff.
6 So we were advertising to fill posts and indeed there
7 was movement from ARHAI, as we describe ARHAI, to
8 Public Health Scotland and from Public Health Scotland
9 to ARHAI which I don't think was helpful."

10 Now, I'm wondering if you can help us with this.

11 If Health Protection Scotland lost a third of its
12 workforce when it became Public Health Scotland and over
13 the course of the pandemic found itself going after the
14 same group of staff as ARHAI, how did this enable
15 greater resilience?

16 **A.** The greater resilience I was referring to was that
17 within Public Health Scotland we had a number of
18 healthcare scientists that were involved in looking at
19 things like some of the aspects of health improvement
20 and you will see from some of the evidence that we
21 presented that not only were we trying to simply respond
22 to the incident as it was happening, we were trying to
23 undertake work around the evaluation of how things like
24 shielding, how ethnic differences may have impacted on
25 the health of the people in Scotland.

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1 So the greater resilience is that this gave us
2 greater capacity to consider some of those wider issues.

3 I also said earlier today that although we lost
4 a third of our staff to ARHAI, this was in effect
5 an administrative change and one of the things that we
6 did, and we did very well, was work with colleagues over
7 which -- with whom long-standing relations had been
8 built up to try and mitigate some of those challenges
9 facing us at that time.

10 We also did receive additional funding and that
11 was to recruit additional staff, scientific staff. It
12 wasn't without its challenges but that greater capacity
13 within Public Health Scotland, both in terms of
14 servicing meetings, carrying out health improvement,
15 carrying out some of the surveys that we needed to
16 support that work was actually extremely valuable, and
17 had we not had Health Scotland as part of our
18 organisation, I think it would have been much more
19 challenging to do.

20 **MS MITCHELL:** My Lady, I would like follow-up questions but
21 I understand we are on a tight time schedule.

22 **LADY HALLETT:** We are today, I'm really sorry.

23 **MS MITCHELL:** No, I'm obliged my Lady.

24 **LADY HALLETT:** Thank you very much indeed.

25 I think that completes the questions for you,
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1 I'm going to try not to flip too much between them
2 both but forgive me if occasionally we have to.

3 By way of background, is this correct, you are
4 a doctor with specialist training in public health
5 medicine and have a number of other qualifications in
6 public health?

7 **A.** Yes.

8 **Q.** I think you in fact undertook your clinical doctor
9 specialist training in Wales?

10 **A.** I did.

11 **Q.** And prior to your roles with Public Health England, as
12 it then was, you worked as a director for public health
13 in Norfolk and Waveney, in Swindon, and Monmouthshire.

14 Indeed, you were chief officer of two former local
15 authorities and in your national work you've contributed
16 to various significant health protection incidents,
17 including the Novichok poisonings, the first cases of
18 Monkeypox in 2018, Zika virus, and supported a number of
19 other global crises in your role.

20 **A.** That's correct.

21 **Q.** You were appointed, I think, the Deputy Chief Medical
22 Officer for England between July 2019 and 1 April 2021
23 and in April 2021 were appointed the CEO of UKHSA
24 although I think we've heard that UKHSA didn't become
25 operational until the beginning of October.

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1 Dr Phin. Thank you very much indeed for your help, for
2 the second time. I don't think we'll be having to call
3 on you again but thank you anyway for the help you have
4 given to date.

5 **(The witness withdrew)**

6 **MS CAREY:** My Lady, may I call, please, Professor Dame Jenny
7 Harries.

8 **PROFESSOR DAME JENNIFER MARGARET HARRIES (sworn)**

9 **LADY HALLETT:** I hope we haven't kept you waiting for too
10 long. I understand that sadly you have a funeral you
11 wish to attend tomorrow. I guarantee we will finish
12 your evidence this afternoon.

13 **THE WITNESS:** Thank you.

14 **Questions from LEAD COUNSEL TO THE INQUIRY for MODULE 3**

15 **MS CAREY:** Professor, your full name, please.

16 **A.** Jennifer Margaret Harries.

17 **Q.** Professor, I mean no disrespect if I don't call you
18 Professor Dame Jenny Harries every time I address you.

19 You were the -- you are former Deputy Chief
20 Medical Officer. You are now the Chief Executive of the
21 UK Health Security Agency who we've been naming UKHSA,
22 just for convenience, and I think you have made two
23 statements in Module 3, the first one ending 410865,
24 dated 31 January this year, and a second statement on
25 27 June 2024, INQ000489907.

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1 **A.** That's correct.

2 **Q.** And is this right, that throughout the relevant period
3 that we are dealing with, you did not work on the
4 frontline during the pandemic but were clearly heavily
5 involved in your role as DCMO and then CEO?

6 **A.** That's correct.

7 **Q.** Can I start with the topic of shielding, please, and you
8 primarily deal with this, Professor, in your statement
9 ending 410865, the January 2024 statement, and if it
10 helps you we have heard from a number of witnesses,
11 including Professor Whitty, the Clinically Vulnerable
12 Families Core Participant Group, Professor Snook, so
13 we're familiar with the creation of the shielding
14 programme and indeed the two lists, the clinically
15 extremely vulnerable and the clinically vulnerable.

16 Can I just take a step back and ask you, please,
17 what was the aim of the shielding programme when it was
18 first established?

19 **A.** So the aim when the shielding programme was established
20 was a very simple one which was to support those people
21 who could predictably be at highest risk of a new
22 pathogen to keep as safe as possible, ie its primary aim
23 was to prevent mortality.

24 **Q.** It may be that some people are confused and think it was
25 to prevent transmission, prevent nosocomial transmission

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1 but it was essentially, if I understand your evidence,
 2 protective of those vulnerable groups?
 3 **A.** It was voluntary and protective in the way the programme
 4 was organised. I think the confusion, if you'd like me
 5 just to explain, potentially was right at the start of
 6 the pandemic when epidemiology was being considered and
 7 various options modelled, different portions of the
 8 population, if you like, were considered and how that
 9 impacted or potentially impacted on the transmission of
 10 the virus and I think as we went through we may see this
 11 later there may have been some confusion about some
 12 early thinking about control of the virus, as opposed to
 13 the actual programme which, as I say, was protective and
 14 entirely voluntary.
 15 **Q.** It was essentially about 17 million people who were
 16 deemed to be clinically vulnerable, is that right?
 17 **A.** Yes.
 18 **Q.** And although the numbers for clinically extremely
 19 vulnerable, it was initially thought to be about
 20 1.2 million people and we know that once QCovid analysis
 21 had been undertaken those on the shielding patient list
 22 rose to about 3.8 million or there or thereabouts?
 23 **A.** That's right.
 24 **Q.** So a significant proportion of the UK's population were
 25 either CV or CEV?

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1 Programme in a moment, but that just sets out the number
 2 of bodies involved. Can I just ask you to stand back;
 3 do you think it was helpful to have that many bodies
 4 involved in such a significant programme, as the
 5 shielding programme became?
 6 **A.** So I think it's difficult but it was inevitable. I'm
 7 sure we'll go on to understand why, but I would just
 8 like to point out that there was an overarching
 9 government department, and it was MHCL till it became
 10 DELUC, so it was very clear where that overall
 11 responsibility was. The part that I played, and I'm
 12 sure we will come into this, was around the clinical
 13 elements of understanding who might be at greatest risk
 14 at the start of the pandemic.
 15 **Q.** Now, I think the shielding policy you say in your
 16 statement at paragraph 38 was announced on
 17 16 March 2020, so the week before we went into lockdown?
 18 **A.** Yes.
 19 **Q.** And why was the programme brought into being before
 20 there was the decision taken to go into lockdown?
 21 **A.** So I think if we look back to Module 2 there was quite
 22 a lot of discussion about the need to move very rapidly
 23 at that point, so the original SAGE modelling of how the
 24 pandemic was likely to pan out, and the identified peak
 25 of a 12-week period when we were expecting to advise

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1 **A.** Yes.
 2 **Q.** Now, the structure of the programme, if I may say was
 3 not the most straightforward but you have set out in
 4 your statement and could we have up on screen, please,
 5 INQ000410865, page 11, a helpful table setting out who
 6 was generally responsible for which aspects of the
 7 programme. We can see that the Ministry of Housing,
 8 Communities and Local Government, as it was then called,
 9 had overall responsibility. OCMO, of which you were
 10 then a part at the beginning, led on the development of
 11 the criteria. And if we go over the page, we can see
 12 DHSC's responsibilities set out. NHS Digital, as it
 13 then was, were drawing on the data. And NHS England and
 14 Improvement developed the first letters.
 15 And if we just scroll down we come to PHE and
 16 UKHSA. PHE contributed to early clinical discussions
 17 led by the CMO, and then in due course you became -- is
 18 that the senior responsible officer, the SRO?
 19 **A.** Yes, I think it was actually senior reporting officer --
 20 **Q.** Thank you.
 21 **A.** -- but for a different programme, and there was
 22 obviously a gap between when I left my D CMO post at the
 23 end of March 2021 and when the EPP, the Enhanced
 24 Protection Programme was established in '22.
 25 **Q.** I'm going to come on to the Enhanced Protection

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1 those who were most at risk to keep out of circulation
 2 actually much of that got pulled forward, and so the
 3 advice, broadly, to the population, as well as the
 4 clinically vulnerable and clinically extremely
 5 vulnerable, became slightly condensed. That was
 6 inevitable because of the detection of more transmission
 7 in the country than was envisaged at the time.
 8 **Q.** So if I understand you, there was always the plan to try
 9 and protect the vulnerable groups --
 10 **A.** Absolutely.
 11 **Q.** -- but as a quirk, I'm afraid, of the high number of
 12 deaths and what we were seeing in Europe, the lockdown
 13 was brought forward, which was -- tended to perhaps
 14 merge the two in some people's minds?
 15 **A.** Yes.
 16 **Q.** I understand. All right.
 17 You do say, though, in your statement, that it
 18 was -- looking at your paragraph 44, Professor:
 19 "It was recognised at the start that whilst the
 20 majority of individuals could be identified relatively
 21 quickly, for others there would be a time lag ..."
 22 And can you help, did you know, at the beginning,
 23 what that time lag would be?
 24 **A.** No. We'll probably go on to the detail of this, but
 25 this had never been attempted in any country before.

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1 The only reason, really, we can attempt it I think in
 2 this country is because of our national health system
 3 and some of our connections across that. And so we
 4 knew -- what we wanted to do was identify those people
 5 who we thought clinically plausibly were most at risk,
 6 and reach them as quickly as possible. And some of
 7 those, we knew we could reach very quickly through
 8 digital means, others we knew we would not be able to
 9 but we weren't able to predict exactly how long that
 10 would take at the start.

11 **Q.** Can you help as to --

12 **LADY HALLETT:** Sorry to interrupt, talking about quickly, if
 13 you could slow down a bit --

14 **A.** Oh, sorry.

15 **LADY HALLETT:** -- or I think I might find -- face screams
 16 from the stenographer.

17 **A.** Apologies. Thank you.

18 **MS CAREY:** Those that you could identify quickly, can you
 19 help with what groups or type of vulnerability they had?
 20 How were you able to pick out one group more quickly
 21 than the others?

22 **A.** The programme overall was -- if we use the word "digital
 23 cohorting", so what we were trying to do was
 24 electronically identify people, so effectively those
 25 where records were good and coding was consistent, were

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1 systems, to be able to alert individuals and provide
 2 advice to them very early in the event of a pandemic or
 3 serious pathogen.

4 One of the problems here is coding, so if we don't
 5 have the information to start with, I'm sure we will
 6 come on to talk about inequalities so we need to be
 7 clear for example around ethnicity, which is not
 8 systematically recorded. We also need to be very clear
 9 about medicines and treatments that people are having
 10 right across the system. So all of these databases need
 11 to be able to speak to each other and be as available as
 12 possible.

13 One of the things we found was initially, and this
 14 is has already moved on, that we would have to update
 15 the database, and that was quite a task, so it would
 16 update weekly. It wasn't instantly available. So --
 17 and different systems would update at different times.

18 **Q.** Can you help us, Professor, who is responsible for
 19 sorting out the coding difficulties? Is that
 20 NHS England, DHSC?

21 **A.** Well, complex topic. Please stop me if I say too much,
 22 but initially, all clinical professionals have
 23 responsibility for ensuring appropriate coding on the
 24 frontline. Sometimes that's difficult because people
 25 are very busy, but it is really important because for

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1 the individuals we were most likely to find
 2 systematically so, for example, somebody who had been --
 3 being treated for cancer, I think we've spoken about the
 4 groups before, over a long time period, you would be
 5 able to identify.

6 But if we then took somebody who perhaps had only
 7 just been identified, they would not necessarily be
 8 flagged in their GP records. So it was seven different
 9 databases connected eventually, but we would not
 10 necessarily be able to pick them up. And particularly
 11 important was the fact that for example, some
 12 treatments, immunosuppressive treatments, were being
 13 prescribed in secondary care, and those would not
 14 necessarily be on a GP list.

15 **Q.** A number of points arise from that, if I may.

16 We also know that there was, in due course, the
 17 ability for general practitioners to identify their own
 18 patients that they felt should be shielding. But help
 19 us, please, a number of different databases clearly
 20 caused a degree of difficulty in merging them.

21 What happens in the event of a future pandemic
 22 we're trying to speed up, if one needs to identify a CEV
 23 cohort or a VC cohort?

24 **A.** So I think this is a really important opportunity for
 25 the UK particularly, because of our national data

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1 exactly the reasons we're seeing here, if we want to be
 2 able to support individuals, we need to know what the
 3 intervention they had was or what their illness is. So
 4 somebody has to put the coding in, it has to be
 5 accurate, and it has to be consistent and updated.

6 But then the actual collation of that
 7 responsibility flows through a number of different
 8 systems. You will have seen, on the responsibilities
 9 chart, NHS Digital at the time was the organisation who
 10 was, I might say, brilliant in the work that they did on
 11 this, and really stepped up to support collation of
 12 these datasets.

13 **Q.** And who's responsible now for data?

14 **A.** So I think that would be will be NHSE.

15 **Q.** Do you know, and we will be hearing from NHSE witnesses
 16 tomorrow and indeed into next week, but do you know,
 17 Professor, yourself, how long it would take a frontline
 18 professional to enter in coding, age ethnicity,
 19 diagnosis, treatment? I'm just trying to think about
 20 practically what are we asking our frontline
 21 professionals to do here?

22 **A.** So it won't always be "the" individual at the frontline,
 23 they will vary with different parts of system, primary
 24 care or secondary care, for example if somebody has
 25 surgical intervention, they have an operation, that

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1 should be coded both by the surgeon but actually there
2 should be a check in the administrative system of the
3 hospital. So it varies.

4 And, of course, basic information should be at
5 this time sitting on a patient's record, full stop, and
6 should obviously be updated and checked regularly but
7 won't change significantly.

8 I think the important point is these different
9 parts, the entries are in different places and they're
10 not automatically linked. The opportunity, going
11 forward, of course, is for electronic patient records
12 and appropriate connectivity, but with that comes,
13 obviously, sensitivities around responsibilities and
14 sharing.

15 **Q.** And do you know, is there any difficulty with getting
16 data from patients that live in Wales, Scotland and
17 Northern Ireland? Is it easier, harder?

18 **A.** So each country is responsible for its own data systems,
19 and they speak differently. Wales, for example, has
20 very good, you may have seen in my report, sale data
21 where it can do a lot of very good connections between
22 social care, local authority data and health data. But
23 it does vary, and we were reliant -- you will see, with
24 the shielding programme, that whilst there was clinical
25 agreement, actually the implementation of that across

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1 receiving of the letters? Was there any support or
2 information provided to them at the beginning even
3 though the letter hadn't actually landed on their
4 doormat?

5 **A.** I think if I start with the people at the end. Those --
6 by the time we got to that -- QCovid is separate.

7 **Q.** Yes, it is.

8 **A.** But for those people, if you like, at the end of the
9 first phase, I mean, we could have waited and sent out
10 all of those letters all at one time when we got them
11 but clearly that feels ethically inappropriate, you want
12 to reach anybody who you would like to give advice to as
13 quickly as possible.

14 I think the reasons which I've outlined about data
15 are important and it is also really important that it
16 wasn't just GPs, actually, it was secondary care
17 professionals as well were able to add individuals. So
18 in that time frame we were either directly, through
19 linkage with some of the representative societies or
20 through NHS England, linking with clinicians,
21 specialists who would also then advise their patients.
22 So there was activity going on during that time.

23 **Q.** I understand that but what I was trying to understand is
24 if you know you have had an organ transplant, for
25 example, and therefore are likely to be deemed CEV but

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1 the different systems necessarily lay with the different
2 countries.

3 **Q.** Can I ask you this. We often hear that work is being
4 done, good idea, we're moving it forward, but if we were
5 to hit a pandemic next Monday, heaven forbid, how
6 confident are you that these data coding issues would
7 actually be, if not resolved, better than they were when
8 we were here in March 2020?

9 **A.** I'm confident they have improved. There was a lot of
10 learning through the pandemic, so the data foundry in
11 the NHS has improved significantly, I think, but
12 nevertheless we would hit many of the problems that we
13 had before and I think those are the opportunities for
14 the future.

15 **Q.** Does it require legislation?

16 **A.** Well, I think it's not simply legislation actually we
17 need patients to understand similar conversations as to
18 deal with research trials, to understand why it's
19 beneficial to share data, and to give assurance,
20 I think, that that data is carefully used.

21 **Q.** Can I just go back to where we started a moment ago and
22 the time lag between some people being identified as
23 CEV. You weren't able to sort of pin down a time frame
24 for reasons that you've explained but what about the
25 rest of those people who were at the end of the

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1 don't actually get the letter, what was done, if
2 anything, to try and support those people whilst they
3 were waiting for the formal notification? Was there
4 anything put up on websites, or any messaging gone out
5 to reassure them pending that letter being received?

6 **A.** So DHSC had the overall responsibility for communicating
7 -- for the policy side of it. I mean, obviously it's
8 a clinical topic and I personally and many of my
9 colleagues would support that but the linkage out to
10 patients also went through the NHS, so you may hear when
11 we discuss perhaps some of the clinical reviews we were
12 liaising all the time with specialist clinicians.

13 I think, importantly, we talk about the shielded
14 cohort but this is not -- these are very, very different
15 people with very different illnesses and diseases and
16 what we're trying to do was work with the specialists in
17 those topics who could then link with their patients.

18 **Q.** So one-size-fits-all would not work?

19 **A.** It doesn't and, actually, you can have, for example,
20 a very -- a young person of working age with a specific
21 immunocompromised condition. These are not, as I think
22 are sometimes considered, all very elderly individuals
23 for example, they have very, very different diseases,
24 backgrounds and contexts and they changed as the
25 pandemic went through.

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1 **Q.** I think having started the programme, in your statement
2 you make reference to the future of the shielding
3 programme -- at your paragraph 49 -- and possible growth
4 of the group asked to shield and you were asked to
5 provide some advice to the Department of Health in that
6 regard and I'd like to ask you about the advice you gave
7 which I think is probably set out in part in an email.

8 INQ000151804_2, please, page 2.

9 We are in late April of 2020. And there is quite
10 a long email, which I won't go through, that starts on
11 page 3 but there was a request of you and others as,
12 I think the department and the ministers were thinking
13 about considering changing shielding as they were
14 thinking about reviewing social distancing. So that's
15 the sort of context in which the email arises.

16 And then you were asked to provide your comments
17 on shielding and if we look at page 2, can you see there
18 the sentence beginning "Cabinet Office":

19 "Cabinet Office have asked us to flesh out some
20 next stage options on shielding in more detail and
21 asked us to consider ... extending [it] ... relaxing
22 [it] in some way ... further segmenting shielding
23 cohort ... and [indeed] applying shielding guidance to
24 households rather than individuals."

25 A number of different options at all ends of the

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1 is a very heterogeneous group, that often people would
2 be feeling very frightened, that you couldn't just put
3 a date on a chart and say this was how we were going to
4 change it.

5 So again, you can see in line two there, "The
6 ability for people in this group to choose not to wish
7 to shield is still missing in several places" and this
8 was a recurrent problem which was this was voluntary, it
9 was there to support people who wished to shield, but it
10 often came across in some of the media or the commentary
11 as people being required to do things.

12 **Q.** We won't go and look at a shielding letter through you
13 but I have to say it doesn't strike you as immediately
14 obvious that this is a voluntary option for those that
15 were required to shield. Can I just ask you about that
16 messaging. If there were to be a shielding programme in
17 future would you recommend changes to the letter --
18 I know it wasn't your responsibility, but the letter
19 that went out, highlighting the voluntary nature, if
20 indeed it is voluntary in any future programme?

21 **A.** So I did input to the letters and I would add that for
22 colleagues who were drafting them sometimes it could be
23 more difficult than it might appear. So for example, to
24 ensure support for Statutory Sick Pay which is something
25 which was -- I very much supported, there had to be

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1 extreme, if I can put it like that.

2 So that was up for discussion and I think if we
3 turn to page 1, we have set out there an email from you
4 where you say:

5 "I feel quite uncomfortable with the elaboration
6 in the document which seems to miss some of the very
7 high level key points ..."

8 Then you set them out.

9 But are you able, Professor, just to help us.

10 What was making you uncomfortable about the options that
11 were being considered at the end of April 2020?

12 **A.** So I think what you see in this email exchange is
13 a continuous push and pull, if you like. So I was very
14 clear what my role was, it was to protect a group of
15 individuals with a heightened clinical risk as we
16 understood it at the time in what was definitely
17 a voluntary system and to support them. I think
18 unfortunately, and I refer back to some of the comments
19 that I made at the start around the SAGE modelling which
20 was entirely appropriate but perhaps what different
21 parts of the system took from that was that every time
22 there was a conversation about changing the social
23 distancing rules it was quite a what I would call
24 a tactical technical conversation and perhaps didn't
25 recognise some of the points I've made earlier that this

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1 quite technical wording in places which wouldn't feel
2 immediately personable to individuals who were perhaps
3 frightened with an illness in the pandemic.

4 But I do think -- I wouldn't say the letter was
5 necessarily the thing that was the problem, I'd perhaps
6 draw two examples. One is every time there was
7 an announcement going out at ministerial level, although
8 as I think Professor Whitty said, we were told when we
9 were on the No. 10 podium or not, I would actually
10 actively try to get on the podium and that was to ensure
11 that when a message was going out the voluntary nature
12 of that was very much put forward.

13 A second example might be I probably got better at
14 doing this myself as we got further into the pandemic
15 and if there was an announcement I, on a couple of
16 occasions, did what we would call an off-camera but
17 on-record media group conversations to explain to the
18 media what we were doing, and why. And on one of those
19 I distinctly remember saying: this is what I expect your
20 headline to be. Please do not write it because there
21 are frightened people out in the public.

22 And so there was always a tension between getting
23 the communications of this right.

24 **Q.** Can I just ask you this. Do you know or do you know if
25 any work has been done to ascertain how many people that

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1 were deemed to be CEV volunteered to shield and those
 2 that decided not to?

3 **A.** So much of the information which you may cover is quite
 4 confused in terms of feedback because it does -- as you
 5 say, not everybody who was asked -- often the data
 6 includes people who were asked to shield and people who
 7 shielded themselves. So it's very difficult to
 8 disentangle.

9 **Q.** So, in short, we don't know --

10 **A.** There were attempts, and actually ONS and I think DHSC
 11 did write out that obviously the response rates from
 12 something like that will not necessarily uncover the
 13 true numbers.

14 **Q.** May I ask you about one of the options that was being
 15 posited on page 2 of this email which was applying
 16 shielding guidance to households rather than
 17 individuals, and her Ladyship heard some evidence from
 18 Dr Cathy Finnis who spoke about the difficulty
 19 experienced where one person was shielding but the rest
 20 of the house was going about their daily business. What
 21 thought was given to try and apply the shielding
 22 guidance to households rather than individuals?

23 **A.** So I think there was strong recognition of this issue.
 24 We know in the first wave I think we had around
 25 0.6 million individuals who lived on their own and about
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1 **A.** Yes, although I would just flag "allow", it was exactly
 2 the same point, people were allowed to do anything, this
 3 was the issue about what we were advising and this is
 4 part of the problem with the communication.

5 I think in this email what you can see, you can
 6 see it's a risk balancing proposal already because there
 7 isn't a perfect answer to this. My concern was that
 8 whilst bubbles were being promoted, this is the
 9 push/pull, very strongly, and there were lots of
 10 positive reasons for all sorts of people, single
 11 parents, elderly, people who were suffering with mental
 12 health conditions and needed support, there were also
 13 risks. And I think this email came before
 14 an appropriate communication and one of the problems at
 15 this stage was that bubbling was being created or
 16 thought about but with no limits.

17 So, for example, as it was drafted it would say
 18 you can bubble with one household, it didn't say you
 19 can't then swap your bubble. And so this is broadly
 20 trying to say: this is a great thing and we recognise,
 21 you know, being tucked away brings significant morbidity
 22 in itself but please be very careful about how this is
 23 articulated and thought through, so get the benefit but
 24 balance it with the risk as well.

25 **Q.** If we move on slightly from May 2020, I think shielding
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1 1.2 in the first sort of few months who were living with
 2 somebody else, sometimes that of course was somebody
 3 else shielding, so they were shielding together, if
 4 that's not an oxymoron.

5 But it was actually practically very difficult.

6 SAGE I think did some modelling on this early on and it
 7 was one of the reasons they didn't go to the cocooning
 8 route because once you start moving out to who needed
 9 support, it became very, very difficult to identify
 10 a household and/or a confined group and it was
 11 recognised right from the start that these were
 12 supportive interventions, they were never going to be
 13 perfect interventions.

14 **Q.** I think in due course there was an email that you were
 15 copied on.

16 Can we have a look, please, at INQ000152001.

17 We are now in May of 2020 and there was, I think,
 18 reference to bubbling and potentially getting various
 19 households together and I think you had some concerns
 20 about that and it -- it just follows on from your last
 21 answer really, but what was your concern about changing
 22 the rules for the clinically extremely vulnerable to
 23 potentially allow them to bubble with either their own
 24 household -- well, obviously with their own household
 25 but with another household?
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1 was paused certainly in England in August of 2020 and
 2 I think you were involved in some work in the run-up to
 3 that and in particular some work that you were doing
 4 around -- in relation to occupational risk?

5 **A.** Yes.

6 **Q.** And I'd like to ask you, please, about a paper and
 7 a roundtable you were involved in at INQ000421846,
 8 please.

9 Now, here we are in July and I think it was August
 10 that shielding was paused, so not long before. You were
 11 involved in clinically vulnerable groups, workplace and
 12 Covid-19 risk clinical principles, informed by DCMO
 13 roundtables. Can you just tell us, Professor, what did
 14 you actually do in the run-up to the pausing?

15 **A.** So I think what -- obviously you can see here it was
 16 running up to a time of people getting back into
 17 society, to opening up workplaces and also
 18 considerations of school opening in a number of
 19 different areas and there was, quite rightly,
 20 consideration of about how best to protect people. It
 21 also came on the back of things like the report from PHE
 22 on the impacts of Covid-19 on ethnic minorities and so
 23 there was quite a lot of discussion about how this risk
 24 and risk management was articulated in the workplace and
 25 so what this roundtable did, and you'll find that I'm
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1 often called in to do roundtables between quite
 2 difficult or disparate factions to try and get some sort
 3 of consensus and shared understanding.
 4 This one included representation from NHS who
 5 obviously had applied a specific risk assessment model
 6 from the Faculty of Occupational Medicine, from Health
 7 and Safety Executive, and a number of others around to
 8 try and pull all of that thinking together as we went
 9 into opposing -- or pausing the shielding programme.
 10 **Q.** I'd like to ask you about the risks to healthcare
 11 workers to prevent them from coming to harm in
 12 healthcare settings. And I think, taking your point as
 13 this is applying to a broader group than necessarily
 14 healthcare workers but included them. Can I just
 15 obviously you set out there at the beginning the
 16 responsibility to protect all workers from harm by
 17 carrying out a workplace risk management and providing
 18 a Covid-secure workplace. And was it envisaged there
 19 would be different types of risk assessments depending
 20 on the setting that was being spoken about?
 21 **A.** So one of the reasons for doing this workshop was to, if
 22 you like, reinforce the hierarchies of control which are
 23 relevant both to, I think you would have heard about
 24 them during infection prevention and control but they
 25 are also highly relevant to risk management of any sort

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1 far the other way.
 2 **A.** So this wasn't just me, obviously. These are comments
 3 coming from a consensus statement from a number of
 4 different representations around the room, and it might
 5 be easier to work backward because that very last point,
 6 "appropriate to ask for conversations in clinical
 7 workplaces", was actually the key finding from the
 8 qualitative outcome from the PHE health inequalities
 9 report.
 10 And I spoke to Kevin Fenton myself quite a lot on
 11 this because there was a difficulty here, I think, if we
 12 take the NHS workplace, my own concern and it was shared
 13 with others, was that if you like I'm going to call it
 14 a knee jerk response but it was felt there was
 15 an anxiety, quite rightly, we were looking at data,
 16 people rushed to an individual risk assessment without
 17 assessing the full workplace and actually the
 18 qualitative work that came through was that the biggest
 19 difference in the ethnic and some other group within the
 20 NHS was that they didn't feel able to have the
 21 conversation or they weren't enabled to have
 22 a conversation. When the conversation happened people
 23 were reassured about the, if you like, PPE or whatever
 24 else it was in place, but the conversation needed to
 25 start with all of the different measures in the

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1 in the workplace and that sentence itself, it says, by
 2 carrying out workplace risk management of which risk
 3 assessment is a part, and I think what had happened was
 4 the NHS were one organisation had gone straight into
 5 individual risk assessment of particular individuals and
 6 the whole thing needed contextualising and managing
 7 workplaces safely.
 8 **Q.** That's something I wanted to ask you about. Can we
 9 highlight paragraph (f), because I wasn't clear here,
 10 Professor, what you were trying to get at. You make the
 11 point clearly:
 12 "It is important to be clear about terminology:
 13 workplace risk assessment, risk management, clinical
 14 risk assessment and culturally competent conversations
 15 mean different things and should be used consistently.
 16 There is currently a focus on 'individual risk
 17 assessment' (eg in the NHS) and the purpose and scope of
 18 this should be re-evaluated (is it more proportionate
 19 and appropriate to ask for COVID conversations in
 20 clinical workplaces)."
 21 I would break that down. I want to understand,
 22 what was your concern with there being individual risk
 23 assessments given, that people may have very different
 24 advice risks on morbidity, ethnicity, the role they were
 25 performing? I wondered if that was perhaps going too

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1 workplace that had been put in place to make the
 2 workplace safe.
 3 And so what this was trying to do was say
 4 everybody needs a risk assessment you start with the
 5 workplace first and try and remove the risk and you work
 6 through the hierarchies of control, and then back to --
 7 I know some of the comments that others have made, which
 8 is the actual PPE bit is the very last point on this,
 9 and we need to risk assess every individual, because
 10 it's the -- and actually one of the other comments here
 11 was not just the individual in the workplace, but those
 12 conversations enabled the environment of the individual
 13 to be assessed as well. So, for example, when we had
 14 lots of peaks in -- I think it was in Swindon, for
 15 example, in one particular workplace, actually the risk
 16 turned out to be people travelling in cars together to
 17 work. And so it's exactly why these conversations and
 18 the broader thinking was really important for
 19 understanding workplace risk.
 20 **Q.** And you would say that would still apply even in a
 21 healthcare setting, there needs to be that broad
 22 a context?
 23 **A.** Yes, because I will probably misquote the numbers now so
 24 I won't but, I mean, the risk for healthcare workers was
 25 higher in community, I think, than it was from in the

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1 workplace, I think, itself. High risk of infection.
 2 But I mean, these are just normal parts of living. This
 3 isn't a worker issue, it's just actually thinking
 4 through where the risk of infectious disease might
 5 happen, and managing it in all settings.
 6 **Q.** And so what was the outcome if I can put it like that of
 7 this round table which I think was about a week or so
 8 before shielding was paused, what was the upshot as far
 9 as healthcare workers were concerned and the risk to
 10 them?
 11 **A.** Well, this wasn't purely for healthcare workers --
 12 **Q.** No.
 13 **A.** -- as I say, this was primarily to consider the
 14 clinically vulnerable groups in whatever setting they
 15 were in, so this just wasn't just focused on healthcare.
 16 It gave -- this was a statement, really, which looked at
 17 all those risks and said, "How can we support return to
 18 work of clinically vulnerable groups, ensure that they
 19 are supported?" And this was fed back as well to
 20 BEIS -- all the department names have changed now but
 21 that was the Business --
 22 **Q.** Business, Energy, Industry --
 23 **A.** Thank you --
 24 **Q.** -- something like that.
 25 **A.** -- and obviously the NHS were present as well. So it

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1 the rapid public health studies, so there are health
 2 protection research units across the country, UK Health
 3 Security Agency has what we call twin hatters working in
 4 and out of research as well, there is the NIHR, National
 5 International Health Research, new framework responding
 6 to pandemics, whether it be to do with this practical
 7 implementation, or whether it be to do with things like
 8 developing new vaccines or treatment.
 9 So I think that has moved on a lot, and that
 10 particular study was given rapid funding and is
 11 continuing to be funded.
 12 **Q.** I paused to look at occupational risk, but clearly some
 13 healthcare workers would have been deemed either CV or
 14 CEV and therefore at particular risk if they couldn't
 15 work from home, and that was really why I was trying to
 16 broaden the questions into the risk to healthcare
 17 workers.
 18 Can I just ask you this, though: clearly, there
 19 was the pause of the shielding in August 2020, and then
 20 by the autumn of that year the prospect of another
 21 lockdown loomed and loomed large as we neared Christmas.
 22 What advice, if any, did you give to ministers DHSC
 23 about the prospect of a new national lockdown? If it
 24 helps you, Professor, I'm at your paragraph 55.

25 **A.** Thank you. I seem to remember.

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1 informed the thinking then of the subsequent
 2 cross-government guidance, I think, that came out as
 3 shielding was paused.
 4 **Q.** Can I just ask you more generally about occupational
 5 health risk assessments. Were studies such as SIREN
 6 helpful in informing occupational health risk
 7 assessments are not?
 8 **A.** So I think we need to distinguish between the workplace
 9 risk management, the cohort of staff, and then
 10 individual risk assessments. The SIREN study has been
 11 hugely instrumental so it started off looking
 12 effectively to see how many healthcare workers had been
 13 infected, but it's been used consistently then to track
 14 through the effectiveness of vaccination, how to best
 15 set testing regimes, for example, to ensure both its
 16 staff and patients are maximally safe, what that time
 17 should be, and it's still going. And I think you may
 18 have seen that that study is also being used now to
 19 assess some of the specific IPC questions as well.
 20 **Q.** And is a study such as SIREN, I think, available to be
 21 reused again in the event of a future pandemic to help
 22 look at whether there is a risk to a particular group of
 23 healthcare workers or there's a particular nosocomial
 24 outbreak?
 25 **A.** Yeah, the SIREN study was set up, actually, as one of

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1 **Q.** We can put it up on the screen, actually, it's
 2 INQ000410865_20.
 3 **A.** Perhaps if I talk through while that's coming up and
 4 I'll hopefully check if it's what I think it is.
 5 I think at the time we were in the summer period. We
 6 knew, or we were pretty confident there would be further
 7 waves, obviously we're now used to that, but at the time
 8 it was difficult to know when they might come. There
 9 was a higher chance of any wave impacting more badly
 10 during the winter when people tend to stay indoors and
 11 accumulate closely together, and apart from a few areas
 12 it felt that that was the right time to give a signal or
 13 to encourage people to be out more. It was both
 14 a climatic -- I mean, Covid hasn't settled into
 15 a particularly seasonal pattern, but the risks are
 16 different during the winter months, and there was
 17 a particular concern as well that for individuals, when
 18 they started, the initial period was advised to be
 19 a minimum of 12 weeks, and the concern was actually if
 20 we needed to advise people to shield again during the
 21 winter in those coming months, it would be very
 22 difficult for people, both mentally and physically, to
 23 be right out of the system for a whole year.

24 **Q.** Does that feed into your first bullet point there shown
 25 on screen, is that on 31 October 2020 you advised DHSC:

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1 "We should not return people to fully restrictive
2 shielding ie never leaving the house, given the known
3 negative mental health impact, particularly given the
4 extended periods of relative isolation we have reached
5 through the pandemic to date."
6 **A.** Exactly, and it's not that the mental health impact to
7 some extent was recognised, these are balanced risks,
8 and there wasn't an easy answer one way or the other but
9 the longer it went on then clearly many of those risks
10 would accumulate and if people had a break from them it
11 was an opportunity for a reset moment and obviously no
12 period is entirely safe, no individual was entirely safe
13 but this was probably the safest time.
14 **Q.** May I deal with two short topics before perhaps we take
15 our lunch break. I'd like to ask you very briefly about
16 QCovid.
17 Now, Professor Whitty, I think told us that the
18 big delay in QCovid was pulling the data from the
19 multiple sources together. Is that feedback to the
20 seven databases that we were talking about a moment ago?
21 **A.** Yes.
22 **Q.** If there was another pandemic today, how soon would
23 UKHSA, and indeed the others involved in QCovid, be able
24 to roll out a similar tool if it was thought necessary?
25 **A.** We may have seen from the records we did try to retain

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1 mean, we're all saying them for a number of different
2 reasons. So the issues around data, about being clear
3 who owns data, about working proactively with the public
4 to understand why that sharing is important, and to give
5 the reassurance about its safeguarding, to always
6 encourage the continuity of the content of it.
7 I mean, ethnicity, I started in public health work
8 30 years ago, ethnicity was not being recorded properly
9 and that has two sides to it, because it may be that
10 people are frightened to have that ethnicity recorded
11 for different reasons, and so we're looking at it in
12 a very technical point here but it's very sensitive and
13 who puts the information in and how it's recorded is
14 really important.
15 **Q.** Aside from the data issue, and that's not to minimise
16 it --
17 **A.** No, that is the major consideration.
18 **Q.** -- are there any other barriers that might lead to
19 delays with implementing a tool like QCovid which has
20 vaccination implications? It was helpful for getting
21 a number of people on the vaccination list, so even if
22 you don't shield them it increased their chances of
23 getting a vaccine first.
24 **A.** It was a completely novel approach, it won a number of
25 prizes, it scored very highly on quality, it was

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1 a model for doing that more quickly. Obviously there
2 are competing demands across the system and that was not
3 funded on an ongoing basis and those decisions are made.
4 I think what we did retain was a playbook as to how we
5 would do this again and for the reasons which I've said
6 around the foundry and other data systems some of that
7 would be easier and some of it would be quicker. It
8 would nevertheless still require us -- require some time
9 to step it back up again.
10 I do think it's an opportunity, it could -- to be
11 able to digitally cohort people -- it sounds a bit
12 technical as though we're counting numbers not
13 individuals, but if you're going to reach them very
14 quickly if we suddenly found, for example, there was
15 a problem with something, or an intervention I think
16 there are much wider opportunities than just responding
17 to a pandemic so this should be an area of urgent
18 progress.
19 **Q.** When you say it would take some time to be able to step
20 it back up again -- days, weeks, months, what are we
21 talking?
22 **A.** Probably months.
23 **Q.** Is there any thing that practically be done now to make
24 that shorter period of time?
25 **A.** The issues about data, which are recurrent, I can -- I

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1 externally assessed, so I think this was a really
2 important way forward. I think it needs more
3 familiarity across the system so people understand the
4 benefits but I think it could be, for example, it's
5 a similar approach running almost parallel to some of
6 the clinical trials work as well. They are all required
7 around data, in being able to reach people and for
8 people to give information, their agreement in advance
9 of something happening.
10 **Q.** It's probably my fault but aside from the data, are
11 there any other barriers that we need to remove?
12 **A.** I think being really clear who is responsible. You will
13 see from the EPP, the Enhanced Protection Programme work
14 plan, if you like, that in some ways I came back into
15 that because as I'd stepped away and with a gap there
16 was a degree of confusion about all the different parts
17 were running but the oversight of that was not clear.
18 So I think being absolutely clear who owns this going
19 forward and who runs with it is really important and
20 I think that depends on the number of uses that can be
21 applied and where that should sit.
22 **MS CAREY:** My Lady, would that be a convenient moment for
23 lunch.
24 **LADY HALLETT:** Certainly. You've got a better idea of --
25 we've got a lot to get in this afternoon. Are you happy

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1 that I take the usual hour for lunch?
 2 **MS CAREY:** Yes, I am, thank you.
 3 **LADY HALLETT:** Very well. You know that we take breaks
 4 certainly for lunch.
 5 1.45, please.

6 (12.46 pm)

7 (The short adjournment)

8 (1.46 pm)

9 **LADY HALLETT:** Ms Carey.

10 **MS CAREY:** Thank you, my Lady.

11 Professor Harries, may I just finish off with
 12 a few questions in relation to the shielding. You say
 13 in your statement that:

14 "DHSC held overall responsibility for
 15 communication with both the CEV and CV [cohort] ...
 16 [Public Health England] and subsequently UKHSA were
 17 mainly involved in the production of guidance."

18 I just would like your help about one piece of
 19 guidance.

20 Can we turn to INQ000410865_33, please.

21 **A.** Just while that's coming, can I just go back. So,
 22 overall, DHSC was not responsible for the whole
 23 shielding programme.

24 **Q.** No.

25 **A.** They were responsible for the policy element of the
 101

1 advice to come out of shielding were when the rates were
 2 falling. But there were periods of time, and I think
 3 this is one, where parts of country were in different
 4 rates, so it was quite a confusing message. And so if
 5 an area was staying in a tier 3 lockdown and the rest of
 6 the country was coming out, it wasn't a simple narrative
 7 to give.

8 **Q.** If you wouldn't mind checking that in case there was
 9 another reason why the guidance was updated as a result
 10 of user feedback that would be helpful.

11 Can I turn to a slightly different aspect of the
 12 shielding programme and the risks to clinically
 13 extremely vulnerable and clinically vulnerable people
 14 not accessing healthcare. In your statement you deal
 15 with this at paragraph 103 onwards and you say, if I may
 16 summarise, the CV group were strongly advised to use
 17 remote access. The CEV group were also advised to use
 18 remote access but should speak to their GP or treating
 19 clinician to ensure they receive care. So slightly
 20 different advice.

21 The Inquiry heard from Dr Cathy Finnis, who was
 22 a member of the clinically vulnerable families core
 23 participant group, who told us certainly the
 24 immunocompromised people were at the time, and indeed
 25 perhaps still, cancelling or delaying healthcare
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1 clinical side of it --

2 **Q.** Yes.

3 **A.** -- and the actual shielding guidance was, if I remember,
 4 was responsibility of Cabinet Office from May.

5 **Q.** Well, I'm reading it from your paragraph 81 where you
 6 said:

7 "[They] had overall responsibility for
 8 communication ..."

9 It may be you misheard me.

10 **A.** On the clinical side of things.

11 **Q.** Yes.

12 **A.** So I think it's the fact that these are multifaceted
 13 elements.

14 **Q.** I see. Thank you very much for clarifying.

15 Can I ask you, please, about the entry on your
 16 screen, I hope, 29 September 2020, and there was some
 17 guidance given to the clinically extremely vulnerable
 18 from PHE, and it says it's updated to remove references
 19 to rates of transmission of Coronavirus falling, in
 20 response to user feedback.

21 Are you able to help me with what the feedback was
 22 and why then the references were removed from the
 23 guidance?

24 **A.** I'm happy to check that after for you, but my suspicion
 25 would be that the rates rose and fell and obviously the
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1 appointments due to ongoing concerns about the risk of
 2 infection in the healthcare setting. And I just would
 3 like your help, if you're able to give it, as to what
 4 practical steps could be taken to ensure that the
 5 immunocompromised people, whether in a rate of high
 6 transmission or not, feel able to access healthcare
 7 services.

8 **A.** So I mean obviously I can't speak on their behalf, and
 9 I have heard many similar points of view. I think the
 10 reason that that was -- that note was put in there was
 11 actually to assist them in getting care safely. So
 12 we -- there was a particular note at the start of the
 13 shielding programme that asked if there was booked care
 14 already planned, these are individuals who would often
 15 have regular appointments and need to access care
 16 frequently, that they discussed how necessary that was
 17 with their GP, and also that they discussed with their
 18 GP in order that the GP might be able to advise on
 19 a safer way of doing something or advise on any
 20 precautions.

21 So the reason for the difference was exactly to
 22 ensure that they were as safe as possible. In terms of
 23 messaging, I mean I think communication, as I've already
 24 noted, has been really difficult throughout this.

25 I think it was the same for many of the population.
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1 I myself had email messages, actually, from people who
2 had accessed care, and were going to discharge
3 themselves to the extent I actually stepped in on one,
4 which was very unusual, because of the fear of the virus
5 at the time. And I think we can try and learn from
6 people's experience for a future episodes but it's very
7 difficult because people's perception of risk, on top of
8 the standard messaging is very individual as well.

9 **LADY HALLETT:** Yes, we learn that it's difficult, but what
10 do we learn that can be done differently?

11 **A.** So, in terms of that, we did have behavioural insight
12 group running, particularly for the CEV group, and so
13 where that -- on a fairly regular basis, where that
14 picked up, something we would try and feed it back into
15 the guidance that was going out. There's also wider
16 work going on which UKHSA is involved with in terms of
17 communication, so one of our communications team is
18 actually co-chairing a European piece of work around
19 risk communication during pandemics with WHO Euro.
20 So -- and I'm also leading some work with WHO Euro
21 looking at how we can engage with civil society
22 organisations in a different way going forward, and
23 I hope that will give some clues, not just for us, but
24 actually other countries as well, as to how we can
25 support individuals safely.

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1 impact or mental health impact that the shielding
2 programme had and there was -- can I have up on screen
3 INQ000348091. There was some guidance released by the
4 government included, from public health.

5 Can we just go to the first page, if at all
6 possible, of it. Thank you.

7 Guidance for the public on the mental health and
8 well-being aspects of Coronavirus. I just -- is this
9 a general piece of advice not specifically aimed at CV
10 or CEV?

11 **A.** It is and it recognises that there will be -- you know,
12 the whole population, I think, we've had increased rates
13 of mental ill health, it wasn't for everybody and
14 I think this document, for some people who are in the
15 clinically extremely vulnerable group, there may be some
16 comments there which will help some people and would not
17 be helpful to them and we recognise that. It's
18 difficult to create documents which suit all different
19 systems.

20 On the advice that went out specifically to
21 clinically extremely vulnerable we tried to add on
22 elements around mental health.

23 **Q.** Right.

24 **A.** And I remember, actually, when I personally was doing
25 one of the early No. 10 briefings, I actually flagged

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1 **LADY HALLETT:** Thank you.

2 **MS CAREY:** Can I ask, is UKHSA doing anything in relation to
3 whether a CEV person should be allowed to wear a mask
4 when attending healthcare appointments? Because we
5 heard some evidence of shielders being told to take off
6 masks particularly if they are wearing, perhaps, FFP3 or
7 FFP2, and it being replaced with a blue FRSM.

8 Is your agency doing anything in that regard? Is
9 it your remit?

10 **A.** Obviously I can't speak for whichever organisation has
11 advised. I think I agree with comments which I think my
12 colleagues have made, Professor Sir Chris Whitty, which
13 is people should be supported to do what makes them feel
14 safe. The only reason that may not be -- you know, if
15 it's going to harm somebody else, for example, somebody
16 wearing a valved mask when they are infected, that's not
17 a good idea for the rest of the group around them. But
18 I think we're talking about precautions which make
19 individuals feel comfortable and if that's not
20 interfering with their care or others' safety it feels
21 the wrong thing, but clearly I can't speak for health
22 services, that is a -- if it's an NHS organisation it
23 will be NHS England.

24 **Q.** Thank you. One of the things you've already alluded to
25 is clearly the longer-term, sort of, psychological

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1 issues about mental health and specifically pulled out
2 the risks, if you like, to CEV who we recognised would
3 be more isolated than others.

4 **Q.** What about the risks to CV, clearly a much larger cohort
5 of people? Was there any specific advice given to the
6 clinically vulnerable?

7 **A.** So it was always -- this is a different balance because
8 individuals have different personal risk perceptions and
9 judgments and the advice can't be precise in
10 an uncertain epidemiological future, and so what we
11 tried do and this actually I think is -- these aren't
12 specific to UKHSA, or certainly not to OCMO, was give
13 general advice and then build on it if there was
14 individual communication with the different groups as
15 I just explained for CEV.

16 **Q.** Thank you, that can come down.

17 Can I just ask you this. Clearly bearing in mind
18 the impact that the shielding programme had on those
19 that were shielding, do you think there should be any
20 additional support and guidance given to certainly the
21 immunocompromised people currently?

22 **A.** This is an important thing -- point I think for the
23 future. I think there are two things. One is knowing
24 what we know now about mental ill health and a pandemic
25 of this size, actually putting in -- it's difficult to

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1 prevent it, I think. There will be some learning. But
 2 actually for a group like the CEV or CV having
 3 a mechanism where their GP, for example, can see what
 4 a mental health status is as somebody progresses
 5 through -- some people will manage quite well, some
 6 people enjoy being at home having their garden, other
 7 people who do not have those facilities, have very poor
 8 health and perhaps were in the CEV group, having
 9 a mechanism of monitoring that health going through with
 10 a simple questionnaire, for example, on a regular basis
 11 of some sort would I think would be quite helpful both
 12 to them, or those who were supporting them at
 13 a distance, and particularly to health services to see
 14 where they could focus and target their support.

15 **Q.** And in the event that there were to be a shielding
 16 programme in years, decades down the line, what sort of
 17 support or advice is ready-made, if you like, or
 18 available to be got up to speed to help them quickly
 19 understand what advice and guidance is out there for
 20 them?

21 **A.** So guidance was put out, as you you've seen. This was
 22 not something that was not thought of and you are
 23 limited in what you can provide. I think one of the
 24 areas that we need to understand more and is probably
 25 not covered effectively yet is the digital divide

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1 the efficacy and you set out there:
 2 "... we have a whole data factory arisen from
 3 a single primary outcome measure effectiveness -- which
 4 is prevention of death. The only logical way I can see
 5 to identify relevant strong interim variables as proxy
 6 measures of success for this programme would be if the
 7 data being collected could demonstrably be linked back
 8 coherently to the model which the SAGE/SPI-M modellers
 9 used."

10 And then you go on to say you can't see that has
 11 happened. Can you put that into layman's terms for us,
 12 what was your concerns?

13 **A.** Can I explain the background to this?

14 **Q.** Yes.

15 **A.** As a starting point any public health intervention that
 16 goes in you should always think about monitoring and
 17 evaluation, that goes as standard, and then you want to
 18 know if you've made a positive or, hopefully not,
 19 negative difference.

20 So that's number one and that will always be in
 21 the minds of any public health professional.

22 Additionally, of course, there had been public
 23 resource invested in this programme as well and we had
 24 colleagues from the NHS who wanted to understand things
 25 like health service utilisation. So everybody had

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1 because if people have digital access and feel confident
 2 and comfortable to use it they can reply to
 3 questionnaires, they can engage with people easily. If
 4 that is not the case then the opportunity to support at
 5 a distance and safely from an infection risk perspective
 6 is much reduced and I don't think we've got that covered
 7 yet.

8 **Q.** Can I come to the end of the shielding programme
 9 certainly as far as England is concerned. I think it
 10 ended on 15 September 2021?

11 **A.** Yes.

12 **Q.** And clearly -- I think you were asked, certainly back
 13 in April of 2020, whether there were any proposals to
 14 measure the effectiveness of the programme and you deal
 15 with that, Professor, in your paragraph 46 onwards.

16 So clearly it was in people's minds at the
 17 beginning of the programme to try and work out if the
 18 programme was working, and I'd like to ask you about
 19 an email chain, please, INQ000151754.

20 Essentially, you were asked, I think, to provide
 21 some comments on the efficacy or otherwise of the
 22 shielding programme and I think we see on the first
 23 page -- yes, it is, first page at the bottom there, is
 24 you replying to the request, and you say, you're only
 25 just back, you have some major concerns about looking at

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1 an interest in understanding it.

2 My prime interest was: did we actually prevent
 3 deaths, did it more good? But the Treasury, for
 4 example, would be interested in the funding and how much
 5 it had cost and what it had achieved.

6 The difficulty we had here, this email came on the
 7 back -- if you're senior in, as you are, in the Office
 8 of the Chief Medical Officer, you tend to see things
 9 quite late when many people have done a lot of work on
 10 things before you've seen them, and so people had been
 11 setting up -- collecting large numbers of hospital data
 12 and coming up with a whole load of numbers and
 13 interpretations which were not valued.

14 And so what we have is two things. Number one, we
 15 absolutely want to investigate and understand whether
 16 this has been effective. But number two, the proxy
 17 measures are what are the things that you can measure
 18 that will give a real, true picture of what has happened
 19 and what I was presented with was a very, very long way
 20 from what I thought was effective for that purpose.

21 **Q.** Let me ask you this then. Do you know, was there any
 22 work undertaken to ascertain whether the shielding
 23 programme did in fact prevent death?

24 **A.** Yes, there was a lot and it was sitting -- this was part
 25 of the start of it. So there was both a look at the, if

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1 you like, the health service data and mortality data and
 2 things like infection rates, where that was available,
 3 and then when this came through, you may have -- I think
 4 I have put into the Inquiry, I did do one very blunt
 5 email where I highlighted all of the reasons which
 6 I thought this was not an appropriate methodological
 7 evaluation, and so to check that this was just not me
 8 having a bad day, we involved the University of York,
 9 Professor Tim Doran and colleagues, to look at the
 10 ways -- I flagged all of the reasons I thought this was
 11 not right and we had not been able to work through a way
 12 to get a comparator group and so we asked them to say,
 13 you know: what do you think of this early piece of work?
 14 I don't think it's acceptable, have you got ideas as to
 15 how we could do this differently?

16 And they came back with four different ways,
 17 interrupted time series, synthetic control groups,
 18 regression discontinuity design, and various other
 19 things, but even those, they said, would struggle, they
 20 would be better than what we had but they would not --
 21 and the fundamental problem is that if you have a belief
 22 that you are plausibly going to do good and protect
 23 people right at the start of this, you cannot have
 24 a comparator group because you will have left people out
 25 that you're trying to protect, and every time then that

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1 support or recommend a shielding programme in the event
 2 of a future pandemic.

3 Now I think you're aware of her conclusions and
 4 I'd like you, please, to put forward your views about
 5 her conclusions.

6 **A.** So I do feel very differently, as you can probably guess
 7 from my introduction.

8 Firstly, I agreed, actually, with a lot of what
 9 Professor Snooks says, she has always drawn the problems
 10 of comparator groups, and we've highlighted that. So
 11 that is a point of agreement.

12 The difficulty then is, she has then gone on to
 13 use evidence which almost is contradictory to the
 14 statement that she's made. So -- and I would also
 15 perhaps separately like to pick up the point about the
 16 healthcare-associated infection.

17 If I just go to the evidence, in fact one of the
 18 types of methodology that was used, was used by Filipe,
 19 it's the only one if I look across at all of the studies
 20 that she's included, actually picks up one of the
 21 recommendations from the University of York. That one
 22 actually said that the likely impact on reduction in
 23 mortality was 34%. So that's really positive. Now
 24 I would not put forward a single study to show evidence
 25 in favour of shielding, I would lodge it and say we need

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1 you try and make a comparator group there is some major
 2 difference that does not allow you to make a true
 3 comparison and so, in fact, effectively, the University
 4 of York agreed with us and there is no definitive
 5 evaluation but it's not for the want of trying.

6 **Q.** So can I take it, given that ultimate conclusion, in the
 7 absence of a control group means it's almost impossible
 8 to be able to work out the efficacy of the programme,
 9 can I take it I don't need to ask you about the four
 10 different ways that they came up with, and the
 11 interrupted time series control groups, etc?

12 **A.** Not indeed, but the one of those I perhaps would put
 13 back --

14 **Q.** Please do.

15 **A.** -- to relate to Professor Snooks' evidence.

16 **Q.** I was going to come on to that, yes. And can I start,
 17 and then if you haven't said what you wanted to add,
 18 please add it at the end, Professor, because I think you
 19 are aware that her conclusions were that given that
 20 there was a high rate of hospital-acquired infection and
 21 given that the CEV group in particular are more likely
 22 to need healthcare and hospital appointments, they
 23 concluded that shielding did not consistently protect
 24 CEV people from infection, serious illness or death.
 25 And so she came to the conclusion that she would not

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1 more studies. But the only one that I think is
 2 methodologically near the main point is that one.

3 If I then look and say -- and I will use
 4 Professor Snooks' own study, and I think you will be
 5 able to understand why this feels differently -- the
 6 comparator group which she has used even before you get
 7 to shielding characteristics is starkly different. So
 8 for individuals, we always look in a study to say,
 9 what's the group we're interested in, and what's the
 10 comparator? And there basically should be, as close as
 11 possible, to avoid confounding, apart from the thing
 12 you're looking at. And so you immediately -- and she
 13 has set these out in her table 2 in her paper, but
 14 bearing in mind how important age is on its own as
 15 a risk factor, those who were 50 years old equal to or
 16 50 years old form 79.6% of the shielding group, and in
 17 her comparator group they form 25% -- sorry, 39%. So
 18 we've already got almost a double difference, and we
 19 know how important age is.

20 Then we look and say, care home status, and the
 21 proportion of the group which she has included in the
 22 shielding group is twice as high as that in her
 23 comparator group. And I could go on. We then look at
 24 frailty, and 38.3% are in a frailty category of mild,
 25 moderate or severe in shielding.

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1 The point I make, without getting into the detail,
2 is you have got a very, very different group of people
3 before you start looking at shielding, and then, most of
4 all, exactly as you have said, these individuals we
5 expected to go into hospital frequently. We don't want
6 them to be there, we want them to only go when they need
7 it, and to do that safely, and to stay out of the way
8 when they didn't need to.

9 She has no, as far as I can see, and I'm happy to
10 be corrected, but I can see no clinical parameters
11 at all which are compared in this. So we've got
12 a younger, healthier, unspecified population.

13 We would expect the shielding group to be going in
14 and out of hospital, sadly, probably, with much, much
15 higher mortality rates and being tested much more
16 frequently.

17 **Q.** So if it's too simplistic, please say, but in short are
18 you saying she didn't compare like with like?

19 **A.** Yes, and I don't think she can, and she's used several
20 studies to look and I admire that, that's exactly what
21 we should do, but I think whereas she has published
22 that, I have gone the University of York and said,
23 "Please check that I am actually seeing this the right
24 way". The only way I think we could do it in the
25 future, and this is an important point, is to say, who

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1 QCovid, for example, was a tool, actually, to support
2 individual risk assessment as well, and the sooner
3 that's set up -- it still needs type time to collect
4 data before you can use it, but the sooner that's set
5 up, then obviously again we have more information.

6 But yes I would, actually and I'm afraid, but with
7 respect and for all the reasons I have said, I feel
8 strongly I would find it very difficult just to say I'm
9 doing nothing.

10 **Q.** Can you help with whether you are aware of any research
11 now being done on the efficacy of the shielding
12 programme?

13 **A.** Well, for the reasons that were said, I think we have
14 stopped for this time because, of course, individuals
15 are vaccinated, even as the programme was running, time
16 was changing and the parameters, different variants,
17 they're quite variable, so it is quite difficult to do.

18 **Q.** And finally on this, I think you said you wanted to say
19 something about the healthcare-acquired infections.

20 **A.** Yes.

21 **Q.** I'd just like to hear your views on that.

22 **A.** So, number one, we definitely want to minimise
23 healthcare-acquired infections. To some extent it's
24 predictable they would be there, and I think that's
25 actually even in some of the records, SAGE and NERVTAG.

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1 do we think are in these cohorts of individuals?

2 They're very different illnesses -- might be the same
3 people we would want to contact again, let's say we have
4 avian flu or something popping up, and actually take
5 groups so that we know broadly what their average
6 healthcare utilisation is now, it would still be very
7 difficult but at least we would have better
8 understanding and that could come, for example, from
9 what you might call peacetime digital cohorting,
10 actually looking at those groups in the intervening
11 period.

12 **Q.** Do I take it, from what you've said, then, that in the
13 event of a future pandemic -- would you recommend
14 a shielding programme or not?

15 **A.** Well, I would -- there's the what -- whether, what and
16 how. So whether, the answer is yes I would. I would
17 find it very difficult as a clinician to say I know
18 there are people who, for plausible clinical reasons,
19 are likely to be at heightened risk from an infection
20 which has no vaccine, no countermeasures, no
21 therapeutics, and just say, sorry I'm not going to give
22 any particular advice or support. That feels wrong.

23 Would I do it differently? We've discussed lots
24 of different communication elements, yes. Would I try
25 and set things up sooner? Yes. Would we have -- the

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1 But the way it's been linked with shielding seems
2 a complete anomaly to me. So my position would be, we
3 want to protect people who are clinically extremely
4 vulnerable, maximally, regardless of what is happening
5 in the healthcare system, so if rates are high we want
6 to reduce them for them and for everybody, but it's
7 a non sequitur, they are not necessarily linked, we
8 still want to protect people and those people were
9 mostly not in hospital, they would visit frequently,
10 many of them, but they're mostly at home, and we will
11 protect them as much of the time as we possibly can.

12 **Q.** Can I leave shielding there and turn to some other
13 matters, and perhaps your second statement
14 from June 2024 which is perhaps more within the UKHSA
15 remit than the DCMO remit, although, clearly, if there
16 is crossover, please say.

17 Can I just ask you, you have set out helpfully
18 a number of locations of experts in the UK at your
19 paragraph 3.5iii, I think you mention there are UKHSA
20 experts in Cardiff and Glasgow. Can I ask, are there
21 any UKHSA experts situated in Belfast?

22 **A.** No, there aren't, but we do --

23 **Q.** Why not?

24 **A.** Well, it's not designed on a geographical basis, it's
25 designed about where support is needed and so we have

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1 a team, some of these are contracted services, if you
 2 like, public health services are devolved, most of them.
 3 But the UK Health Security Agency is the lead for global
 4 health security with government, and for some specific,
 5 specialty areas, so things around radiation, and we have
 6 chemical expertise. The devolved administrations
 7 generally are too small to maintain services, and so
 8 those cases are some of our specialist services, but
 9 Northern Ireland actually calls on us as well, and we
 10 have very close links. I do personally both with the
 11 chief executives for each of the agencies, and also with
 12 each of the CMOs and their team.

13 **Q.** The Inquiry has heard a lot about transmission and
 14 terminology in relation to Covid, but can I ask you, as
 15 at today in November 2024, does UKHSA now accept that
 16 Covid is transmitted via the airborne route potentially
 17 as well as other routes?

18 **A.** Yes, and I think that's clear in our documentation.

19 **Q.** And in the event of a new coronavirus, what assumptions,
 20 if any, are going to be made as to how the virus is
 21 transmitted?

22 **A.** Clearly we'll need to learn from the evidence as it
 23 accrues, and the reason I think that there has been as
 24 many people who have said that, that movement from
 25 a predominantly, not exclusive but predominantly a

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1 more detail, and so work which is probably not visible
 2 to this module that UKHSA is doing on establishing rapid
 3 stand up of testing and also the opportunity to do
 4 point-of-care testing as early as possible, so lateral
 5 flow tests for new pathogens, is really important work
 6 for actually understanding the virus much earlier.

7 **LADY HALLETT:** Just going back to your point about -- on
 8 transmission, it was a reasonable place to start, but
 9 didn't we already know, by the time the pandemic hit us,
 10 that SARS was a virus from the original SARS -- what do
 11 you call it, SARS-CoV-1?

12 **A.** Effectively, yeah.

13 **LADY HALLETT:** That that was airborne, didn't we already
 14 know that?

15 **A.** I'm not a virology expert in that area, but I don't
 16 think -- I mean, we have different viruses, they don't
 17 cause this element of severity that we've had during
 18 this time. And I don't think anybody ruled out, in fact
 19 I haven't heard anybody, and I'm not saying either that
 20 airborne transmission was ruled out. It's the
 21 proportion which is the tricky part, and I think what
 22 we've absolutely seen is the proportion, both of that
 23 and of asymptomatic transmission as well, has turned out
 24 to be much more significant than was, I think, put in
 25 the sort of frame at the start of the pandemic.

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1 fomite and droplet based -- it was based on historic
 2 evidence of near relatives, if you like, in virological
 3 terms. But actually we now have a whole lot of
 4 information on this one, so we're starting with
 5 a different evidence base.

6 And I think the two areas which I know my Lady
 7 will know from Module 2 before -- I call it
 8 a sensitivity analysis -- that when you're starting off
 9 looking, we need to broaden the area that we are
 10 thinking about in detail and in planning. And so things
 11 like asymptomatic transmission and the relevant --
 12 you know, the relative proportion of transmission by
 13 different routes, needs to be thought through, I think,
 14 with more clarity at the start. I think all of the --
 15 it was a reasonable assumption to start with what we
 16 knew, but clearly the evidence has grown and changed as
 17 we've gone forward.

18 **Q.** So if there were a new coronavirus, would the assumption
 19 be that it's droplet, fomite and airborne?

20 **A.** It would be very bad practice to assume anything. It
 21 would be a good starting place because that is exactly
 22 what we have seen and grown now, and then we would need
 23 to continue to explore that. And I think the importance
 24 of testing, we did not have testing capacity at the
 25 start of the pandemic to investigate some of this in

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1 **LADY HALLETT:** But I've heard from, as you may have
 2 gathered, quite a few IPC specialists, and they seem to
 3 become rather wedded to the idea that it wasn't
 4 airborne. And so I'm just really, I suppose, "using"
 5 you as an expert in other areas: should they not have
 6 been thinking about the possibility it was airborne,
 7 from very early on?

8 **A.** I think the evidence -- I might struggle to point you to
 9 individual papers, but a lot of the evidence we have
 10 including at SAGE, for example, says that it talks about
 11 airborne transmission. What it doesn't do is talk about
 12 it as a major or high proportion of the transmission
 13 risk, and I think that's the element which you learn as
 14 you go forward. And to be honest, even now, I'm not
 15 sure we do have a really strong estimate of what it is.
 16 I think everybody accepts it's there and it's
 17 significantly higher than was accounted for at the
 18 start.

19 **MS CAREY:** I need to correct one thing, I think the World
 20 Health Organisation tweeted it wasn't airborne at the
 21 beginning --

22 **A.** I agree.

23 **Q.** -- but we put that as an anomaly.

24 **A.** I think CMO made a point about that, that it probably --
 25 I think most people recognise that there is a spectrum of

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1 transmission normally, and it tends to be at one end or
2 another and you can have multiple routes of
3 transmission, it tends to be one or another or a bit of
4 these two. And it's as you get used to the pathogen and
5 more research is done, it becomes much more evident than
6 which of the critical transmission routes.

7 **Q.** Is UKHSA doing any work to ascertain the amount -- my
8 words -- of virus that is contained in droplets as
9 opposed to transmitted via aerosols?

10 **A.** I would not be able to give you a list of all of the
11 research that we're doing. Along with many other
12 organisations, we have funded research from NIHR and we
13 work with other organisations. We definitely have
14 research I know you're aware of in relation to
15 respiratory protective equipment and we do routinely do
16 work on IPC and so one of the really important studies,
17 I think, from this pandemic has been the SIREN study
18 which I mentioned, that was an urgent public health
19 study and that is continuing including work on IPC.

20 **Q.** May I just ask you about one matter Professor Hopkins
21 told us about. We had an exchange about the terminology
22 used and whether it was helpful or otherwise to maintain
23 the airborne droplet terminology, or move it to far
24 field, near field, and perhaps other terminology in
25 between, and she told us there was some work ongoing,

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1 through what the implications were in another part of
2 the system. If I give an example, IPC guidance in
3 healthcare systems, was there an implication for
4 education or work front?

5 But obviously I would also try and professionally
6 keep up with developments and literally act as a spot
7 checker -- people were working at high pace -- and to
8 see if there were anomalies. It might be IPC, it might
9 be testing, you know. So it was much more of a checking
10 arrangement between systems than necessarily the detail
11 of the content. But if I saw things then I would flag
12 them and pull them out.

13 **Q.** I think that was in your role as DCMO, I'd like to ask
14 you though about a roundtable that you chaired
15 in January 2022 when you would have been CEO of UKHSA by
16 that stage. It's at your paragraph 6.26, if it helps
17 you, Professor.

18 But I think once Omicron had emerged
19 in January 2022 you chaired a roundtable discussion on
20 RPE and in particular FFP3 masks, attended by
21 representatives from DHSC, the four nations IPC cell,
22 NHS England, the Health and Safety Executive, and indeed
23 the public health agencies.

24 And could we have up on screen, please,
25 INQ000348432.

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1 but I wanted to try and get a sense from you. Is there
2 any timescale for when this terminology review is going
3 to be completed and then translated in due course
4 perhaps to new NIPCM guidance?

5 **A.** I think I would have to refer you back to
6 Professor Hopkins for that, I'm afraid, I don't have the
7 detail.

8 **Q.** She said there were a number of forums engaged in
9 looking at the terminology. I think where we got to
10 was, well, that's all well and good to look at it but
11 when is the product going to come? Perhaps if you could
12 ask her that would be extremely helpful.

13 **A.** I will.

14 **Q.** May I turn then perhaps to some IPC and PPE matters, and
15 I think you say in your statement that it was not your
16 role during the pandemic to author guidance but you
17 would be shown guidance and would sense check it as well
18 as contribute your understanding based on your knowledge
19 at the time.

20 What were you sense checking for, Professor?

21 **A.** So in the OCMO role, DCMO role, and particularly when
22 the triple lock was put on I would be sent guidance on
23 almost anything, mostly at 1 o'clock in the morning for
24 a one-hour turnaround and so a lot of what I was doing
25 was just trying to check that somebody had thought

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1 This is a summary of the discussion. It was
2 a couple of hours, the meeting, and I think you say in
3 your statement the purpose of the meeting was to ensure
4 that shared understanding of the current guidance, sense
5 check the guidance to ensure that it was clear:

6 "I had no personal authority to change the
7 guidance, that rested with the IPC cell."

8 But was there a concern that there were aspects of
9 the IPC guidance that was not clear?

10 **A.** So as I've noted before, I would often be asked to chair
11 meetings where we had quite a spread of colleagues
12 either across the health system or health and care, or
13 local authorities, having worked in those areas, and so
14 this was probably one of those meetings. I would be
15 able to understand different insights from where people
16 were reflecting their own practice.

17 There was quite a lot of noise about this time, so
18 this was the Omicron time, I seem to remember the
19 meeting was organised just before Christmas. And so
20 people were concerned, as it says here, about whether
21 the Omicron -- it was a new variant and people were
22 concerned about whether it was going to be more
23 transmissible, and as I think you've discussed, there
24 was still quite a lot of conversation, shall we say,
25 about FFP3s, fluid-resistant masks and the purpose for

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1 me in this, and this is probably from experience, is
2 actually to make sure we all know what the argument is
3 about, if there is one, and be clear what we can then --
4 need to do to resolve it.

5 And so having a meeting like this was to enable
6 all of those contributing to feel that they had a space
7 to explore that and see where the differences lay, if
8 there were any, and what we all needed to do about it.

9 **Q.** Can we scroll down, please, to the summary section,
10 beginning "Guidance". All the attendees, a number of
11 whom we are familiar with now, Professor, indeed have
12 heard from:

13 "... jointly noted that the UK IPC Guidance
14 already enables the use of FFP3 in appropriate risk
15 settings. However, there was some agreement that
16 further messaging may 'enable' appropriate wider use
17 where needed."

18 And it's that that I'd like to ask you about.

19 What was the concern given that UK IPC guidance
20 said FFP3 can be used, I think if you're risk assessed
21 and needed it or you are working in an AGP area or a hot
22 spot, why was there still concern in January 2022 that
23 there needed to be further messaging to enable wider use
24 of FFP3?

25 **A.** So I think some of this is actually about, you know, the
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1 translate to those on the ground that either want to ask
2 for it or have to risk assess and provide it?

3 **A.** So there's a human element to all of this and, as I say,
4 this is often where I end up in many of these meetings,
5 you will see me at random meetings on different topics,
6 because sometimes it just needs a connection between
7 organisations to allow people to understand what the
8 shared picture is and then feel able to go out and take
9 their message.

10 Now, in this case most of this utilisation will
11 have been in the NHS, and NHS were present. So from the
12 perspective of anyone who was sitting there, everybody
13 who was around the table knew what we'd all agreed and
14 then everybody would and should be supportive in giving
15 out a single message in any environment to say: this is
16 what is available and appropriate. That hadn't
17 necessarily, I think, for all the reasons we've heard,
18 been as clear up to that point.

19 The end result, at the end of the day it is the
20 employer's responsibility and the employer for most
21 frontline staff for this was actually the NHS.

22 **Q.** It may be that we'll ask this question of those
23 witnesses that are coming as well. It's just the mind
24 may be willing but it's the translation on the ground
25 that I'm struggling to see how this roundtable actively

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1 conversations about the evidence base but some of it
2 goes back to the insights which are reflected from the
3 work that Kevin Fenton did actually, which is not all
4 staff felt able to come forward and ask. So I think
5 many colleagues and I would agree with this, there is
6 a standard that has to be met for face coverings and
7 we've seen that from HSE and from the IPC guidance but
8 on an individual basis people could use FFP3s on a local
9 risk assessment and I think what came through the
10 meeting was that that was not happening for some reason,
11 whether it's because messaging from individual trusts
12 didn't -- wasn't landing correctly, whether people were
13 not coming forward and asking to do that, I wasn't sure.

14 But that was why we've got the word "enable"
15 there. The guidance itself wasn't changed, but what we
16 hoped it would do would support individuals who felt it
17 was appropriate, through their risk assessments and
18 individual requirements to get to use FFP3s. And there
19 was no shortage or anything at this time, this was
20 purely to support individuals to ask questions and to
21 use kit they felt was appropriate.

22 **Q.** May I ask, Professor, one understands the tenor of this
23 was to try and increase usage if people wanted it, felt
24 able to ask for it. But how is this practically, having
25 this discussion at the roundtable, actually going to

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1 helps the hospital or the employer enable more use of
2 FFP3 if it's wanted.

3 **A.** So that is a translational question for the NHS. That
4 happens with many areas but nevertheless it often is of
5 value, I think, to have senior representatives from
6 organisations to sit round, agree what they're all
7 agreeing, and make sure therefore that anybody in the
8 system knows this is what all of their seniors are
9 signed up to. It takes away some of the sometimes
10 erroneous dispute as a starting point.

11 **Q.** Underpinning a lot of the conversation or concern back
12 in the day was whether FFP3 is more protective or
13 otherwise than FRSM, and I'd like to piggyback on some
14 evidence Professor Hopkins gave because she told us that
15 certainly in a healthcare setting there was no evidence
16 that it was more protective, we looked at observational
17 studies that suggested it was, indeed there are lab
18 studies that suggest it was, but I'd like your help,
19 please, with what UKHSA was doing back in January 2022
20 in trying to design trials that might determine whether
21 FFP3 was more effective than FRSM. And if it helps you,
22 I think on 4 January, is it right, that UKHSA applied
23 for funding for a randomised control trial called
24 WIPPET?

25 **A.** Yes.

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1 **Q.** Can you help us with what WIPPET was, please.
 2 **A.** So WIPPET was a winter infection protection study to try
 3 and look at the use of face coverings, FFP3s and
 4 fluid-resistant surgical masks and, indeed, some funding
 5 was provided for that, initial funding which was
 6 utilised. It was rejected, I think at a second stage
 7 and I'm very happy to send you the detail because
 8 I think some of these funding applications will go in
 9 an initial phase and then it will go to a second phase,
 10 often rejected or challenged on methodology.

11 So certainly UKHSA was doing work then, it's
 12 an NIHR grant, to try and establish different mechanisms
 13 for exploring this work and then there was another
 14 study, a SURE study application to look at sessional use
 15 through a randomised control trial.

16 **Q.** Pausing there, we'll come to sessional use in
 17 a moment --

18 **LADY HALLETT:** Before you go any further, 4 January which
 19 year?

20 **A.** 2022.

21 **LADY HALLETT:** Thank you.

22 **MS CAREY:** My fault, I am so sorry.

23 **A.** We didn't exist until October '21, so ...

24 **MS CAREY:** The trial was designed to try and work out which
 25 if either of the masks provided the best protection and

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1 We can -- I can send you the detail of that.
 2 These are quite technically difficult ones so they will
 3 often be rejected or challenged, quite appropriately on
 4 methodology to get that right so we get an outcome,
 5 result. And I think it's not just UKHSA either, there
 6 will be a number of academic institutes around the
 7 country also who are doing similar work.

8 **Q.** The observational framework that you just spoke about,
 9 what are the kind of timescales we're looking at though
 10 to --

11 **A.** I would have to come back, because these are quite
 12 detailed research plans, so very happy to send that back
 13 to the Inquiry so you can see --

14 **Q.** And you mentioned the SURE study which was
 15 in April 2022, UKHSA applied for funding for the
 16 sessional use of respiratory protective equipment, SURE
 17 trial for short, to develop the evidence base around
 18 different strategies. What was the aim of this study?

19 **A.** Because we'd introduced and recommended sessional use
 20 and, again, I think there was a lot of validity in that
 21 but often healthcare workers also felt that was
 22 probably -- they didn't feel comfortable. So, again,
 23 it's one of these areas, we just need to work out and
 24 get a really strong evidence base behind. That
 25 application I think was rejected, again for

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1 you have explained, I think there, that it perhaps
 2 didn't go ahead. It begs the question, what is being
 3 done now to determine what is undoubtedly a really
 4 important question for a number of healthcare workers
 5 who wanted FFP3, felt they were more protected by FFP3,
 6 even if in fact it may turn out in a study to be less
 7 protective or not as protective as they hoped.

8 **A.** I might make a comment on the evidence base in a moment
 9 but in terms of this, so I think there were two studies,
 10 the WIPPET one and then SURE which was a similar one
 11 about sessional use, so clearly actively exploring
 12 these.

13 But I think UKHSA absolutely recognises that this
 14 is an area that we need to get much more certainty. And
 15 so we have put in a small amount of -- and we're not
 16 a funding organisation but we've put in a small amount
 17 of funding internally ourselves to develop
 18 an observational framework so that we can move to assess
 19 mask use in healthcare workers. We're doing some work
 20 within the SIREN study which is possible, and then
 21 I think overall we've got studies focused on experience
 22 of users, how to assess that, so the framework, and then
 23 policy around it.

24 But -- and I think we will be trying to obviously
 25 move towards other studies as well.

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1 methodological reasons, it needed a particular cluster
 2 randomised trial study. So I think the best thing I can
 3 do is probably send you the detail of the active work
 4 that's ongoing and we can look as well if we are aware
 5 of other research institutes.

6 **Q.** Can you just help me to this extent. Was the purpose of
 7 the SURE trial to work out whether sessional use is in
 8 fact safe?

9 **A.** We would not have introduced it as an approach if we
 10 didn't think it was safe during the pandemic. That goes
 11 without saying. But I think it's more how effective are
 12 things and what is more effective than anything else.
 13 And these are all questions which you're very familiar
 14 with from all of the Inquiry participants.

15 **LADY HALLETT:** But these are questions that don't just
 16 affect us in the UK, they affect people around the
 17 world.

18 **A.** Yes.

19 **LADY HALLETT:** So presumably other countries are doing
 20 research?

21 **A.** They do, many of our -- many, many people in UKHSA have
 22 counterparts, if you like, working on different things
 23 overseas and often there will be trials, we've got
 24 a research, an online research database that might be
 25 looking at Mpox or it might be looking at something like

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1 this. We have a particular -- we have a lab and we have
 2 a set of a hospital ward in a science hub in Porton Down
 3 where we can actually test out some of these things and
 4 some of that research has been assessed here. But it
 5 does -- it needs funding and it needs a plan with it so
 6 I think probably the best thing is if I can set out for
 7 you what we actually have in train at the moment in,
 8 some of the studies that have taken place.

9 **MS CAREY:** Can I ask you about testing of hospital
 10 inpatients and indeed testing of frontline staff and I'm
 11 aware there is another module looking at testing. But
 12 her Ladyship has heard a number of witnesses and experts
 13 urge and urge strongly that in the event of a future
 14 pandemic the need to get testing up and running as soon
 15 as possible is absolutely key, for example to keeping
 16 patients safe, working out if patients have the disease,
 17 dealing with asymptomatic people, dealing with
 18 healthcare-acquired infections -- across the board.

19 Can you just summarise, if you're able to, what is
 20 UKHSA's ability now to roll out testing more quickly
 21 than perhaps had happened at the beginning of the
 22 pandemic in March 2020.

23 **A.** So just to -- again, I'll just be boring on the
 24 responsibilities. There were different pillars of
 25 testing which we'll come on to that obviously a lot of

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1 one prepares for pathogens for the future, but I think
 2 that is in a very different place to where it was. It
 3 is still the NHS responsibility and was then to be
 4 testing their staff.

5 **Q.** We've heard also about a desire for more testing to
 6 enable more visitors to be able to attend either
 7 end-of-life visits, maternity services and perhaps many
 8 other different settings in between. And I think
 9 everyone understands that there will be priorities. But
 10 what about the availability or ability to roll out the
 11 testing so that it's more widespreadly available to
 12 enable more visiting?

13 **A.** So two points. If we just talking testing and that's
 14 not my main comment but I know that's the focus of your
 15 answer. The real game changer was around getting
 16 lateral flow devices, and so UKHSA is doing work
 17 currently at Porton Down. We still monitor and check
 18 that the current LFDs will work against new variants,
 19 that goes on all the time, but we're also doing work
 20 under a diagnostics accelerator to try and ensure that,
 21 effectively, we can get LFDs up and running as quickly
 22 as possible for new pathogens. Now, none of that is
 23 assured, but there is a very new focus on doing that.

24 The wider point I want to make, which you may not
 25 welcome, it's around hierarchies of control, because

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1 people are referring to them, the mask community
 2 testing. But in terms of what happens if we have a new
 3 pathogen, so in fact the reason we got this test running
 4 pretty quickly, very quickly, was because there had been
 5 preceding work internationally over the prior five or
 6 ten years to actually look at a bank of coronavirus
 7 tests so that they could be tweaked effectively when
 8 this pathogen arrived. So, in fact, the actual initial
 9 test was done very, very quickly by PHE and then could
 10 be ramped up to a small number of specialist
 11 laboratories.

12 The difficulty is in the stretch out from there.
 13 So we are doing work on priority pathogens, so what do
 14 we think is the most likely next critical pathogen to
 15 come along. There's international work as well, we're
 16 linked into that. And then looking at how rapidly we
 17 can roll out and there does need to be -- there's
 18 a safety issue around HCID about when different labs can
 19 handle different pathogens which we need to be aware of,
 20 but on the assumption they can roll out it's then
 21 UKHSA's opportunity to roll out to NHS labs and then
 22 they can continue that testing for inpatients.

23 So there is national work on testing capacity and
 24 it is much clearer than it was. It won't go -- I mean,
 25 obviously there are political decisions about how far

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1 a test is a tiny, tiny part of the IPC control and in
 2 fact if you have visitors, you're saying you have
 3 a test, an LFD, they're brilliant at saying, "Ah, you
 4 infectious at this minute". Really good. They wouldn't
 5 necessarily be telling you you're infectious the next
 6 day, so there's an issue about how often you do them.
 7 But, equally, if visitors -- there's a learning where we
 8 need to learn together, I think, particularly for
 9 regular visitors, where there's always a risk of
 10 bringing in infection from community and hospitals or
 11 care homes have a duty to protect all of their patients
 12 and all of their staff, not just the individual patient.

13 And so this balance is important. And I think the
 14 more shared understanding there is of that hierarchy of
 15 control just about how you move around a building, about
 16 ventilation which we haven't mentioned much is really
 17 important, just as important, actually, as that test.

18 **Q.** Can I turn to some comments you make in your second
 19 statement starting at page 34, please Professor. And we
 20 touched on some of the work you were doing in relation
 21 to occupational risk and then there's a section
 22 beginning ethnicity. And I think you've commented on
 23 a number of pieces and guidance, not all of which was
 24 healthcare guidance, some of which was social care
 25 guidance, but I just wanted to understand really what

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1 your concerns were that you were setting out at
 2 paragraph 7.2 onwards, relating to risk reduction
 3 frameworks and the undoubted risk there is to people
 4 from a black, Asian and minority ethnic community, as
 5 Professor Fenton's inequalities report brought to the
 6 fore.

7 **A.** I'm afraid I don't have the page in front of me, but I
 8 think I -- yes, I know what you're referring to.

9 So my concern is about the long-term support and
 10 reduction in harm, and the risk of running to
 11 conclusions on very early data without really
 12 understanding what sitting behind them.

13 My anxiety was we would be doing, if you like,
 14 tick box exercises -- I'm summarising for brevity --
 15 without really understanding what was sitting behind the
 16 data.

17 So in fact and I think Professor Whitty said this,
 18 if you look at those who were impacted most particularly
 19 in numbers on the first wave and the second wave, you
 20 immediately see that we have those of black African
 21 heritage, Caribbean African heritage on the first wave,
 22 and -- it was in London, and we know that somewhere near
 23 45% of the healthcare worker staff who are supporting
 24 running public services are from those heritage, and
 25 then if we move then to the next wave, that is not the

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1 **Q.** Can I ask you about an email that might bring to the
 2 fore some of those problems, at INQ000152140, please.
 3 Which should be an email involving you -- yes, thank
 4 you -- in June 2020. And at the bottom of the page you
 5 had been asked by the Government Equalities Office for
 6 support for some questions summarise below and it says:
 7 "A question regarding what you are looking for
 8 with regards to guidances that are sent your way. I
 9 expect we can go back and state that ensuring that:
 10 appropriate stakeholders have engaged, and in the
 11 right channels are followed ..."

12 But essentially you were being asked some
 13 questions about signing off new guidance, which also
 14 involved guidance going to the BAME communities, and
 15 that then resulted in your response on the first page,
 16 saying:

17 "... this is quite tricky and might benefit from
 18 a ... pragmatic, unminuted confession with GEO, to get
 19 [a] shared understanding of what is and is not
 20 possible."

21 And there's key things they should be aware of:
 22 "[There are] a number of different 'tools' being
 23 developed which will incorporate ethnicity risk --
 24 there is potential for these to be picked up
 25 deferentially".

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1 ethnic group that's affected, it's south-east Asian.
 2 So it's very clear that that is not a biological
 3 ethnicity issue, there are some small variations, it is
 4 actually a representational issue, and so my anxiety,
 5 and I was possibly a little bit outspoken in some of
 6 these areas, was that by only looking at that immediate
 7 knee-jerk reaction, and doing what are quite
 8 superficial, in some ways, risk assessments, we would
 9 miss the point that we do not have appropriate
 10 representation through all of our ranks, through our
 11 senior NHS.

12 And I think in some of these conversations, I was
 13 very anxious. So we had, for example, pregnant women
 14 just being told not to go into work, not being allowed
 15 to go into work, or senior individuals potentially being
 16 taken off the frontline, just at the point when we're
 17 starting to reasonably, still not right, get appropriate
 18 representation of ethnicity, through our health services
 19 and our public services, to truly represent the
 20 communities that we serve.

21 And so it's an area where, again, I've been in the
 22 public system for a long time, we have not seen much
 23 movement, and I was concerned this would actually be
 24 a retrograde step if we weren't honest about what was
 25 sitting underneath it.

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1 What did you mean by that?
 2 **A.** So this goes back to QCovid, so one of the things about
 3 QCovid was that it effectively pulls in a whole load of
 4 data, and not only did it inform the clinically
 5 extremely vulnerable group and support appropriate
 6 individuals being pushed upwards into a higher
 7 vaccination group and safety, it also was designed to
 8 allow an individual to have a conversation with their GP
 9 about their own individual risks. So -- but what we had
 10 at the time was a multiplicity of everybody developing
 11 some sort of tool to put in occupational settings.
 12 There was actually a review, which I think I've quoted
 13 in my statement, which looked at about a dozen of these
 14 different tools which were being advocated, including
 15 one which was being advocated in the NHS, I think.

16 And the only one that was suggested as suitable
 17 for community settings, for -- all of them were for
 18 hospital settings, the only one that was supported was
 19 actually QCovid, which at the time was not completed, it
 20 suggested it needed to go out for peer review and
 21 validation, which it did, and it passed with flying
 22 colours, it was assessed by ONS and other external
 23 bodies. None of the others did.

24 Now, when it comes back to this particular issue,
 25 again, my concern was different people will be going and

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1 getting different, unvalidated answers, having wrong
 2 risk perception, and then, again, coming away either
 3 worried from their work, making decisions about their
 4 work which disadvantaged them and their families in the
 5 long-term, and there was no control on this, which was
 6 why everybody agreed to use the QCovid tool.

7 **Q.** Right, so a proliferation of tools at the beginning was
 8 unhelpful for the reasons you've just set out. You say
 9 there is a very poor understanding of the comparative or
 10 combined risk in most discussions you've had. Whose was
 11 the poor understanding?

12 **A.** Just generally, around the systems. Again, and I'm not
 13 trying to pick on the NHS here, what they were trying to
 14 do was answer the concerns -- quite reasonable fear,
 15 I think, and concerns of their workforce.

16 The difficulty is, though and, I tend to use, say,
 17 two examples, if you are -- if you were a young, black,
 18 24-year-old footballer in London, your risk was probably
 19 still very, very low. But if you were white, with --
 20 immunocompromised, whatever -- the risks would be very
 21 different. And what you needed was a tool.

22 Now, overall, there are a number of underlying
 23 health conditions which are much more prevalent in
 24 people from different ethnic minorities, and the whole
 25 point here is it needs a proper risk assessment with all
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1 took proportionate action.

2 And, you know, many people were very frightened at
 3 this stage. So it was, in some ways, some of the risk
 4 tools, I think, were actioned, some of the language, the
 5 narrative, was making, I think, concerns worse in many
 6 places.

7 **Q.** You say some interventions which are really practical
 8 and would help will not land well in the current context
 9 of inequalities. What were you talking about here?

10 **A.** Well, these are the wider societal ones. I mean, it's
 11 probably why I said at the start, you know, often when
 12 you're asked to respond -- and I'm being very open and
 13 honest here -- people want -- there is a problem, people
 14 want to see an answer. But actually the same problems
 15 follow infectious disease around, which you will have
 16 heard through this, and we need to understand those.
 17 I mean, if there are, for example -- I think most of the
 18 differential outcomes, actually, in current data is
 19 gone. Once you take away things like vaccination,
 20 underlying health conditions, the obvious thing here
 21 just as an example would be, why are we not paying the
 22 same attention to cardiac events in south Asian males,
 23 for example, routinely and looking at the data? We
 24 shouldn't just be trying to put in another layer of PPE
 25 now.

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1 the right parameters going in, not just to, suddenly,
 2 you are this or you are that and you are boxed. And,
 3 again, I say my concern was that we would end up with
 4 illogical responses which actually disadvantaged people
 5 in the long run.

6 **Q.** The QCovid tool, though, identified people who were at
 7 higher risk of infection and/or mortality as
 8 I understand it --

9 **A.** Yes.

10 **Q.** -- so I understand it being helpful on saying yes,
 11 you're more at risk, but it doesn't necessarily help you
 12 work out how to then risk assess and put in practical
 13 implications -- sorry, practical measures to stop you
 14 getting infected.

15 **A.** Well, when it was up and running, it did. And in fact
 16 what we tried to do, this is probably a recommendation
 17 about occupational health because there is no single and
 18 national occupational health system, but had there been,
 19 we could have rolled out the QCovid so that with your
 20 occupational health clinician, you had a conversation
 21 where you put in your own risk factors, and effectively
 22 it will give a relative risk or an absolute risk of
 23 severe outcomes or mortality from Covid.

24 And it would combine those risk factors so people
 25 had a proportionate understanding of their risk and then
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1 **Q.** And finally in relation to this email, please, you say:

2 "I am very fearful that we will get reverse
 3 inequality longterm if we are not very careful how this
 4 is managed: for example lack of BAME opportunity in
 5 senior positions -- for example BAME banished from
 6 frontline roles and therefore career development in
 7 [NHS England], where the trend in equality has only just
 8 started to turn."

9 I am asked to ask you if you could clarify what
 10 you meant by the phrase "reverse inequality" and what
 11 specific concerns were worrying you.

12 **A.** Well, I mean, this is just an example, but we know that
 13 we don't have equitable representation of our
 14 communities at different levels through our services, so
 15 even if I look at UK Health Security Agency where I am
 16 passionate about trying to getting diversity and
 17 equality, I haven't managed it in my top team. We are
 18 over-represented in some of our lower grades but we
 19 still don't have it right despite proactive trying in
 20 our -- in our more senior posts, and that is absolutely
 21 classic across the system. And any intervention like
 22 this where you suddenly start, effectively, although
 23 done with the right intentions, targeting people and
 24 moving them out of post, their careers will go backwards
 25 as well. They don't have the experience for two or
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1 three years during the pandemic, and then we're back to
2 square one.

3 So it was really to be possibly running a bit
4 against the tide, but to flag some of the risks of doing
5 this when we didn't have good indications of what the
6 true risk to individuals were.

7 **Q.** And finally on this topic, appreciating that you are not
8 responsible for employer practices as we do, are you
9 able to help, though, with what, if any, further action
10 can be taken in healthcare settings to protect ethnic
11 minority healthcare workers from higher risk of
12 infection and, dare I say it, higher risk of mortality?

13 **A.** So many -- going back to these points here, many of
14 the -- in fact, the vast majority, if you look at data
15 now, I mean, I may not be up with all of the latest
16 detail of it, so please do refer to other colleagues, so
17 people like Kamlesh Khunti who I know who has
18 contributed and I worked with, with Kevin Fenton at the
19 time.

20 Many of those differences can be taken out of the
21 data. They are not directly related to the infection.
22 The infection is following round systems of inequality.
23 So, high occupation houses, particularly roles where
24 people are public-facing frequently -- so we've had
25 conversation about healthcare workers, but actually

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1 Every hospital trust has a director for infection
2 prevention control. They will work with their
3 engineers. There's some really, really skilled people
4 around the system. So the question is, is that thinking
5 represented in the IPC?

6 The other thing I would just flag is, as you will
7 have seen, there are sometimes differences, you know
8 antigroup thing, between UKHSA science positions and
9 a practical position. That is an important distinction
10 and neither is incorrect. And I think the question
11 might be, where do you want that science to feed in
12 because we do have environmental scientists feeding into
13 UKHSA advice. We have research running down at Porton
14 Down, for example. The question is, and I'm not
15 suggesting it should all be in UKHSA either, I thought
16 the environmental group in SAGE was fabulous.

17 So my own view is the IPC cell is a practical
18 translation of advice into the health system and trying
19 to intersperse different skills there is quite
20 challenging. It's also important that the advice can be
21 utilised at a local level with the skills that are
22 there.

23 **LADY HALLETT:** Taking your point about the expertise that
24 exists around the country, if I got an impression, it
25 was that the guidance that came from the UK IPC cell was

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1 those healthcare workers were also the ones who are
2 mostly going out on transport during the pandemic, they
3 are the ones most exposed.

4 So we will always have inequalities until we have
5 equal representation across all of our public services.

6 **Q.** May I move finally, please, to some lessons learned and
7 recommendations, and a number of, perhaps, slightly
8 discrete topics but nonetheless ones we hope UKHSA will
9 be able to help us with.

10 We have heard, Professor, about the make-up of the
11 UK IPC cell, and there is potentially a recommendation
12 to be made around about expanding the make-up and
13 membership of that cell, including potentially some
14 specialisms that may be represented on the IPC cell. I
15 want to know, are you in a position to help as to what
16 other specialisms might be useful on such a cell?

17 **A.** I realise my facial expression may be giving my view on
18 this. We need to be very careful, I think, about having
19 groups that are functional in size. The more people you
20 get round, the more difficult it is to get somewhere.

21 The real question is, what is the skill set
22 missing and where should it be? And I think I agree
23 with Professor Hopkins' comments, I think she pushed
24 back quite hard on do we have these skills in the system
25 already?

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1 treated as the word of God and followed by everybody as
2 if this was the most highly specialised specialists in
3 the country and I suppose that's why I question, so your
4 very expert director of IPC in hospital will just --
5 I haven't yet decided but that's one of the things
6 that's worrying me, that it was taken as if this was
7 written in stone and everyone had to follow it, even if
8 people didn't really agree with it.

9 **A.** This may be a better question for NHS colleagues because
10 that's where it goes out. My experience is that if I go
11 around the other side of being a director of public
12 health, say, in Norwich and working directly with the
13 Acute Trust and with the Health Protection Agency then,
14 my experience is DIPCs are hugely experienced
15 individuals, they know their environments really well,
16 and so the trick is to get the guidance that comes out
17 to give the framework in as much detail as is needed but
18 then allow that to be translated in a local setting and
19 that is really important because, as I think Dr Shin
20 said, and many others, the NHS estate is so different
21 that just taking something and applying it
22 systematically absolutely everywhere is really difficult
23 to do and not necessarily helpful.

24 **LADY HALLETT:** Thank you.

25 **MS CAREY:** You mentioned the work of the environmental

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1 modelling group that was a subgroup I think of SAGE. We
2 understand that that's been stood down now that we're
3 not in the emergency phase of the pandemic but do
4 I understand from what you've just said that they are
5 nonetheless environmental scientists still working on
6 behalf of UKHSA to do the same kind of work that the EMG
7 did?

8 **A.** We have scientists working, for example, as I say in
9 Porton Down but, equally, Cath Noakes who was the chair
10 of that group -- again, I would have to come back with
11 the detail, I won't have it to hand -- but many of these
12 connections, or research work, she will be working most
13 certainly on pieces research and I wouldn't be surprised
14 if some of my staff are as well, but I'd have to try and
15 find it out. Some of that would move then into academic
16 research environments though, so it won't necessarily
17 sit within UKHSA and many of them will have or will be
18 applying for NIHR funding as well.

19 **Q.** A slightly different topic. Is UKHSA involved in any
20 work being undertaken as to whether the AGP list, the
21 aerosol-generating procedures list should remain as
22 a list and if so what procedures should be on it?

23 **A.** So clearly that didn't end in -- I think we can see that
24 there is -- the position it's got to is a practical one
25 in the sense of there was a scientific position and

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1 I think that's important because the issue I think
2 you're raising is how does this land, if you like,
3 effectively and sensibly with frontline workers.

4 The NIPCM is now on the NHSE site. We have done a
5 piece of work to ensure that the roles and
6 responsibilities are clearly set out. I always thought
7 they were clear before but clearly that's not how has
8 been portrayed through this Inquiry, so I think we've
9 done that piece of work and that has been agreed with
10 Department for Health and with NHS England.

11 So the short answer to your question is that
12 should be the NHS, always has been but will be clear
13 it's disseminating.

14 In terms of the Friday night thing, and I think
15 Sir Chris Whitty gave a similar answer. I mean, I have
16 been guilty of sending things out on a Friday night on
17 occasion but we always think really carefully. So if it
18 was, for example, an infectious disease outbreak, you
19 know, are we putting out a press notice at 6 o'clock at
20 night to frighten everybody over the weekend, do we need
21 to? Sometimes we do because we need to alert the public
22 or workers in a hospital. You can imagine a Novichok
23 incident, for example. But generally we know that
24 putting things out -- we have Friday as a no publication
25 day unless we absolutely need to. In fact, you'll see

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1 another one -- I think this is one of the areas along
2 with the FFP3s, and AGPs is one we need to resolve, but
3 that is actually an international debate, as well, it is
4 not simply a UK debate.

5 **Q.** But is UKHSA involved in AGPs?

6 **A.** Again, I think the best thing I can do with all of the
7 detailed research is -- this is not an area that I will
8 personally be directly involved with each day so let me
9 come back and identify against the key topics where
10 there are research programmes running that we're aware
11 of and involved in.

12 **MS CAREY:** My Lady, I have about five minutes left.

13 I wonder if I might finish and then we take a break, if
14 that's convenient.

15 **LADY HALLETT:** Yes, of course.

16 **MS CAREY:** Can I ask you about this. We've heard about the
17 proliferation of guidance that was issued, invariable
18 late on a Friday, some of which had PHE's name attached
19 to it and that having to be trickled down and then
20 implemented in the hospitals and the like. And there
21 may be an urge for a more streamlined process and if
22 there can be more streamlining what would it look like?

23 **A.** Well, I think just to go back to that. Clearly I wasn't
24 directly involved in that but PHE published, it was not
25 the author, it was definitely not the disseminator, and

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1 all of UKHSA's standard data, whether it's TB,
2 infectious diseases, what have you, our standard
3 publication day is Thursday exactly for that reason.

4 **Q.** Different topic again, please, hibernated studies.

5 Module 3 has heard from Professors Brightling and Evans
6 in relation to Long Covid and hibernated studies that
7 were woken up, for want of a better phrase, in the
8 pandemic. Is UKHSA involved in ensuring that there may
9 be hibernated studies that are capable of being brought
10 to life in the event of a future pandemic?

11 **A.** So just so I make sure I'm on the same -- I think these
12 are NIHR hibernated studies --

13 **Q.** They are.

14 **A.** -- which effectively is when there is an incident we
15 step up. So the ones that we would be involved with
16 would be around things like early infection risk,
17 understanding the pathogen, there is now a new framework
18 actually which included cross-government framework which
19 Lucy Chappell, the Chief Scientific Adviser in the
20 Department of Health worked on, we've been part of those
21 conversations. It runs with some of the testing as
22 well. So we are definitely involved with some of those.
23 The more clinical side of things, I think you raised
24 that on -- probably on a Long Covid basis, we wouldn't
25 be involved with.

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1 **Q.** Communications generally, and the balance of the message
2 that is put out, that is something that you have already
3 touched on, Professor. But can I ask you, what are the
4 risks of being more transparent with the public in
5 future that maybe hospitals are overwhelmed or
6 nosocomial infection rates are on the rise? How could
7 that potentially fear-engendering communication be
8 mitigated to encourage people to still come into
9 hospital or seek treatment?

10 **A.** Most good public health interventions are based on
11 a background of trust whether that be around infection
12 control or whether it be about vaccination and certainly
13 for UKHSA we have the opportunity quite unusually of
14 being a relatively new organisation and so I have set
15 out to say we will always be transparent with what we
16 do, and you will have seen I think in some of the work,
17 Dr Shin and colleagues' report about some of our
18 appraisals for example, they are up on the website and
19 very clear. We go out early with technology,
20 technological briefings, for example, about variants.

21 So there's what do we do routinely that generates
22 background trust, and then on some of the data there is
23 a point, I think, which is a wider issue about the
24 public being used to what might happen during
25 a pandemic, what normal looks like, rather than

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1 be able to understand where true risks are and then be
2 able to take action.

3 **Q.** Finally this from me, please. If there were one
4 recommendation you would urge her Ladyship to consider
5 on UKHSA's behalf to make the response of the health
6 system next time, what would it be?

7 **A.** Data. I'm afraid it's a recurrent theme and it's a huge
8 theme but much of our work is around interpreting data.
9 It needs to be robust. The more variables we have the
10 more information we can provide, the sooner we have it,
11 the earlier we can give advice and take action and
12 protect lives.

13 **MS CAREY:** My Lady, those are all my questions.

14 **LADY HALLETT:** Thank you very much. I will return at 3.20.

15 And a warning to all Core Participants: do not expect
16 any generosity from me this afternoon.

17 (3.06 pm)

(A short break)

19 (3.20 pm)

20 **LADY HALLETT:** Mr Wagner.

Questions from MR WAGNER

22 **MR WAGNER:** Good afternoon, Professor Harries, my name is
23 Adam Wagner and I asked questions on behalf of the
24 Clinically Vulnerable Families Group.

25 First, I want to ask you about masks. You were

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1 everybody suddenly focusing in when there's a calamity.

2 Now, that's easier said than done. I don't hold
3 the NHS data. We do model for the NHS in these sorts of
4 incidents but I think again that's probably one for
5 those instances better reflected back to NHS colleagues.

6 **Q.** Is UKHSA involved in any way in monitoring the deaths of
7 healthcare workers in the event of a future pandemic?

8 **A.** Only in the sense of we will be party to things like you
9 will have heard of the CO-CIN -- so we use data that
10 comes through in order for us to understand early viral
11 characteristics and things like the early data we'll try
12 and indicate any clinical risks or any occupational
13 risks and certainly during the pandemic, exactly as
14 Sir Chris Whitty said, I would see data coming through,
15 recognising, as someone pointed out, I think, that it is
16 not complete and sometimes we are not -- we don't
17 distinguish, you know, we have healthcare workers and
18 different data on a social care side for example.

19 So there is, I think, a wider discussion to have,
20 again looking forward, around death certification
21 because it doesn't currently have ethnicity for a number
22 of very good reasons. But actually the more we
23 understand about occupation, about ethnicity and about
24 other characteristics, and that could almost certainly
25 be within a data link system, the more quickly we will

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1 asked by Ms Carey earlier about the January 2022
2 roundtable discussion on RPE and the minutes of that
3 say -- that you were shown, say UK IPC guidance already
4 enables the use of FFP3 in appropriate risk settings and
5 that further messaging may enable wider use where
6 needed.

7 Do you recall any discussion about whether the use
8 of FFP3 masks should be enabled for patients,
9 particularly those who are clinically vulnerable in
10 appropriate, that is sort of high-risk, settings for
11 example attending hospitals or other healthcare
12 environments?

13 **A.** I think I made an earlier point here people should be
14 enabled to wear what they wish so long as it's safe,
15 which I think a broad point but not directly answering
16 the one you have made. That meeting was very much
17 around advice to healthcare workers, I think, not more
18 broadly, but it did also pick up conversations about use
19 of face coverings and masks for patients because of the
20 importance around nosocomial infection.

21 But I think what you will have heard from other
22 colleagues, probably more expert than me in this area,
23 so Professor Hopkins and Professor Sir Chris Whitty
24 said -- I think there was no recommendation including
25 from the expert group from Dr Shin and colleagues to

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1 recommend anything other than FRSMs for patients and
 2 there are a number of reasons for that. I think
 3 Professor Whitty flagged some of the issues of handling
 4 them and also the issues of fit testing, as well, to
 5 make them very effective.

6 **Q.** And you said earlier that if a patient comes in wanting
 7 to wear an FFP3 mask they should be permitted as long as
 8 it's safe, and you said because it makes them feel
 9 safer. Would you agree that FFP3 masks, if fit tested,
 10 mean that the patient, a clinically vulnerable patient
 11 is safer, they just don't feel safer they are safer from
 12 contracting Covid or other respiratory illnesses?

13 **A.** Well, the evidence that we've -- not necessarily myself
 14 today but others have discussed here has actually been
 15 very much around debating the effectiveness, the
 16 differential effectiveness of different masks and again
 17 I would go back to this hierarchy of controls because
 18 the thing which is most important to those individuals
 19 is that the setting that they're working in is sitting
 20 within that hierarchy of controls. PPE is just the very
 21 last step in that point. So I would be most concerned
 22 that hospitals were keeping up to step with all of the
 23 other areas.

24 My point is I don't think -- we don't want to
 25 be -- well, I certainly wouldn't want to be telling

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1 cluster trial so that you get the right comparison. So
 2 yes, they are technically very difficult. Yes, UKHSA
 3 has put in to try and do some of those sorts of trials,
 4 but actually this isn't -- I think there's been some
 5 earlier sort of debate about whether everybody is
 6 looking for an RCT and therefore we should only look at
 7 observational studies, but in fact the evidence I think
 8 which Dr Shin provided was a meta-analysis which
 9 included something like 21 observational studies. So
 10 the -- which -- you know, broadly the evidence has been
 11 the same from both the expert witnesses and from those
 12 who are working in the field.

13 So I think the evidence can be explored more and
 14 I think will be beneficial to everybody whether it be
 15 healthcare workers, those providing guidance or
 16 clinically extremely vulnerable and individuals
 17 themselves.

18 **Q.** Do you agree that there is a real risk if people are
 19 waiting for the, what would be the gold standard in, for
 20 example, drug trials, of RCT evidence, in relation to
 21 an area in which you're just not going to get that and
 22 yet there is a lot of observational evidence which shows
 23 -- which comes up with a positive outcome?

24 **A.** We always work on the best evidence that we have and
 25 we're working from predominantly observational studies

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1 other people what to do when there is no harm associated
 2 with what it is they are trying to do. There's
 3 a difference between feeling safe and effective PPE and
 4 I think from our earlier conversations I'm equally
 5 supportive that FRSMs, from the evidence that we have
 6 now, in practice are effective.

7 **Q.** Sorry, can you just explain what you mean by that last
 8 comment?

9 **A.** Well, I'm not distinguishing between the evidence for
 10 example that I think Professor Hopkins gave, certainly
 11 others have, and including Dr Shin and Co, that say the
 12 evidence of effectiveness in use, in clinical use,
 13 between FFP3s and FRSMs is very, very small. And so the
 14 same I think will apply to individuals in the clinically
 15 extremely vulnerable group.

16 **Q.** Picking up the point about evidence. Do you agree it's
 17 difficult, maybe even impossible to obtain randomly
 18 control trial evidence in relation to the success or
 19 otherwise of FFP3 masks in hospital settings?

20 **A.** So I think, as I was saying earlier, and we were
 21 discussing some of the research proposals, in fact one
 22 of the reasons that one of those research proposals has
 23 not gone through is because and again, I think
 24 Professor Whitty said this, actually, it probably needs
 25 to be looked at in a methodology called a randomised

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1 now and the best evidence is agreement between Dr Shin,
 2 who is the expert, and colleagues who provided it,
 3 Dr Hopkins, Chief Medical Officer, I'm not actually
 4 seeing a difference in their views of effectiveness and
 5 the majority of that evidence is currently on
 6 observational studies. I think it would be helpful to
 7 have some RCTs and UKHSA is applying to try and promote
 8 that line of investigation.

9 **Q.** Can I ask you about mask abuse. Are you aware that many
 10 clinically vulnerable people who choose to wear a face
 11 mask today have experienced mask abuse, so people being
 12 abusive towards them because they're wearing a mask?

13 **A.** I am aware of it obviously just from the media.
 14 I haven't had individuals that I know in that -- in that
 15 -- who are clinically extremely vulnerable experience it
 16 themselves, but I absolutely acknowledge it. But
 17 I think this is -- any form of abuse is unacceptable.

18 **Q.** Would it be a good idea to have some sort of public
 19 information campaign explaining to the general public
 20 that some people reasonably continue to wear masks today
 21 because they remain at high risk of Covid-19 which
 22 continues to circulate?

23 **A.** I think this is a much broader conversation. One of the
 24 things that has struck me in some of these conversations
 25 is that we're now with Covid in exactly the same place

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1 as we are with flu or RSV or any other pathogens and we
2 will have groups of individuals across the population
3 who, unfortunately for them, will always be at
4 a slightly increased risk. So I think, going out with
5 a sort of specific Covid-19 wearing a mask campaign is
6 probably not the right thing to do. Getting a wider
7 understanding of the risks of pathogens and how they can
8 be prevented and how individuals can be supported is
9 a really important thing to do and that actually will
10 feed in not only to supporting individuals in that
11 group, but the public's understanding of how they could
12 respond if we have another pandemic.

13 **Q.** But that could include mask wearing, couldn't it? Even
14 if it's wider than --

15 **A.** Many nations wear masks routinely; I mean, if you go to
16 Korea in the flu season, routinely people will wear
17 a face covering.

18 **Q.** So I think you're not disagreeing that some sort
19 of public information campaign of that kind, of that
20 wide a kind would be good --

21 **A.** I don't think that was exactly what I was saying. What
22 I was saying was educating the public so people are more
23 accepting would be quite a positive thing to do, but
24 I think it needs to be in a wider context and certainly
25 not just in relation to Covid-19.

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1 also have heard me say, when this programme went in, it
2 was recognised that this was an imperfect way of
3 supporting people, protecting them. So I think we were
4 clear at the start that we were supporting to the best
5 position we could, rather than necessarily ending with
6 a perfect programme.

7 Obviously many of the support things -- my role in
8 this was very much about trying to identify those
9 individuals that we thought were plausibly most at risk
10 when we had very little information, and that has
11 changed as well a little bit, obviously, since
12 vaccination and with QCovid and our understanding of
13 risk.

14 The actual support elements sit with other parts
15 of government, and that's not for me to opt out, but it
16 is -- it wasn't for me to make those decisions. It was
17 difficult, though, because I -- I mean, in supporting
18 them, I know there were many conversations about how it
19 could be achieved. And one of the difficulties was
20 actually there was always a connection somewhere. There
21 was always somebody who needed support or a family
22 member or something else, and to try and manage any
23 further support equitably was quite challenging in
24 itself in organisational terms, and I think you can see
25 that coming through some of the email chains. You can

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1 **Q.** Can I ask you now about design of the shielding
2 programme.

3 Many of CVF's members who shielded found it
4 practically impossible to socially distance from other
5 members of their household, particularly, for example,
6 if they had children and they were going off to school
7 or a partner who was going to work. And they -- there's
8 evidence before this Inquiry of them going to quite
9 extreme lengths like sleeping in a tent in the garden,
10 on the most extreme scale.

11 CVF has proposed, and you've been asked about this
12 morning, this idea that the shielding support could have
13 been extended in some cases to family members, for
14 example, to allow a partner not to have to go to work,
15 or a child not to have to go to school. And you said
16 earlier, just quoting from what you said:

17 "... once you start moving out to who needed
18 support, it became very, very difficult to identify
19 a household ... or a [confirmed group or] confined
20 group ..."

21 Do you mean by this that it would have been
22 difficult to identify those people to give them the
23 support, or was it something else?

24 **A.** So I think I said as well, SAGE actually did look at how
25 one could achieve shielding effectively, and you will

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1 see it was thought about. It wasn't followed through,
2 eventually.

3 **Q.** Yes, so it was really a practical issue rather than
4 a principle issue, because it was about making sure you
5 could have identified individuals who could
6 straightforwardly identify themselves --

7 **A.** Partly, but --

8 **Q.** -- or be identified, or was it a principle issue?

9 **A.** Yes, I mean I think in part. But equally, as I said, as
10 you start extending out the group that you are trying to
11 protect, actually the sort of societal fabric starts to
12 go. So if every single family, for example, is
13 isolating indefinitely, systems start to fail, and it
14 wasn't practical. And I think this was very much --
15 I realise people picked up different messaging, but it
16 was voluntary and supportive. And so, in the end,
17 I think it was felt that certain provision was made, and
18 we recognise that wouldn't suit every single
19 circumstance, but it was actually a very unusual,
20 I think, internationally unique way of trying to support
21 individuals with these conditions.

22 **Q.** I just want to finish with healthcare-acquired
23 infections. We've been -- you have been over in this
24 morning. Obviously, shielded people tended to access
25 healthcare more than others, and often CVF members felt

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1 that their efforts to shield which came with some very
2 significant costs were undermined because they had to
3 leave their homes to access healthcare, where they were
4 exposed to higher rates and -- much higher rates of
5 hospital and other healthcare-acquired infection.

6 And that is discussed, there is an email which is
7 in your bundle, you've not been shown, it's at tab 8, to
8 Patrick Vallance where it's described, in effect, the
9 opposite of shielding, vulnerable or being
10 preferentially infected.

11 Do you agree that there was a failure to make it
12 sufficiently safe for clinically vulnerable people to
13 attend hospitals and other healthcare settings?

14 **A.** So there are some specific details about the data that
15 email refers to, because in fact, on that one, I think
16 it was associated with some graphs where, in fact, the
17 mortality in hospitals was actually plateauing. So the
18 interpretation in the email and the data, I think, is
19 slightly misaligned. So I'd prefer not to do the detail
20 of that email.

21 But in relation to your actual question, I think,
22 number one, as I explained earlier, we recognise that
23 individuals, they're going to have to keep going to
24 hospitals, and many of them have conditions which
25 require recurrent interventions, and that was why there

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1 goes out so UKHSA monitors those infections frequently.
2 We have continuous surveillance running. And we try and
3 match that with discussions with modelling with the NHS.
4 But these are all the things that people have discussed
5 about interventions to try and reduce that and
6 understanding where the infections are coming from.

7 So, again, we know from data that these were
8 predominantly healthcare-to-healthcare and
9 patient-to-patient.

10 I think one of the important things for clinically
11 extremely vulnerable is because not -- because of them,
12 because of the conditions they have, sometimes the viral
13 load of an illness will continue for a longer period and
14 that's a really important point both for them and those
15 working with them and caring for them that we need to
16 try and flag.

17 **LADY HALLETT:** Thank you, Mr Wagner.

18 **MR WAGNER:** Thank you.

19 Ms Waddoup.

20 **Questions from MS WADDOUP**

21 **MS WADDOUP:** Good afternoon, Professor. I represent
22 13 Pregnancy, Baby and Parent Organisations.

23 Your comments on the draft maternity visiting
24 guidance were particularly focused on the fact that
25 testing couldn't eliminate risk. In hindsight, do you

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1 was a specific paragraph around contacting your GP, so
2 that if you did need to go, you were supported and
3 encouraged to in the safest way, and if you didn't need
4 to go, you didn't expose yourself unnecessarily to some
5 sort of routine check-up that he or she may have been
6 able to provide differently.

7 You'll also see that as shielding was stepped
8 down, the guidance going out to trusts very much
9 mentioned specific wards, so renal dialysis wards, and
10 wards where individuals were immunosuppressant being
11 treated were specifically named to encourage them to try
12 and ensure that things like mask-wearing and particular
13 care was taken around infection.

14 But I think, you know, what we want to do is
15 actually keep healthcare-associated infections down for
16 everybody, and to some extent there are bound to be some
17 in a pandemic, so this is about keeping everybody safe
18 including those who are clinically extremely vulnerable.

19 **Q.** What concrete steps can be taken now to achieve that?

20 **A.** Well, I mean routinely we try, and -- I say "we", NHS,
21 but we support with data -- to try and keep healthcare
22 associated infection prevention infections down, and
23 that's -- you know, we have good data systems in this
24 country. For example, I think, maybe, any minute now or
25 tomorrow, something like that, you know, the HCI report

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1 accept that testing support partners from the same
2 household as a pregnant person could have sufficiently
3 mitigated the risks of Covid-19 transmission, especially
4 when balanced against the clear and direct risk to the
5 health and well-being of the mother and baby of being
6 alone during or after birth?

7 **A.** So I understand the thrust of your question, but I don't
8 actually -- the short answer would be no because there
9 is an objective, practical one, which is, if you give
10 somebody a test, will it remove all risk of Covid? No.

11 The wider question is, can we prevent or
12 absolutely minimise the risk of infection in a way which
13 allows all of the positives around having a partner
14 there and reduces all the negatives of ill-health and
15 the feeling of nil support. And the answer to that is
16 I think we can do that much better.

17 I mean, I commented it was quite interesting which
18 guidance come to me or not. I have a responsibility to
19 flag -- usually, if they were coming to me, it was to
20 flag what the clinical technical risk was, and I have a
21 responsibility to say that. There is a balance point
22 for people to take and for hospitals to take but it does
23 go back to the point of two things: one is hierarchy of
24 controls, so, you know, if your partner is super
25 well-trained and knows how to go in and out safely and

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1 all sorts of things, that's a much safer one, whether or
2 not you've got to test a human, than having somebody who
3 is not used to that.

4 Then the other point is, of course, local
5 facilities are required to maintain the safety and the
6 well-being of both the mums, the partners, but all the
7 other mums' partners and babies as well. So this is why
8 it's important locally that they do understand that.
9 But the principle should be that for -- whether it be
10 start of life or end of life, that there is good,
11 normal, routine access, and that's assisted by some of
12 the near testing technologies that we have.

13 **MS WADDOUP:** Thank you, Professor.
14 My Lady.

15 **LADY HALLETT:** Thank you very much.
16 Ms Sen Gupta. She is over there.

17 **Questions from MS SEN GUPTA KC**

18 **MS SEN GUPTA:** Good afternoon, Professor Harries.
19 I represent the Frontline Migrant Health Workers Group.
20 Our clients' members include out-sourced non-clinical
21 workers, not directly employed by the NHS such as
22 hospital cleaners, porters, security guards, and medical
23 couriers.

24 Our questions relate to occupational risk
25 management and risk assessment in hospitals. Ms Carey
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1 anybody in that environment is able to have
2 a conversation in a way which they understand and feel
3 comfortable in so that they can ask for the protection
4 that they need or be advised what is available and that
5 is a Covid-secure environment.

6 **Q.** Thank you. Professor, do you agree that at least during
7 a pandemic assessment of risk and risk management within
8 hospitals is best conducted by a single employer who is
9 subject to regulatory sanctions by the HSE in the event
10 of a breach of health and safety law?

11 **A.** That, I think, is more difficult. It's not my expert
12 area. There shouldn't be loopholes so that people end
13 up being looked at in one space when they're working in
14 another because the combination of the role that
15 somebody does and the risk management of the workplace
16 is an important combination.

17 So I think, you know, it is critical, we found --
18 I'll take a slightly different track. But for -- and
19 I know my Lady will be looking at this later. For care
20 homes, actually, individuals, it's the same here.
21 Individuals who are supporting -- like I said, just as
22 much as doctors or nurses, these places will not keep
23 running and yet actually often people will be -- on the
24 lower employment ranks they will be earning less, they
25 will be doing two or three jobs and these all start to
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1 has already shown you the relevant passage of your
2 evidence, and it's Inquiry reference INQ000489907,
3 page 58. Please could that be displayed. This is
4 paragraph 9.31 of your second statement in Module 3.
5 Thank you.

6 In a single hospital setting workers include those
7 directly employed by the NHS trust, nurses engaged by
8 agencies, and other out-sourced workers such as
9 cleaners, porters and medical couriers who were engaged
10 by private companies and so employers responsible for
11 workplace risk management for those workers include
12 NHS trusts and private companies. Do you agree that
13 this inevitably leads to inconsistent risk assessments
14 and protections for those working in the same hospital?

15 **A.** It shouldn't, is the answer, because I think at any --
16 if you are running a hospital and we're talking, I think
17 predominantly about infection control and transmission
18 here, that hospital needs to control. If that means
19 supporting individuals as well to do that, transmission
20 within the hospital. I do recognise that this issue of
21 who you are employed by and who you are looking to to
22 get that advice and support from can be challenging and
23 disconnected but the key point here is, to my mind -- I
24 mean, I'm coming from a protection -- Covid protection
25 perspective, actually it is important that proactively
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1 become transmission risks.

2 So I think I'm broadly supportive of what you're
3 saying, I'm steering slightly away from the regulatory
4 side because that's not my area of expertise.

5 **Q.** Thank you.

6 Finally, do you agree that the employer best
7 placed to assess and manage risk to workers in
8 a hospital setting is the organisation with direct
9 experience and control of the hospital where the risk
10 exists, ie the individual NHS trust?

11 **A.** So again, there are clearly both contractual and
12 regulatory responsibilities. My position would be that
13 it would be very difficult to run a safe hospital unless
14 you are really sure of how risk is being managed in your
15 employers within that working environment because
16 otherwise how can you know your environment is safe.

17 So I think it could be done by different ways but
18 very definitely if I was heading up an Acute Trust
19 I would want to know all where my workers were and what
20 that risk assessment was and I think that's implicit in
21 running a safe hospital.

22 **Q.** And building on that, doesn't that lead to the
23 conclusion that the employer best placed to conduct that
24 sort of risk assessment and risk management is the
25 NHS trust?
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1 A. I think that depends on how systems is -- there are
2 very, very many different setups, so I don't want to be
3 pinned into one particular place, you might have a group
4 of trusts, you might have a local system where
5 an individual knows the different trusts and is acting
6 on their behalf, so I think that is much more difficult.
7 But the principle that individuals both should be
8 protected in any environment they're in but also that
9 the owner, if you like, who is responsible for the
10 workplace should understand that in order to deliver
11 a safe environment are both agreed with.

12 **MS SEN GUPTA:** Thank you, Professor.
13 Thank you, my Lady.

14 **LADY HALLETT:** Thank you very much.
15 Mr Stanton.
16 Mr Stanton is behind you but if you could make
17 sure your answers go into the microphone. Thanks you.

18 **Questions from MR STANTON**

19 **MR STANTON:** Good afternoon, Professor. I ask questions on
20 behalf of the British Medical Association.

21 I'd like to refer you to a UKHSA paper, which is
22 reference INQ000338440 which should be before you --
23 I can see it is. This is a paper that I think your
24 scientist colleagues prepared in response to a Rapid
25 Review of AGPs that was carried out by NHS England and

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1 scientists?

2 A. So I think, if I'm correct, this comes -- was a review
3 and I was also provided a note as the chief executive
4 because there was a debate -- I think there was
5 a document, a review done by the IPC cell and some of my
6 colleagues in UKHSA were less comfortable, I think, with
7 the idea that some of the procedures should come off the
8 list.

9 Q. Yes.

10 A. So I think this is predominantly about AGPs and I think
11 the only thing I would just pull here is I think "the
12 graded and proportionate way around respiratory
13 activity", I think that is a debate. It may have come
14 through some of these, but it's quite variable of both
15 between different procedures, aerosol-generating
16 procedures and between different individuals, and
17 I think that's an area where I've already flagged there
18 should be more work.

19 But broadly I was supportive of the fact that
20 I felt this should be flagged to the IPC cell and indeed
21 it was with my permission.

22 Q. You mentioned in your answer that some of your
23 colleagues were less comfortable, I think you might have
24 said, with the initial review that was conducted on
25 behalf of the IPC cell. Can I just ask you quickly

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1 I just want to quickly refer you to a sentence on page 2
2 which reads:

3 "There is an increasing evidence base of aerosol
4 measurements during normal respiratory activities such
5 as tidal breathing, breathing during exercise,
6 talking, shouting, and singing."

7 And then take you quickly to the three conclusions
8 on the fourth page, please, and actually I just want to
9 reference the first two conclusions.

10 The first one is:

11 "In the absence of robust evidence, the
12 precautionary principle should apply before potentially
13 removing protections from staff and patients."

14 And the second conclusion:

15 "This AGP review highlights the production of
16 aerosols by normal respiratory activity in a graded
17 and proportionate way and importantly this
18 physiological respiratory aerosol has been
19 demonstrated to contain SARS-CoV-2 in-patients with
20 COVID-19. The logical consequence of this conclusion
21 is that those delivering close care to patients with
22 suspected or confirmed Covid-19 should be provided
23 with the highest grade of respiratory protection."

24 And I'd just like to ask you briefly whether you
25 agree with the conclusions expressed there by your

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1 about that as well. The conclusions of your scientists
2 are in contrast to the approach taken by the IPC cell.
3 Would it be fair to say there was a difference of view
4 between the IPC cell and some of your scientists on this
5 issue?

6 A. So if you look back at a lot of the evidence that's come
7 to the Inquiry there are times when the scientists are
8 saying something different and in fact the scientists,
9 if you think back to Professor Beggs at the start of it
10 is saying something different somewhere else.

11 So, number one, there is definitely not group
12 thinking because there is quite a lot of noise.

13 Number two, I think there is a differential which
14 I was trying to say which is the IPC cell is providing,
15 if you like, a manual, an operational manual. We are
16 providing the science input. I think one of the
17 questions that arises is at which point do I or my
18 colleagues shout really, really, really loudly if we
19 think this is inappropriate? In this particular case,
20 if I remember, the broad principle was maintained but
21 a couple of AGP procedures were removed from the list
22 and my point there is I think this is very difficult
23 territory, we need really, really good research and that
24 is exactly what we should do.

25 Q. Can I really quickly ask you, just finally, your view

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1 about whether the UK IPC cell should have responded more
 2 quickly to the emerging threat of aerosol transmission?
 3 **A.** So this goes back, I think, to the effectiveness. So
 4 what is the thing that they should have done and I don't
 5 actually think that any of the experts either feeding --
 6 that the Inquiry has called or others feeding in are
 7 saying that there is strong evidence of a different
 8 approach to the guidance that's there from the IPC at
 9 the moment. This was specifically about AGPs, I think.

10 So I think you were asking both content and time
 11 issue, so I think the content is we have an agreed
 12 position. We think we could do better with evidence and
 13 we should generate that.

14 In timing I'd have to look back, I'm afraid, at
 15 the precise timing in which they responded. So if
 16 I can, I would rather pass on that one and come back to
 17 you if I need to.

18 **MR STANTON:** Thank you.

19 Thank you, my Lady.

20 **LADY HALLETT:** Thank you, Mr Stanton.

21 Mr Burton, who's at the back there.

22 And if, when you are being polite by looking at

23 Mr Burton, if you --

24 **A.** Sorry.

25 **LADY HALLETT:** As you are looking at Mr Stanton, we lost you
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1 page 2.

2 And you'll see there that Mr Rogers was asking for
 3 an assessment of each proposed addition to the SPL
 4 against, amongst other things, net health including
 5 socioeconomic status and fairness, and in relation to
 6 fairness Mr Rogers said at paragraph B3 of his email:

7 "On fairness impacts we should thoroughly
 8 consider the differential impacts on different groups
 9 both those with protected characteristics and other
 10 groupings such as socioeconomic background or
 11 location. This work will need to inform a public
 12 sector equality duty assessment for ministers."

13 Professor, as far as you know, was each proposed
 14 addition to the SPL considered in the way Mr Rogers had
 15 requested in relation to socioeconomic factors and
 16 protected characteristics in particular?

17 **A.** I haven't got the questions in front of me, I have just
 18 got the front page, but I think I remember the content
 19 of this.

20 So at 24 April the SPL was a conditions-based
 21 list. That was how -- it was done on the clinical
 22 grounds of whether there was a plausible likelihood of
 23 an individual suffering significantly because of the
 24 condition that they had.

25 So many of the questions that have been asked here
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1 a bit.

Questions from MR BURTON KC

3 **MR BURTON:** Good afternoon, Professor Harries, and please
 4 don't feel obliged to look this way at all. Please just
 5 address her Ladyship when I'm asking you these
 6 questions.

7 I ask questions on behalf of the Disability
 8 Charities Consortium which you may be familiar with and
 9 I'm going to be asking questions exclusively about the
 10 shielding programme, and with one exception I'm going to
 11 be going to be asking guess about your witness
 12 statement, your first one, so if you want to look at
 13 that at any point please feel free to do so.

14 Professor, at paragraph 49 of that statement you
 15 say that on 26 April 2020 you provided advice by email
 16 to DHSC on the shielding programme and possible growth
 17 of the group asked to shield and Counsel to the Inquiry
 18 asked you some questions about that process earlier.

19 In particular, that advice was provided by you in
 20 response to an email from James Rogers of the
 21 Cabinet Office which I think had been forwarded to you
 22 by Antonia Williams. It might be helpful just to
 23 briefly look at that.

24 This is the only document I'm going to ask the
 25 witness to look at, my Lady, which is at INQ000151804,
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1 were just not -- derivable at that point, there wasn't
 2 sufficient evidence.

3 What we did do, though, and that was the whole
 4 point of QCovid was to -- as evidence arose, to move on
 5 and the list was updated and conditions around location,
 6 for example, or deprivation and protected
 7 characteristics were brought into QCovid and that's why
 8 more people were added and in fact when we got to some
 9 of the additions and I think it may have been evidence
 10 that was presented to Professor Whitty, we could see
 11 that, for example, there was a much higher proportion of
 12 ethnic minority individuals brought in because they got
 13 picked up on this intersectional consideration.

14 But at this time it actually wasn't possible to do
 15 that because it was primarily a conditions-based initial
 16 list.

17 **Q.** Just in relation to QCovid, do you know if disability in
 18 particular was ever one of the considerations in
 19 relation to QCovid?

20 **A.** So the conditions were -- so disabilities is a really --
 21 I might go back to the recommendation about data because
 22 the data -- as I -- it's difficult talking away, but I'm
 23 sure the data, as you know, is really difficult. So
 24 some conditions which will be counted on that will have
 25 appeared in the -- in our original conditions base list,
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1 and then as the QCovid data was generated effectively we
2 could see various conditions coming through. So I use
3 the example of Down's Syndrome where, the initial run of
4 the QCovid, there was very little signal earlier on when
5 the initial run, the test data went through, if you
6 like, on the initial run for QCovid, we could see that
7 there was a signal from Down's syndrome, and then when
8 we got that through you could see this was a strong
9 signal, and those with Down's syndrome were moved into
10 this -- into the QCovid list and into the CEV.

11 So it was -- but it was considered on different
12 areas, and disability of course is recorded in many
13 different ways for different conditions, and means
14 different things. And that's one reason why the data is
15 so difficult to incorporate.

16 **Q.** Thank you very much. I think I know from your previous
17 answer what your answer is likely to be to the next
18 question, but I just need to ask it for formality's sake
19 anyway, if that's okay. Just following on from
20 Mr Rogers' email, do you know if any public sector
21 equality duty assessment of a shielding policy was ever
22 actually undertaken?

23 **A.** I can't remember offhand, but it would be very unusual
24 for something not to take place, and I know from the
25 data that we looked at, although it's difficult to

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1 **Q.** Most grateful, thank you.

2 At paragraph 55 of your statement you cite further
3 advice you gave to DHSC somewhat later on
4 31 October 2020, and you very helpfully cited some of
5 that advice after paragraph 55 and I just want to ask
6 you about two bits of that advice that you cited there.
7 Towards the bottom of the page you say:

8 "We should continue to rapidly include those
9 additional groups already identified by the Clinical
10 Panel at increased risk and not yet included in the
11 SPL -- CKD5 and Down's. This work has been paused by
12 CO but there is clinical agreement with NHSE that work
13 should proceed apace on Monday unless other factors
14 preclude this."

15 Now I think the decision to add those with Down's
16 to the SPL had been made somewhat earlier in September.
17 Can we take it from your advice, then, that as of
18 31 October 2020, those with Down's still hadn't been
19 added to the SPL list?

20 **A.** So we'd looked at this, as I'd just noted, that there
21 was an early signal but with not very granular data back
22 in June. We had taken that too, so there's a clinical
23 review panel which I would chair, and then we take that
24 for decision to the UK CMOs. Their consideration at the
25 time said actually individuals should be added on

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1 evaluate the effectiveness, which is clearly part of the
2 outcome, should be part of that duty as well, the
3 characteristics of the group were clearly described.
4 And then when we got into, as I say, the QCovid, you
5 could -- we could see, intentionally, that we had higher
6 representation than we had previously from ethnic
7 minorities, we had differential geographical
8 representation, for example, which was, although we were
9 challenged on, I think it was entirely consistent with
10 where there were health conditions differentially --
11 disproportionately affecting populations, particularly,
12 for example, in -- I think it was Newham, Tower Hamlets,
13 various other areas where we know there was high
14 deprivation.

15 **Q.** Sorry to pin you down on this, Professor, but I think
16 your answer there was, you're not sure but you'd be
17 surprised if there hadn't been one?

18 **A.** Well, Department of Health would have been responsible
19 for it, but I know -- I know from the work that we did
20 that we looked at different characteristics, so whether
21 you call that a formal PSED -- I mean, I'm very happy to
22 confirm that we looked at those characteristics in
23 detail. I wasn't the one responsible for putting in
24 a formal response back to Government, but it was
25 monitored very carefully.

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1 an individual basis because we didn't have sufficient
2 data to really make forward a strong recommendation to
3 say that everybody with Down's, for example, should be
4 on that list. But actually, when we ran the data, the
5 QCovid data formally with all of the updates, we could
6 see that there was a strong signal, and that was the
7 clinical panel's recommendation, the UK CMO's decision.

8 The actual processing of that going into the list,
9 for all of the reasons which I explained earlier on the
10 data and the connectivity was a responsibility that went
11 back to DHSC and NHS digital so my assumption would be
12 that they were working on it. I was really saying here
13 there was clinical agreement and we strongly support
14 that.

15 **Q.** I'm most grateful and further to that then, you would
16 agree --

17 **LADY HALLETT:** Last question, I'm afraid, Mr Burton, I'm
18 really sorry.

19 **MR BURTON:** But Madam, I haven't gotten through the
20 questions I've been given permission to ask, I --

21 **LADY HALLETT:** No, but I'm afraid you were given
22 eight minutes and we're really tight for time.

23 **MR BURTON:** Very well. Well, I will skip the next question
24 and ask another, if I may.

25 If you could look again at that advice, please,

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1 you'll see at the bottom of it, it says:
 2 "In addition, advice should be that those on the
 3 SPL do not provide childcare or other care and
 4 arrangements even those these are permitted more
 5 generally."
 6 Do you see that?
 7 **A.** Yes.
 8 **Q.** Do you know if that advice was actually given?
 9 **A.** So the advice finally would go back, as I noted earlier,
 10 it was Cabinet Office advice, and I would provide a
 11 clinical view. It wasn't my final decision, but the
 12 rationale sitting behind this was to try to protect
 13 individuals, obviously we wanted -- and you can see
 14 here -- recognition of the fact that there were
 15 significant mental health conversations and physical for
 16 people who were shielding for a long time, but actually
 17 multiple childcare arrangements, for example, could
 18 actually be quite challenging in terms of transmission
 19 control.
 20 I think it was actually -- I'm just trying to
 21 connect the time frames because I think this links to
 22 the bubbling conversation later on where there was
 23 a recommendation to bubble but again not to bubble more
 24 widely.
 25 **MR BURTON:** And, my Lady, if I might ask one very quick
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1 Do you agree that those recommendations weren't in
 2 the IPC guidance issued?
 3 **A.** I'm just trying to process your question. Ventilation
 4 I absolutely support, but that is -- again that comes
 5 with understanding more of the transmission as the -- as
 6 our evidence base developed, but it's -- that goes --
 7 whether it's in hospitals or other areas, and I think
 8 again Sir Chris Whitty mentioned the point there are
 9 risks with that as well around thermal regulation as
 10 well, the different -- and so we need -- it's not quite
 11 as clear as it is.
 12 On the evidence that we were discussing which
 13 Dr Shin and colleagues presented -- again, I'm just
 14 repeating what I've said -- I think nobody has suggested
 15 that the actual practical evidence of wearing FFP3s is
 16 significantly better than wearing FRSMs, except for the
 17 AGPs that we were just discussing. So I'm not sure if
 18 I've answered your question, but I think it's probably
 19 the same answer I gave before.
 20 **Q.** Very quickly, you asked earlier what were the things
 21 they should have done that they didn't. I was just
 22 giving you some examples of the evidence that we've
 23 heard in the Inquiry. Do you agree that that should
 24 have been implemented?
 25 **A.** I'm sorry, I don't understand the question. Apologies
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1 follow-up question?
 2 **LADY HALLETT:** No, I'm sorry, I'm going to have to stop --
 3 I'm sorry, Mr Burton. We had intended to call
 4 Dame Jenny tomorrow. We can't because of -- she has to
 5 go to a funeral, so I'm afraid I have to cut you short
 6 I'm really sorry.
 7 **MR BURTON:** Thank you.
 8 **LADY HALLETT:** Ms Shepherd.
 9 **Questions from MS SHEPHERD**
 10 **MS SHEPHERD:** Good afternoon, Professor Harries, I appear on
 11 behalf of Covid-10 Bereaved Families for Justice Cymru.
 12 The first question I was going to ask you was going to
 13 be, do you accept that the IPC guidance did not have
 14 sufficient measures to adequately address the risk of
 15 aerosol transmission?
 16 You were asked that earlier by Mr Stanton, and
 17 I think the answer that you gave was, what should they
 18 have done?
 19 Well, the evidence of the IPC experts who were
 20 Professors Gordon, Drs Shin and Warne, gave a couple of
 21 recommendations: they wear HEPA filters, the portable
 22 HEPA filters, UV lights, improved ventilation, and they
 23 advised that FFP3 respirators should have been used on
 24 a precautionary basis when treating Covid patients and
 25 patients with suspected Covid-19.
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1 if I'm not --
 2 **Q.** I'll move on. Earlier in this Inquiry,
 3 Sir Frank Atherton, who is the CMO for Wales, gave
 4 evidence that he assumed that long-range aerosol
 5 transmission was taking place, and that it was
 6 understood from quite early on that there's a continuum
 7 of droplets to tiny particles. Did you understand that
 8 as well at the early stage of the pandemic?
 9 **A.** I think obviously it depends at what time he thought
 10 long-range air transmission was happening and in what
 11 proportion. So the issue is not whether there was some
 12 air transmission, it is how much, what proportion, how
 13 far, and I think I've probably answered that question
 14 previously. So I think, at -- any respiratory virus, we
 15 would always think, is there some air transmission? But
 16 our evidence from previous SARS and MERS, in practical
 17 clinical utilisation and transmission prevention, was
 18 that wasn't the predominant route. I think, obviously,
 19 evidence has changed now.
 20 **Q.** In relation to the issue about predominant route, it
 21 also wasn't known at the time whether droplet and fomite
 22 transmission was predominant at the beginning of the
 23 pandemic, but you wouldn't remove measures in relation
 24 to droplet and fomite, so do you agree that if there is
 25 some evidence of aerosol transmission and it wasn't
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1 known to the extent of the aerosol transmission, that it
2 should have been assumed that it was taking place and
3 that it was a predominant route?

4 **A.** So I think I just repeat what I've said previously,
5 which is, it was a reasonable assumption to go to the
6 nearest relative in the viral chain, look at what had
7 happened in clinical practice, because this is important
8 as well, that's where guidance started. Yes, we should
9 always stay open to changes in proportion of
10 transmission routes and risks and we need to manage
11 those, but I don't think -- it wasn't an unreasonable
12 assumption at the start.

13 **Q.** In your witness statement you talk about the role that
14 you had, which was effectively to flag any issues that
15 you saw in the IPC guidance, but that wasn't necessarily
16 your primary role; you were looking at if there were any
17 interferences with other parts of guidance. Did you
18 ever flag any issues with the IPC guidance or challenge
19 it?

20 **A.** Yes. But I struggle to be -- we've seen -- it's not
21 just IPC guidance, it's guidance, full stop. And
22 I would get guidance for example from BEIS, and flag
23 differences in the way things have been described to
24 ensure there was consistency across, but these would be
25 multiple documents on a daily basis flying through the

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1 Atherton said that the Welsh Government was still trying
2 to reach across to England to understand the exact
3 rationale for the changes that they've made in various
4 categories. To your knowledge, did Sir Frank Atherton
5 or anyone else from Welsh Government reach across to
6 understand the rationale for the expansion?

7 **A.** I wasn't involved with Test and Trace at the time, so
8 I can't answer from that perspective. I can say that
9 Frank Atherton I routinely joined conversations with all
10 of the DCMO -- CMOs from all of the nations, as I think
11 others have described, and we would have had
12 conversations through that and through the Senior
13 Clinicians Group as various changes were being managed.
14 So I think in general that was it. It's not clear from
15 your question whether that relates to a practical issue.
16 There were tests you know test availability which
17 I could find out for you for a later module I think I'm
18 sorry I'm not able to help.

19 **Q.** What Sir Frank Atherton said in his early evidence was
20 test wag as bit of an issue although information on the
21 public health basis fled very smoothly between the CMOs
22 sometimes at the policy level in England they didn't
23 communicate as rapidly as we would have liked with
24 colleagues who were working on similar issues in Wales
25 and he says that that did lead to some divergence and

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1 office, so that's quite a broad question.

2 **Q.** If I could make it more specific, did you ever say that
3 there needs to be more in this IPC guidance to address
4 the risk of aerosol transmission?

5 **A.** Well, I would have been looking at the control of
6 transmission as a whole, and it would -- obviously that
7 would depend on the evidence we had available at any
8 particular time as to whether I would or would not have
9 been flagging it. Obviously at the start of it, I think
10 I've just said that the transmission TO was recognised
11 potentially but was not thought to be a major route so
12 I would not have been focused on that specific at the
13 start. Clearly, as the guidance went through, I mean,
14 I can think many occasions where I put in the word
15 "ventilation" in the middle of things as the guidance
16 and the evidence developed, but, I mean, these are --
17 there's probably hundreds of documents, so I think
18 I'd need a slightly more precise question. Sorry not to
19 be more helpful.

20 **Q.** I'll move on to my next topic which is aspects of
21 divergence between English and Wales. In late April
22 2020, the Minister for Health in England announced an
23 expansion of the rapid antigen testing programme to
24 include asymptomatic healthcare workers and NHS
25 patients. When the announcement was made, Sir Frank

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1 some difficulties in keeping up with what everybody was
2 doing. Were you aware of any of those difficulties in
3 communication?

4 **A.** I don't think this is a question -- with my Lady's
5 permission I don't think this is a question for this
6 particular module. There will be a testing module.
7 I can provide information historically that I receive on
8 behalf of the Test and Trace, but it feels like that's
9 probably a question for DHSC policy, possibly, in
10 a different module.

11 **LADY HALLETT:** It's a legitimate point. I should probably
12 have thought about that more when I gave permission.

13 **MS SHEPHERD:** My final question is about testing, so
14 therefore, my Lady, I will raise that in the next
15 module. Thank you.

16 **LADY HALLETT:** Thank you, Ms Shepherd, I'm very grateful.
17 Mr Pezzani who is over there.

Questions from MR PEZZANI

19 **MR PEZZANI:** Thank you, my Lady.

20 Good afternoon, Professor, I ask questions on
21 behalf of Mind, the mental health charity. The first
22 topic has already been raised with you, Professor, by
23 Ms Carey, Counsel to the Inquiry, and it's in relation
24 to the document published by PHE on 29 March 2020 called
25 Guidance for the Public on the Mental Health and

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1 Well-being Aspects of the Coronavirus, the reference is
2 INQ000348091.

3 My questions in relation to that are first,
4 children and young people's mental health was not
5 expressly addressed in the guidance published on
6 29 March 2020. Given that (a) known risk factors to
7 their mental health include disrupted schooling and
8 social isolation and (b) the guidance did expressly
9 address another age category, that of older people, are
10 you able to assist on why there was no specific
11 reference to children and young people's mental health
12 in that guidance?

13 **A.** So I'll say two things. One is, I wasn't -- I can't say
14 the origins, I wasn't in Public Health England at the
15 time and I didn't draft the guidance. So what I can say
16 is in the -- as DCMO, I did link a lot and I think that
17 is -- I've provided some evidence of that with Royal
18 College of Paediatrics and Child Health, the CMOs
19 obviously, provided that for CMO position for education,
20 and I recognise all the points that you make. I think
21 it's probably become much clearer to everybody through
22 the last few months just how difficult it's been for
23 children and for mental health and how enduring some of
24 that difficulty has been. I don't think it was
25 necessarily anticipated at the start and I think your

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1 fact, as we've progressed, that advice now would come
2 from the Office for Health Improvement and Disparities
3 not from UK Health Security Agency.

4 Nevertheless, I'm a general public health
5 physician so I think the point that you make is
6 an important one. I think, again, it would have been
7 difficult to know at the start of the pandemic. We had
8 no understanding of how long this was going to go on,
9 how the waves would form, what the impact in timing
10 would be on education and the impact on children. So
11 I think these are important considerations to learn for
12 any other potential future lockdowns, if I dare use the
13 word, but really important and actually the most
14 important thing is about the services -- now, again, not
15 my responsibility but I know is recognised because
16 services have been strained for many years and actually
17 if individuals, if children are not recovering quickly
18 there will be an ongoing significant demand and I think
19 that's probably an important one to ask NHSE colleagues.

20 **Q.** Thank you. I don't want to overuse my time, so I will
21 ask you this. You said to Ms Carey before lunch, and
22 I hope I got your evidence down right from the
23 transcript: the mental health impact -- and I think you
24 were talking about shielding then and lockdown:

25 "The mental health impact was to some extent

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1 point about always ensuring that children are considered
2 in guidance is a really important one. Whether --
3 I think there was separate guidance for children which
4 I would just flag but I don't have that to hand to show
5 you.

6 **Q.** I'm very grateful. The second point is similar but in
7 relation to eating disorders. Similar risk factors
8 apply, and much of what you've already said in your
9 answer to my first question would also apply to eating
10 disorders as I'm sure you're very well aware. And also,
11 a later version of the guidance did expressly address
12 eating disorders as a specific category of groups with
13 additional mental health needs, and it said, and it's
14 worth just noting briefly what it said: if you have
15 an eating disorder or struggle with your relationship
16 with food, you may be finding aspects of the current
17 situation particularly challenging, for example the
18 reduced availability of specific foods, social isolation
19 and significant changes to your routine.

20 But the first version of the guidance
21 in March 2020 did not mention eating disorders at all.
22 Again, are you able to assist on the reason for that
23 omission early on in the pandemic?

24 **A.** So, again, this is not an area -- I wasn't responsible
25 for the guidance, I wasn't in that organisation and in

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1 recognised."

2 My question is, why to some extent?

3 **A.** Well, I think I gave the answer then because we don't
4 have -- I mean, it was recognised on an ongoing basis so
5 if I think about the clinically extremely vulnerable or
6 other groups, people were surveyed through the pandemic,
7 ONS produced regular updates so, as I say, to the extent
8 that those surveys showed evidence then that's there.
9 But for something like an eating disorder, that can be
10 actually hidden for large amounts of it and it may not
11 surface until children are back in different societal
12 fora, so I think it's inevitable that some of these
13 things will surface through the pandemic and not all
14 were predictable.

15 **Q.** I see. So your point is delayed emergence of evidence
16 for the mental health impact?

17 **A.** And the fact that, you know, unless you put in very
18 specific studies for different cohorts of people you
19 will always have hidden pockets of illness, or ill
20 health, which you cannot quantify or qualitatively
21 explain in detail until a specific piece of work is
22 there. I think I was probably just saying there is
23 a general recognition and I think we can all see that.
24 We could see that through the clinically extremely
25 vulnerable, although actually the mental health levels,

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1 the reported downturn in mental health was probably not
2 too dissimilar to actually what the general population
3 reported as well. So I think it will have affected
4 different individuals in different ways and some of that
5 also will depend on their own individual home
6 circumstances.

7 So it was a general comment, really, but I think
8 recognised the importance of mental health.

9 **MR PEZZANI:** I am very grateful.

10 **LADY HALLETT:** Thank you, Mr Pezzani.

11 Ms Munroe, just there. Much more convenient.

12 **Questions from MS MUNROE KC**

13 **MS MUNROE:** Thank you.

14 Good afternoon, Professor Harries. My name
15 is Allison Munroe and I ask questions on behalf of
16 Covid-19 Bereaved Families for Justice UK.

17 I'd like firstly to take you back to a document
18 you have been referred to a number of times already this
19 afternoon. Hopefully, I have different questions in
20 relation to that.

21 It's the January 2022 roundtable that you
22 attended. And looking at the summary of notes, the
23 purpose of that roundtable, amongst other things, was
24 for those participants to understand and discuss the
25 current evidence base regarding RPE, usage, guidance,
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1 that stage I was the chief executive of the UK Health
2 Security Agency, clearly I have professionals now
3 working in my new organisation who were inputting to the
4 IPC cell. The first event, actually, after the
5 formation of UKHSA was the Omicron wave and that had
6 triggered a number of conversations to come back up to
7 the top.

8 So in some ways it was an opportunity for all of
9 those people in a new wave with a new health protection
10 system to say, actually, what do we all think here, are
11 we all understanding the evidence the same, are there
12 issues here, can we have a single voice around what's
13 there or are there things that we need to do to improve
14 the position?

15 **Q.** Thank you. The summary notes of the meeting also state
16 that the evidence relating to RPE was accrued up
17 to April 2020 and pre-Omicron. There may be value in
18 revisiting this work. My question, was the work
19 revisited and had further evidence been sought post
20 April 2020?

21 **A.** One of the reasons, actually, for chairing the
22 roundtable which as I say I think I had flagged or
23 suggested just before Christmas, was to check. It was
24 this whole position of: well, this is what the evidence
25 was before, has the evidence changed? And so when
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1 how the guidance was being implemented in practice, and
2 what the practical considerations are regarding RPE
3 usage such as fit testing and supply.

4 Now, that is January 2022. However, the concerns
5 about availability and use of FFP3 masks for healthcare
6 workers treating Covid patients were being raised from
7 the outset of the pandemic which I'm sure, Professor,
8 you were aware of at the time. What was your
9 involvement in addressing such concerns prior to this
10 roundtable in January '22?

11 **A.** So I didn't have a direct involvement. As I tried to
12 say, usually if there were 20 topics or areas involving
13 individuals representing large parts of the
14 healthcare -- health or care system or local government
15 then often I would be used as a chairperson -- very
16 willingly -- but because I had insight into each of
17 those different areas of work rather than just one part
18 of the system.

19 So, originally, I would have been -- in fact very
20 little, to be honest. My role as deputy CMO was
21 theoretically, prior to the pandemic, to do with health
22 improvement work, so nutrition, physical activity and
23 those sorts of thing and I reverted to health protection
24 obviously in response to the pandemic.

25 So I think the reason this particularly arose by
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1 people came to that -- I would have to go and check --
2 I mean, PHE and then the UKHSA will routinely update
3 evidence, there's usually a time frame attached to
4 a piece of evidence, but the pandemic was fast moving.
5 As we've all discussed, the transmission routes were
6 being considered and the proportion of airborne
7 transmission was being considered so it was important to
8 ask. So that was one of the topics that was discussed.

9 Because each of those contributors came from
10 a different background so they would have brought with
11 them the science side of things, what utilisation was
12 right, what healthcare workers were seeing or feeling on
13 the ground, a whole range of different potential
14 evidence bases and if there were gaps then we could take
15 that away and review it.

16 **Q.** Thank you. And finally on this roundtable meeting,
17 amongst the outcomes of the roundtable was further
18 consideration of fit testing in the context of pandemic
19 preparedness. Can you, Professor, comment on the work
20 done since the roundtable, since January 2022, either by
21 UKHSA or others in regards to (a) RPE and
22 transmissibility of Covid and (b) fit testing?

23 **A.** The transmissibility and the use of RPE goes back to the
24 conversations around our research programme and I'm
25 going to provide my Lady with some detail of that. So
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1 there is work ongoing.

2 The fit testing is much of an operational issue
3 for NHS so I suggest that might be a question that you
4 might want to keep for when colleagues are on the stand
5 in the near future.

6 **Q.** Thank you. One question on another topic, testing of
7 asymptomatic patients and healthcare workers. I want to
8 refer you to another meeting that you attended. It was
9 a senior clinicians meeting at which a paper was
10 discussed on nosocomial transmission. For reference,
11 it's in your statement at INQ000489907.

12 Now, the paper that was discussed was drafted by
13 NHS England to SAGE and dated 31 March 2020. And it
14 identified risk including the risk of transmission by
15 asymptomatic patients or staff and noted that swabbing
16 of healthcare workers and/or asymptomatic patients was
17 a potential surveillance and research option which had
18 already been underway in Bristol.

19 With that in mind and in view of this early
20 recognition of the risks posed by asymptomatic
21 transmission and potential for addressing it, do you
22 consider that such testing of healthcare workers, which
23 was not implemented until November of 2020, was properly
24 prioritised, particularly in advance of the second wave
25 in October of that year?

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1 need to hit the ground running and be in a position that
2 data is used better and is utilised better and that
3 there are mechanisms to facilitate its use and rapid
4 implementation, etc, for policies such as perhaps
5 a future shielding policy. What is being done now to
6 prepare and ensure that we're in the best possible
7 position to utilise data effectively and efficiently?

8 **A.** So obviously there are many different owners or
9 custodians, I will say. The data is provided often by
10 the individual, so it's their test, it's their infection
11 it's whatever it might be. But we are careful
12 custodians of a lot of public data, particularly on
13 infectious diseases. So in UKHSA now we will receive in
14 automatically signals of, you know, to monitor, survey
15 different infections, so Covid variants, or what have
16 you. We have taken action because what happened during
17 Covid was that a lot of new systems were set up quite
18 quickly, patched together, they were quite expensive
19 systems and they were only specific for Covid.

20 So we don't have most of those systems now.
21 I think this is an important understanding. So if you
22 absolutely said this happens this minute, I cannot do
23 what we provided for -- for dashboards and things to the
24 extent that we did before, but we are trying to now
25 build systems which are pathogen agnostic and so not

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1 **A.** I would have to check some of the detail in my notes but
2 I think the sequence of events was -- that was -- that
3 paper was -- I don't have it in front of me but
4 I recognise -- it had a number of different areas of
5 potential opportunity to intervene and so there were two
6 issues. One was actually the testing capacity, and
7 I think that was the prime reason, but there was also
8 research which started and in fact the SIREN study,
9 which I've mentioned earlier, picked up some of that, so
10 that it gave an opportunity -- I think it came in before
11 the actual testing, it was a research protocol, but the
12 real problem with testing at the early part of the
13 pandemic was actually the capacity. So it was clinical
14 use first for management of patients and then obviously
15 healthcare workers and their families and social care
16 workers as well were the -- and key workers were the
17 next priority.

18 **Q.** My final question relates to lessons learned and data
19 systems. We've heard a lot about data, you've spoken at
20 length about it, and your answers have touched upon my
21 question so the remnant of the question that I have left
22 I can probably summarise as follows. It's abundantly
23 clear, Professor, how important and significant you
24 place data and it's a view that we share.

25 In the event of another pandemic we're going to
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1 only could we pick up -- use those for any new emerging
2 infection but much more routinely we can provide
3 information to the public so they can see as well.

4 I mean, one of the important things about the
5 dashboard was once it was up and running, actually
6 people responded to the waves that they saw and so to
7 some extent the advice we give can be -- there will be
8 routine evidence and we are doing that now. It's
9 a little bit -- it's crude at the moment but we're
10 trying to put out new systems for the public to use and
11 if you go on the UKHSA website you will see that for
12 winter viruses at the moment.

13 So we are doing work but there is a history,
14 I think of a lack of investment in digital
15 infrastructure across the public system and that comes
16 with security as well which is obviously a changing
17 environment. So it's quite a slow progress but there is
18 work.

19 **MS MUNROE:** Thank you very much, Professor.

20 Thank you, my Lady.

21 **LADY HALLETT:** Thank you, Ms Munroe.

22 Ms Hannett is right at the back there. I think
23 she's trying to make your life difficult as the last
24 questioner.

25 **Questions from MS HANNETT KC**
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1 **MS HANNETT:** Thank you, my Lady.
 2 Professor Harries, I ask questions on behalf of
 3 the Long Covid groups.
 4 Can I ask you first of all about UKHSA's work.
 5 The latest publicly available data on the prevalence of
 6 Long Covid was published by ONS in March 2024, and that
 7 reported that nearly 2 million people, or 3.3% of the
 8 population of England and Scotland, are self-reporting
 9 with Long Covid.

10 What work is UKHSA currently doing on
 11 communicating the risks of Long Covid to the public?

12 **A.** So, predominantly, the risk of Long Covid and the
 13 clinical interventions are managed by the NHS through
 14 NHSE, so broadly we don't transmit risk because we will
 15 include those risks along with the risks of the pathogen
 16 itself.

17 So I think in -- for example, in things like
 18 vaccination, where we know of vaccine effectiveness we
 19 will show in public communications the evidence that we
 20 have in relation to reductions in Long Covid, alongside
 21 those reductions in prevalence of disease.

22 **Q.** Is the answer that then, generally, no, nothing, save
 23 for when it --

24 **A.** Well, I think this is a distribution of responsibility,
 25 so it's not that we don't recognise the significance of
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1 **A.** So I think I'd probably refer to the evidence that
 2 Professor Sir Chris Whitty gave. Obviously I left that
 3 office in April 2021, and -- as I think he said, we are
 4 still learning a lot about this, and I'm sure you are
 5 very familiar with that.

6 I think that there is a -- there were lots of
 7 things that were really difficult and bad about the
 8 pandemic, and the balance of impact on children is
 9 really difficult. I think we've just had a colleague
 10 speaking from Mind about the mental health impact, so
 11 it's very difficult to -- there are lots of things in
 12 that statement that have not been flagged, and there is
 13 a lot of learning ongoing. So I think there's
 14 an absolute recognition that in a small number of
 15 children there will be really, really significant
 16 impacts.

17 It is still the case that the impact of Covid
 18 severity is still very much with the elderly, and you
 19 can see that in the outcomes.

20 **Q.** Professor, do you accept having put out that statement
 21 in August 2020, it was incumbent on the office of the
 22 Chief Medical Officer to flag the risk of Long Covid in
 23 a subsequent statement?

24 **A.** I think it would have been very difficult to do that in
 25 August. I mean --

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1 the disease. It's actually -- it's more to do with
 2 different parts of the health system and the
 3 responsibilities we have. So we will monitor vaccine
 4 uptake, for example. We will look at the associations
 5 of effectiveness of vaccine in a number of different
 6 ways, preventing serious illness, preventing
 7 Long Covid -- a number of those areas. But we -- it's
 8 not probably our -- it's more in the clinical research
 9 of clinical trials with NIHR, with the Department of
 10 Health and NHS England, to look at some of the other
 11 parameters.

12 **Q.** Can I just ask you about Long Covid in young people.
 13 The UK chief medical officers, of which at the time you
 14 were one, put out a statement on 23 August 2020 on
 15 skills in childcare reopening, and in that statement you
 16 said very few, if any, children or teenagers will come
 17 to long-term harm from Covid-19 due solely to attending
 18 school. That statement was issued at a time,
 19 August 2020, when a number of my clients' children had
 20 already developed debilitating and disabling symptoms of
 21 Long Covid and were being disbelieved by medical
 22 practitioners. So the August 2020 statement didn't warn
 23 parents of the risk of Long Covid in children; when did
 24 the office of the Chief Medical Officers provide such
 25 a warning?

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1 **Q.** I'm not talking about August, I'm talking about
 2 subsequently, once the risk of Long Covid to children
 3 became apparent.

4 **A.** I would struggle to answer, I think, on behalf of the
 5 Chief Medical Officer, because I think you posed
 6 a similar question to him when he was here and it's his
 7 office now and it's not mine. So I think the broad
 8 question, I think, is, are we aware of those risks?
 9 Yes. Is it well-known amongst the medical profession
 10 and among health services? Yes.

11 And for my own organisation, we do use that as not
 12 specifically for children, obviously, but we do say that
 13 the reduction, when we're using vaccine data, we will
 14 use the evidence about reductions in Long Covid as part
 15 of the opportunity that is available to the public of
 16 all ages from the reduction in incidence of Covid and
 17 therefore of Long Covid.

18 **Q.** Can I put the point another way: would you do anything
 19 different now, in your time as Deputy Chief Medical
 20 Officer, to offer reassurance to parents of children
 21 with Long Covid in hindsight?

22 **A.** Well, we're talking now about a document that I think
 23 went out in August 2020 when I don't think -- we were
 24 only a few months after the start of the pandemic, and
 25 the Long Covid syndromes were not well-described and

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1 understood, and that's obviously because it has a long
2 time frame. So I don't think it would have been
3 possible to say very much more at that time. Clearly,
4 the approach for everybody is there are lots of negative
5 things about Covid that we want to reduce them, and the
6 more we reduce the incidence of Covid, the less
7 Long Covid there will be.

8 **MS HANNETT:** My Lady.

9 **LADY HALLETT:** Thank you very much, Ms Hannett.
10 I think that completes the questions that we have
11 for you, Dame Jenny. I think the last we met you, you
12 had to go off to deal with -- was it an Mpox outbreak?

13 **A.** There is another Mpox outbreak.

14 **LADY HALLETT:** Another one, and I had a case of avian flu
15 this morning, so I hope that your organisation isn't
16 overwhelmed with cases, and that you manage to get them
17 all under control.

18 Thank you for your help. I think you may well,
19 during the course of your answering Ms Shepherd, have
20 volunteered to help the Inquiry again in another module,
21 but we'll try to limit the burden we place on the UKHSA,
22 but thank you for your help to date.

23 **(The witness withdrew)**

24 **LADY HALLETT:** Very well. 10 o'clock tomorrow, and
25 I understand the tube strike has been called off --

1 **MS CAREY:** It has, my Lady.

2 **LADY HALLETT:** -- so travel arrangements back to normal,
3 however good that may be. Thank you very much.

4 **(4.33 pm)**

5 **(The hearing adjourned until 10.00 am**
6 **on Thursday, 7 November 2024)**

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