## Thursday, 2 November 2023

## (10.00 am) <br> LADY HALLETT: Mr O'Connor. <br> MR O'CONNOR: My Lady, our first witness this morning is Lord Stevens. <br> LORD SIMON STEVENS (affirmed) Questions from COUNSEL TO THE INQUIRY

MR O'CONNOR: Could you give us your full name, please?
A. Simon Laurence Stevens.
Q. Lord Stevens, you have kindly prepared a witness statement for the Inquiry at our request, a copy of the front page of it is up on the screen now. I'm sure you're very familiar with the contents of that statement, and we don't need to go there, but on the last page you've signed that statement with a date of 22 September of this year underneath the statement of truth saying that you believe the facts contained in the statement are true. Is that right?
A. It is.
Q. Thank you. Lord Stevens, you had a lengthy career in the NHS, latterly in NHS England, and of particular interest to the Inquiry, you were chief executive of NHS England for over seven years between April 2014 and July 2021 ; is that right?

That is.

Health Education England had responsibility for education and training, NHS Digital for the data, Public Health England for obviously not just infectious diseases, but PPE stockpiles and so forth, and so over time, frankly, we attempted to try to ensure that, together, pieces of the jigsaw were coming together to form the full picture, but the consequence of that is that in legal terms at least, before a set of changes were made in 2022, NHS England was not actually directly responsible for the totality of what was happening in the NHS in England. Confusing as that sounds, but that is the legacy that Parliament bequeathed us.
Q. Well, perhaps not responsible for the totality of the NHS in England, but what, in summary, was it responsible for?
A. Well, de facto, particularly when Covid struck, our job was to lead the NHS response.
Q. So that was the role of NHS England.
A. Yeah.
Q. Your role with it, as its chief executive, in summary?
A. To be responsible for the work of NHS England itself and also to be directly accountable to Parliament as the accounting officer for the funding that flows to the NHS in England, which was about $£ 150$ billion a year.
Q. Thank you. And that brings us to a point I wanted to
Q. And it's clear, therefore, from the dates that the final year and a half of your tenure as chief executive was during the Covid pandemic?
A. Yes.
Q. We also know that you were made a life peer on stepping down as chief executive in 2021; is that right?
A. $\mathrm{Mm}-\mathrm{hm}$
Q. Lord Stevens, help us a little bit, if you will, with the nature of your role as chief executive of NHS England. Is it right that you were, as it were, the operational head of that organisation?
A. Yes.
Q. It is, of course, an enormous organisation, enormous budgets, huge staff, buildings and so on. Just give us an idea, if you will, as to the scope of your role in that post.
A. The NHS in England is not one and the same as NHS England, somewhat confusingly. So NHS England is the body that was created by Parliament in 2012, in the first instance to oversee the funding for different health services across the country, but as part of that 2012 Act of Parliament, actually quite a number of the responsibilities for the health system overall were distributed, some might say fragmented, between different bodies, of which NHS England was one, but
raise, which is that we need to be clear, don't we, about the relationship between NHS England but, in this case, you, and the Department of Health and Social Care and its Secretary of State, Mr Hancock. Putting it crudely, he was not your boss, was he?
A. The chief executive of NHS England is accountable to the board of NHS England. I must say, frankly, it felt as if I had many bosses. So the board of NHS England was one. I obviously had an accountability to the Secretary of State and to the government, but also more widely to Parliament, as I've described, as the accounting officer for the organisation. And frankly I felt an obligation to patients, the public and the staff in the NHS as well.
Q. All right

Moving on to the pandemic itself, Lord Stevens, it is obvious that the NHS was involved really at every level of the response to the pandemic, and that involvement will find its reflection in the involvement of NHS England with this Inquiry. There is to follow this module, as you know, a module that will focus on the NHS itself, there will be a vaccines module, there is a module to consider PPE, care homes, all of which the NHS will have a strong interest in.
A. Absolutely.
Q. This module, as you know, is focusing on core political and administrative decision-making, essentially decisions about the pandemic made in Downing Street and the Cabinet Office, and so the scope of my questions today will be on the role that you and NHS England took, first of all, in that decision-making and also on issues that affected that decision-making. But we need to bear in mind that those operational matters, if you like, will be covered in subsequent modules.

So let me start, if I may, by asking you: what role do you think that you played, in general terms, in that core political decision-making in the period that you were in office during the pandemic?
A. Well, I think the main responsibilities that we had and I had were to do everything we could to ensure that the NHS was able to look after severely ill Covid patients and also all of the other non-Covid patients who needed our care during the course of the pandemic. So, first and foremost, it was about the operation and the availability of the NHS.

We were not directly asked to contribute to debates that government was having about lockdowns and so-called non-pharmaceutical interventions or other ways of controlling the spread of the virus --
Q. Just pausing there a moment, Lord Stevens.
decided to take its decisions or review progress against the pandemic, so that abated as a forum for this type of discussion.
Q. Well, we've certainly heard that the COBR meetings stopped, but are you saying that you stopped going to them for that reason?
A. No, I think -- well, I went to every COBR meeting I was asked to go to, as far as I'm aware.
Q. Was it routine that either you or someone else from NHS England was invited to those meetings?
A. During February 2020 I think that's right, and probably March as well. I mean, I'd have to literally go back and look at all of the COBRs and the minutes and so forth, but that's my recollection, yes.
Q. You've mentioned just now, and you describe in your statement, a view that these meetings were not, in your words, optimally effective. Can you expand on that?
A. Yes. I -- my observation is that the COBR meetings were very large, so lots of people, which often makes it hard to have very substantial discussions, and sometimes the seniority of representation, ministerially, at the COBRs varied between departments. So it wasn't always the case that a minister necessarily had the full authority of their department when a discussion was taking place, was my observation. Now, you know, others
A. Sure.
Q. If you can try to keep your answers relatively -- speak relatively slowly and relatively short, that would help us all.
A. I'll stop there then.
Q. All right. So you've described, in essence, most of your work, unsurprisingly, given what you've said, was on operational matters: helping the NHS deal with Covid, and of course dealing with all of the other things it would have been dealing with anyway?
A. Yeah, I think that's right.
Q. And you've said you were not routinely involved in those discussions about lockdowns and other NPIs.

We can see and you describe in your statement -perhaps we can look at paragraph 13 of your statement on page 5 -- you say that you did attend several of the COBR meetings, we've heard about these meetings, held in the early part of 2020.
A. Yes.
Q. Several, all, maybe you can't remember now?
A. Probably almost all. I know the Inquiry has the COBR minutes and whether I was there or not will be there. But certainly a number during February and then in March. But as I think I mention, in a sense COBR fell out of use as a mechanism by which the government 6
in government may take a different view.
Q. There's a particular point you make, which we can see in this paragraph on the screen, Lord Stevens, which is that when, as we know they were, in the early stage, the COBR meetings were chaired by Matt Hancock, other secretaries of state sometimes avoided attending, and sent junior ministers instead. Was that a reflection you had at the time?
A. I'm not saying that was cause and effect, but that is the fact of the matter.
Q. Well, I'm sorry, the inference in your statement is that it was cause and effect, but you're not going that far?
A. Well, I just observed that those two coincided.
Q. Can you offer a view as to whether, in light of that, the phenomenon that you were observing, it would have been better for the Prime Minister to have chaired the COBRs at the early stage? Would that have, do you think, ensured that more senior people, secretaries of state, attended those meetings?
A. I think it's very likely that if the Prime Minister had chaired those COBRs then other secretaries of state would have chosen to go as well, but whether the substance of those COBR meetings was such that not having all of those folks there made a big difference, I defer to others.
Q. Of course.

Just following down the page, Lord Stevens, you indicate that you did attend some Cabinet committees, and I think we can see -- I'm not going to take you to the document -- you were an attender, were you not, of the MIG, the health -- there was a particular health MIG early in 2020, which I think you did attend; is that right?
A. Yeah, I think I went to several of them, but not all of them. And as I think I perhaps diplomatically say in my statement, I did not consider that they were the most effective forum for resolving operational questions, shall we say, and that's why, in fairly short order, they were abolished and replaced by a different system.
Q. They were replaced by what we, I think everyone, referred to as Covid-O, Covid-S, operational and strategy?
A. Yeah.
Q. I think you're saying that your MIG was replaced essentially by Covid-O; is that right?
A. I think all of the MIGs were, in a sense, replaced by Covid-O and Covid-S, the point being that I think having fragmented subject-specific ministerial groups didn't really deal with the cross-cutting issues which actually were the main purpose of having those kinds of forums. 9
had happened I think earlier that week, and we can see from the start, the first line of the email, it was a meeting which included the Prime Minister, the Chancellor, Chris Whitty, Stuart, Vallance and you, and it may well be others as well.
A. Sure.
Q. We don't see your name on the copy list. This appears to have been an internal Number 10 document, but I know you've had a chance to look at this document, and obviously if there are any things in it which don't accord with your recollection, you'll tell us.

First of all, do you remember going to this meeting in the autumn of 2020 ? I say "going", it may have been a virtual meeting.
A. Yeah, I do -- I do remember it. I think this note is 10 October, I think it relates to a meeting that Thursday, I think it was probably 8 October.
Q. Right. And we see again from the first line that the purpose of the meeting was to discuss Covid, perhaps in particular NHS preparedness.
A. $\mathrm{Mm}-\mathrm{hm}$.
Q. Preparedness for the winter to come?
A. Yeah, and in the light of rising Covid cases which were apparent by early October.
Q. We'll look at just a little bit of the detail in

And when it came specifically to figuring out things that required political involvement, a ministerial decision on health, the MIG was probably not the best place to get that done.
Q. Did you attend either Covid-O or Covid-S and did you find that they were more effective forums for the --
A. Yes, I did from time to time, and that was my assessment. And as I think I say as well, I think when the Cabinet Office created with Number 10 this thing called the Covid Taskforce, that substantially improved the coherence of what the centre of government was doing relative to individual government departments, was my impression.
Q. You also say in your statement, Lord Stevens, that there were a few occasions at least where you had ad hoc meetings with the Prime Minister and other senior decision-makers.
A. Yeah.
Q. I'd like to take you to a document which records one of those meetings. It's INQ000146616, please.
So this, Lord Stevens, is an email, is it not, dated 10 October 2020, so we're in the autumn of that year. It's an email from Imran Shafi, who has given evidence to the Inquiry, essentially recording a meeting which 10
a moment, but before we do, can you give us a sense of how frequent meetings like this were? Did you have meetings with the Prime Minister and the Chancellor weekly, monthly, less than that?
A. It ebbed and flowed. So during March 2020, and April, very frequently. Then as Covid numbers decreased and the pressures on the NHS likewise, then far fewer during May, June, July, August. But then from October they increased again, and certainly by the time we were in, say, late December, early January 2020, very frequently. In fact I think I had between New Year's Day and 10 January something like six separate meetings with the Prime Minister and others on both winter, Covid pressures and the vaccine roll-out. So that was the sort of pattern of it over the course of the pandemic.

As I think I also say in my statement, Number 10 got into this sort of rhythm of having these so-called daily dashboard meetings at 9.15 that the Prime Minister would chair, and their frequency kind of changed a bit depending on what was happening with Covid. They could sometimes be every day, they could be three times a week, and I personally found those very useful sessions, because it was a chance to kind of tell it straight direct to the relevant senior politicians, and
to the extent there were things that frankly I thought we could benefit from some support on, to sort of lodge that direct with the Prime Minister and others.
Q. Just helping us to imagine what you're describing, obviously, can you just give us an indication of whether those meetings were virtual or not? I mean, were you spending your life going back and forth to Downing Street when you were having these regular meetings or did you, for example, dial in to those 9.15 meetings?
A. Yeah, some were virtual and some were face to face, so yeah, it was absolutely a mix of both.
Q. We will come to the detail, but since you've given us that overview of your interplay --
A. Yeah.
Q. -- the exchanges you had, the meetings you had with the Prime Minister and his team, you are of course aware that we have heard evidence in the last few days, the last week or so, of difficulties in the decision-making process, a certain level of dysfunction. There has been evidence of the Prime Minister finding it difficult to settle on a particular decision. "Oscillating" is one of the words, one of the words that's been used to describe that.

13
you've heard, as I understand it, over the last several days really relates to sessions that, frankly, I wasn't present at, so I can't give you good commentary on those.
Q. You would, though, have experienced the consequences of his decisions, and you would have found yourself at the next meeting hearing a decision you might have expected to have been taken either had or hadn't been taken, so is there really nothing that you can say about the way in which the decision-making process took place?
A. Well, I mean, obviously I can see some of the evidence that you can see now as well, not all of which obviously we were privy to at the time. What I would say is that in respect of decisions that we needed from Government on NHS capacity, I mean, sometimes decisions were taken which we didn't like but nevertheless, you know, those were the decisions.

I think the best example in a way of the sort of interface with Prime Ministerial decision-making that I can personally speak to was around the roll-out of the vaccine programme, where the Prime Minister was very personally involved in that, and for the most part that was actually a, you know, constructive engagement on what needed to get done. And we can obviously talk

Can you give us an overview of your experience of those months that you spent discussing Covid, helping him make those decisions?
A. Well, in a sense, I don't think I did help him make those decisions, if by "those decisions" you mean lockdown restrictions, social restrictions and so forth. So I can't --
Q. Just pause there. What I meant, because you have just given evidence that you had frequent meetings with the Prime Minister --
A. Sure.
Q. -- at times very frequent --
A. Yeah.
Q. -- I'm not suggesting that you were making the decisions with him --
A. Sure.
Q. -- but one assumes that the purpose of him having those discussions with you was to help him make decisions. That's what I meant.
A. Yes, but actually the way the rhythm of it tended to work was we would have the session specifically on the NHS and then ministers would go off and have a separate session without the NHS present, where then the consequences of that for their wider decision-making would be taken account of. So I think a lot of what 14
Q. Yes. All right, we won't, because, as I said --
A. Right.
Q. -- there is another module to come, and I'm sure there will be an opportunity for you to talk about vaccines in the vaccines module.

Let's look, if we can, at this document, and it's perhaps the third paragraph where we see that:
"The PM asked about NHS capacity."
There is then a record of a relatively detailed review, if you like, that you conducted of the position as it stood regarding the NHS. We see reference to regional variation, and we also see in the first line that you stressed "the NHS was not overwhelmed".
A. On 8 October 2020, correct.
Q. Exactly. And so you are saying it wasn't overwhelmed at the time of the meeting, and then, reading on, you describe the regional position and give some view about the future. I'm going to come back to the question of NHS overwhelm shortly, but just looking a little bit further down the document, there's the next paragraph, we see that the discussion "turned to the question of NPIs". Simon Ridley, one of the Cabinet Office officials, gave a presentation about NPIs.

Then there is another paragraph where it appears that you contributed to the debate, perhaps about NPIs, 16

## it says:

"Simon Stevens argued that -- stepping back -- not everyone currently accepted there was a problem, people did not think measures were fair, they questioned whether they worked, and if they did work, they wanted financial support. Government response should take these factors into account."

So, first of all, slightly contrary to what you said a moment ago, this does appear to suggest that you were contributing to discussions beyond simply the NHS capacity matters?
A. Well, I think on this occasion I was asked: what are people in the health service in Liverpool, Merseyside, the northwest seeing about what's happening in their local situation? Because obviously part of my responsibilities were often to be out and about around the country, talking directly to people who were affected, and I think in that comment I was reflecting what I had been told directly from people in Merseyside, Manchester and elsewhere, that frankly the set of mechanisms that were then supposedly in place in those areas were not working, and their view was that part of the problem was that there wasn't sufficient financial support for people who were being asked to self-isolate. So when I was asked the question, I answered.
other people saying, but yes, that was also my personal view.
Q. Thank you.

I'm going to move away from this document, but stay, as it were, with that general issue of exchanges between you and the Prime Minister.

I'd like to go, if we can, please, to the written witness statement of Helen MacNamara, which is INQ000273841, paragraph 71, on page 39, I think. Yes.

Lord Stevens, I don't know if you have had a chance to look at this document before. I hope you have.
A. Sorry, which part are you looking at?
Q. Well, let me show you. One of the observations that Helen MacNamara makes in her witness statement, and in fact that she expanded on in evidence yesterday, is the last sort of five or six lines of this paragraph we're looking at. She, of course, is talking about her experience of dealing with officials and politicians in Number 10, but she said this:
"I do not remember anyone working in the centre or who was part of the conversations who had a detailed understanding of the way the NHS operated. This is not unusual or unique ..."

And she talks about the fact that social areas of policy are less well represented in Downing Street than
Q. Yes. And in fact one of the themes of the evidence that we've heard is precisely on that issue, that there was a live question about whether sufficient financial support was being provided, including in fact to workers in the healthcare sector, and I think are you saying that perhaps it was workers in the healthcare sector that you were reporting back on, as it were, needing further financial support?
A. You know, I can't remember that specifically, because obviously there were different arrangements for NHS staff, furlough and so forth, so I can't say that directly. But what I can say is that I think this was a time, as I recall it, when it was a pretty variegated set of local restrictions that were in place around the country, and frankly a lot of people were struggling to understand the rationale and what they were supposed to be doing in one place or another, and I think it's the case that after this the government then moved to their more sort of clear-cut tiering system to try to respond to that.
Q. Quite. And on any view you were voicing support for the idea that further financial support needed to be given to people self-isolating?
A. That was my personal view. I think actually what these notes show was that I was describing what I'd heard 18
military, national security type matters.
I'm interested in your views on that, with your experience of -- long experience of dealing with politicians, but perhaps particularly that period during the pandemic, did you feel there was, as it were, a deficit in their understanding of the granular way in which the NHS works?
A. I think Helen's description seems to me accurate, particularly as regards the Cabinet Office. The extent to which the Prime Minister's office, Number 10, has health expertise is to some extent a function of how the Prime Minister of the day chooses to staff their Number 10 policy unit.

During the pandemic itself, I think there is truth in what she says, but to some extent, as long as that doesn't lead to ill-informed second-guessing of the decisions that people in the NHS are actually trying to take, that need not in itself be a problem.
Q. One can certainly see how it would be a problem if there was that sort of second-guessing, but surely even if they leave the operational decisions to you, it would still be necessary for them to have that level of detail in making the higher level decisions, for example NPIs and so on?
A. Yeah, I think to some extent that is -- that is true.

I mean, I think there was a -- as I think Helen described, and I agree with her, there was a sort of disconnectedness between aspects of what the Cabinet Office was doing early on in the pandemic and what, sort of, we were seeing in terms of the operational realities.

As I say, I think the Covid Taskforce really helped with that because that brought together people who had that more detailed set of expertise into one place with a single voice where you could have a direct conversation and know that the advice that would then go to the Prime Minister and others would be properly informed by what we were telling them.
Q. Just sticking with that, then, we will hear more about the Covid Taskforce in evidence, in fact, next week.
A. Right.
Q. Help us with this: were there people, civil servants, involved with the taskforce who had this sort of granular understanding of the NHS in a way that perhaps the earlier structures didn't have?
A. I think to a greater degree, yes, and there were some -even if there were some generalists, they I think, you know, pretty quickly understood the moving parts, shall we say.
Q. I want to move to a slightly different topic, 21
or so later, 3 February, it's just at the top,
Dominic Cummings says:
"When SS off?"
Matt Hancock says:
"Wanted to talk to you about this in the margins of meeting [tomorrow]. Short answer is his initial proposal is to announce in Sept \& go at Christmas. I haven't yet engaged. How hard to push for sooner?"

Dominic Cummings says:
"We must get on with it now. Announce next week as
part of reshuffle frenzy and it will all get lost in
that."
Matt Hancock says:
"Let me see if I can square him for that? If I can't, we can still go if we want."

So at least on the basis of these messages, first of all, there certainly do seem to have been discussions between Mr Hancock and Mr Cummings about you leaving.
A. $M m-h m$.
Q. And it does appear that Mr Hancock had had some discussions with you about that?
A. Well, take a step back. I, as I said at the start, was appointed in 2014. When I took up post I envisaged serving for around five years, which would have taken me to 2019. As you may recall, there was a degree of

Lord Stevens, and it's still to do with your engagement with the Prime Minister and Mr Hancock and others, but it's a rather basic question, of whether Mr Hancock in particular, but others, were encouraging you to resign or otherwise remove you from office during the period of the pandemic.

I'll take you to some documents, but were they, or not?
A. No.
Q. Let's look --
A. Not to my face, anyway.
Q. Let's just look at a couple of WhatsApp messages, if we may.

First of all, INQ000129176. Let me say these are both -- these messages are from very early in the pandemic, but you can see January 2020 Dominic Cummings is texting to the owner of the cellphone, who is
Mr Hancock, saying:
"Where are we with SS?"
Simon Stevens.
He says:
"It's in train. I am first getting Ara Darzi to
persuade him it's in his best interests to go now. If that doesn't work I'll move directly."

Then if we can go, please, to INQ000129185, ten days 22
political chaos in the United Kingdom during the course of 2019, a change of Prime Minister, a general election, and I therefore did not feel it was quite the right moment to create a gap in the leadership of the NHS, so I think it was known that that was something that had been in my mind, but felt that I should stay through to the New Year, and then sort of make a decision at some point during the course of 2020.

Now, of course Covid then came along and it would have been completely wrong to have left a vacuum during the first wave of Covid. Come summer 2020, the thought recurs, but I have a discussion with the Prime Minister about that during summer 2020, but by the time that possibility would crystallise, we were back into another wave of Covid. So I therefore, again, felt duty bound to see the winter period through and then the roll-out of the vaccine, at which point, in July 2021, I was able to -- I was able to leave.
Q. Well --
A. By the way, can I just say on some of these things, I think there's a suggestion there, asking Lord Darzi to persuade me. These emails I think have previously been leaked to The Daily Telegraph and, in response to those, Lord Darzi has said on the record that is not correct, and I think his actual words were "that is
misinformation". So he did not seek to persuade me in the way that's described here.
Q. Well, thank you for clarifying that and for the earlier answer, Lord Stevens.

Let me be clear, the reason l'm asking these questions is to understand whether there was a relationship of confidence and trust between you doing your very important job and Matt Hancock, Boris Johnson and others during the period of the pandemic.

I think it follows --
A. Can I just say on that, I think it's relevant, as I saw Dominic Cummings' statement earlier in the week, I think he has said on the record that when the pandemic struck he was then not seeking to do this, and I believe Matt Hancock has said the same in his written statement. So I have no insights other than what the two of them have said on the record.
Q. And your evidence, putting those exchanges in context, is that there was no sense in which you were somehow defying them in staying in your role in January/February 2020?
A. No.
Q. I do want to ask you about one more message, which is from later in the year, August 2020. I'm not going to bring it up on screen, but let me just read it out. 25
improve social care, that it needed to be not just about ensuring that people didn't have to sell their homes but also that the availability of social care increased and that the social care workforce was addressed. I was clear that I didn't think this could be done just as a private Whitehall process, a sort of behind the bike sheds agreement between ministers, it had to be a public open process. And ideally, if it was going to create a national consensus, so social care reform actually got done, it needed to be on a cross-party basis. That was the basis on which I suggested action was required. Those points did not find favour and therefore I didn't do it.
Q. Did you think that Boris Johnson, Dominic Cummings trusted you to do your job during the summer and autumn of 2020 ?
A. I can't speak for Dominic Cummings but there was nothing -- because I had no conversations about Dominic about this question, but my regular interactions in the autumn with the Prime Minister did not give me a different sense of that, no.
Q. What about Mr Hancock, Mr Stevens? It is important to understand whether there was a fruitful relationship of trust between the two of you. The Inquiry has heard evidence that other people working with Mr Hancock found 27

Its primary focus is Mr Cummings coming back to the question of whether Mr Hancock should leave his role, but he does mention you as well. He says this:
"I also must stress I think leaving Hancock in post is a big mistake -- he is a proven liar who nobody believes or shd believe on anything, and we face going into [an] autumn crisis with the cunt still in charge of the NHS still -- therefore we'll be back around that cabinet table with him and stevens bullshitting again in [September]. Hideous prospect."

So, leaving aside the question of Mr Hancock, did you later on in 2020, in August, have the impression that Dominic Cummings or Boris Johnson was dissatisfied with the way that you were running the NHS or "bullshitting" them?
A. Well, by the standard of Dominic Cummings' adjectives, that's one of his gentler epithets. So, look, what I would say is -- well, I just said it a moment ago actually -- I did have a discussion with the Prime Minister in the summer of 2020 about whether or not I would be able to be released from active duty in the NHS. We discussed specifically whether I might play a role in helping improve social care in the country. To be frank about it, I was pretty clear cut about what I thought success would look like if we were going to 26
him someone who was untruthful. Was that your experience or not?
A. There were occasional moments of tension and flash points, which is probably inevitable during the course of a 15 -month plus pandemic, but, look, I was brought up always to look for the best in people.
Q. I'm sorry, Mr Stevens, that's not an answer to my question.
A. Which question? Which bit of it?
Q. Did you find Mr Hancock to be truthful or not?
A. Well, I know various people have made quite strong accusations against -- against Matt Hancock. All I would say is strong accusations need strong evidence to back them up, and I don't think I've seen that evidence.
Q. I'm still not sure you're quite engaging with my questions, Lord Stevens, and it is important, because you were at the head of the NHS, he was at the head of the Department of Health and Social Care?
A. Sure.
Q. In your working relationship with him, during these most extreme and important of times, was he someone you found you personally could trust?
A. Yes, for the most part, yes.
Q. What do you mean by "for the most part", Lord Stevens?
A. Well, as I think I said right at the start, I'm not denying that there were a small handful of occasions during the course of the year, year and a half, when there were tensions, but that I don't think is particularly surprising given the circumstances under which everybody was working.
Q. I'm going to move on to ask you some questions about something called Operation Nimbus.

Let's look, first of all, at your statement, please, paragraph 21, page 7.

I think it's right to say you attended this operation --
A. Yeah.
Q. -- which was a tabletop training exercise?
A. Yes.
Q. I'm not going to call it up, but we can note that it was an exercise that was implemented following a SAGE meeting -- sorry, a COBR meeting on 29 January, we could see it in the minutes, that there needed to be an exercise, and, as I think we've said, it occurred about two weeks later on 12 February 2020.

Can you just describe in a few sentences,
Lord Stevens, what that exercise was about and what you took from it?
A. Yes, the purpose of the exercise was to look at 29
A. -- but I would have thought so, yes.

I mean, I might also say that, in a sense,
the effectiveness of this exercise was slightly
undermined by the fact that this took place on
12 February 2020, with a lot of ministers from a range
of departments other than Health around the table, and then the very next day there was a Cabinet -a ministerial reshuffle, and quite a number of them lost their jobs. So it was an entirely new set of ministers who had not been exposed to any of that 24 hours before.
Q. I was going to ask you, without wanting to stretch your memory too much, in fact, who was there. Do you recall whether the Prime Minister was there?
A. I don't think he was, no. I don't think so. But I'm sure there will be records to that effect.
Q. Well, we haven't seen any, but we can carry on looking.
A. Right.
Q. I think it's implicit in what you say, then, that certainly, I think, Mr Hancock was there --
A. Yeah.
Q. -- we'll come on to talk about that, and other junior ministerial people, who, as you've said, some of whom may have lost their jobs or changed their jobs the next day.
A. Yeah.
the so-called reasonable worst-case scenario, which I know the Inquiry has heard evidence about, which is saying: if it's the case that Covid turns out to have these features, maybe $81 \%$ of people are infected and a proportion of them then die, that obviously is a huge and devastating impact on the United Kingdom, what are the responses the different government departments need to make?

And so I think it was less specifically aimed at the health response and more about having a broader range of Whitehall departments who had not been so involved in those conversations kind of getting their head around: my goodness, this would be an absolutely terrible thing, what would we need to do to make sure our plans are prepared?
Q. We haven't actually seen any report or summary from this exercise.
A. Right.
Q. Do you happen to know whether such a document existed or would you have expected such a document to exist?
A. Yeah, I would have assumed that the Cabinet Office relevant secretariat would have produced some sort of notes from that, actions for departments. Whether they have or not, I leave to you --
Q. Understood.

30
Q. Let's look at what we do have about Operation Nimbus, Lord Stevens, which is -- if we can call up on screen, please -- INQ00052022.

This is a set of, I think, slides, perhaps
a PowerPoint demonstration. It's perhaps what the participants in the operation were shown or at least part of what they were shown.

If we can go to page 7 , please, we see the synopsis, which is -- very much as you've already outlined, it is to be imagined that the Covid pandemic has advanced, as it were. We see that the participants are asked to imagine that the date is 14 April, so two months further on from 12 February, which was the date this took place. Sustained transmission has been ongoing for a month and a half, hypothetically, by that stage.

There are various facts and figures given, but the most striking one is in the last bullet point, which is that there might -- it is, as of the synopsis, to be assumed that there may be around 840,000 excess deaths over the 16-week wave of infection, which, as you say, reflects the reasonable worst-case scenario at the time. Is that fair?
A. Yes.
Q. Then if we look over the page, we see a wave, which was the scenario that was being engaged with. The sort of
solid line is the hypothetical line up to the date of the exercise and then there's a sort of projected dotted line after that. The wave lasts for 16 or so weeks, and the idea is that within that time there would have been that very large number, 840,000, excess deaths.

Just a couple of points I want to ask you about leading on from that. The first is that, as you describe in your witness statement, this exercise seems to have provoked a discussion about who should be responsible for making decisions about prioritisation, allocation of stretched NHS resources in a situation like this.

Perhaps we can take this down and look at paragraph 21 of your witness statement. It's on page 7. Sorry, perhaps I should have said that. So it's at the bottom of the page.

So we can see, Lord Stevens, you say:
"It ..."
That is the exercise:
"... did result in -- to my mind at least --
an unresolved but fundamental ethical debate about a scenario in which a rising number of COVID-19 patients overwhelmed the ability of hospitals to look after them and other non-COVID patients. The
Secretary of State ... [that's Mr Hancock] took

Social Care I think created an ethical, moral advisory panel to sort of ask the question, you know, if absolute disaster strikes then how would you ration care, limit it, in a way that would be fairest and have the -you know, be the most defensible under this, you know, horrible situation.

But I certainly wanted to discourage the idea that an individual Secretary of State, other than in the most exceptional circumstances, should be deciding how care would be provided. I felt that we are well served by the medical profession, in consultation with patients, to the greatest extent possible making those kinds of decisions.
Q. And this, I suppose, was Operation Nimbus doing its job, in the sense that it raised in advance an issue like this, while there was still time to think about how to deal with it. And did you then take steps to at least pursue that debate as to whether Mr Hancock should have that level of decision-making in a worst-case scenario?
A. Well, I think, and this is something that -- I think you're seeing Sir Christopher Wormald from the Department of Health and Social Care later, that was probably something that Chris Wormald may be able to give you information on as well. As I say, the department had this Moral and Ethical Advisory Group,

33
the position that in this situation he -- rather than, say, the medical profession or the public -- should ultimately decide who should live and who should die. Fortunately this horrible dilemma never crystalised."

Just before I ask you about this, to note that is it right that the previous Secretary of State or possibly a previous Secretary of State, but Jeremy Hunt had taken a different view of this matter, had he not? I think it was connected to Exercise Cygnus, which had happened some years before. He had taken the view, and this is in fact something that he spoke about in evidence in Module 1 of this Inquiry --
A. Right.
Q. -- that decisions of this type ought to be reserved to clinical staff. Is that something you're aware of?
A. Yes, I've heard Jeremy Hunt say that, yes.
Q. So there you are. I mean, he took one view and you're saying in your statement that on 12 February Mr Hancock took a very different view. Did you have a view as to whether that was an appropriate line for him to take, desirable or not?
A. I thought it would be highly undesirable other than in the most extreme circumstances, and you can argue that these are the most extreme circumstances, and that is one of the reasons why the Department of Health and 34
and I think they continued in existence during this period. So I actually don't think this was a question that was resolved. There were specific instances that gave rise to this type of question. At one point during the first wave there was a group that had come up with essentially rationing criteria that might be used for critical care in the event that there were not enough critical care beds for severely ill patients.

Our view was -- my view was that -- actually by the time that was drawn up, it was clear it wasn't going to be needed, and in any event it was far too crude a tool, that would result in bad decisions being made around the country, so that was never promulgated.
Q. I want to move to a second issue sort of stemming from Operation Nimbus, Lord Stevens, which takes us back to this question of the NHS being overwhelmed.

We know that a month later than Operation Nimbus, 12 February, we know that on 13 March or thereabouts there was a change of policy from the mitigation strategy towards a suppression strategy which, in the end, involved a lockdown. We also know that one of, if not the key rationale for that change of policy was a fear of the NHS being overwhelmed unless the policy was changed.

But we've also heard from a number of scientists who 36
sat on SAGE who, in summary, have said that it, in fact, was obvious or fairly likely or very likely to them that the NHS would be overwhelmed some time before 13 March, and they -- I mean, for example, Professor Medley, who I'm sure you know, the chair of SPI-M, said that throughout February it became increasingly clear that NHS capacity in the UK would be overwhelmed.

Just looking at this Nimbus exercise, it's inherent in what we've been saying about decisions of life and death, and so on, that the exercise that was run there had, as part of its core, a situation in which clearly the NHS would have been overwhelmed.

So just drawing those strands together, from your perspective, was it as late as 13 March or thereabouts that it became obvious and only then did it become obvious that the mitigation strategy would involve the NHS being overwhelmed, or is it something, to your mind, that was apparent earlier or at least should have been considered earlier?
A. I think it was clear that, if the reasonable worst-case scenario were to come about in the UK, then the NHS would be overwhelmed, and we had a group of our clinicians and analysts working, for example, intensely with the SPI-M modellers on Sunday 1 March to refine what the parameters might be for thinking about how many
and do I take it from what you've said then that, first of all 12 February, so Operation Nimbus, although the exercise involved a set of facts which included the NHS being overwhelmed, are you saying that, at that stage, because it was still then a worst-case scenario, it perhaps wouldn't be fair to say that, at that point, it was clear that, in reality, really the cards were on the table and the NHS was going to be overwhelmed at that stage?
A. Yeah, as you say, I want to be very careful of hindsight bias, but I think Nimbus was explicitly presented as a scenario, as a possibility, as an exercise. It was not being suggested by the epidemiologists or anybody else that "This is the course we're on, so now plan against it". And I think I've made the point in my written statement that one of my observations looking back is that there was too much ambiguity about what the status of this reasonable worst-case scenario was during the course of February and the first part of March and the probability that the reasonable worst case was actually going to become the case.

Obviously, that probability evolved during the course of February and early March, but I think, you know, for example, minutes of the COBR meeting on 29 January say that, informally at least, it was thought 39

37
intensive care beds each sick patient might need, and so forth, and that produced a set of scenarios that evening, Sunday/2 March, SAGE papers, as I see them now, on 3 March 2020, have two separate papers, one from Imperial, one from the London School of Hygiene and Tropical Medicine.

SAGE on 3 March says three things: it says it is highly likely there is sustained transmission of Covid-19 in the UK at present; secondly, they say, given current surveillance systems, it will not be possible to time the start of interventions optimally; and, third, they say, whatever the exact figure, NHS demand will greatly exceed supply in a reasonable worst-case scenario even with behavioural interventions and -behavioural and social interventions.

So I think it is -- it is apparent that, certainly by the beginning of March, it could be seen that, if action was not taken to reduce the growth of Covid, then the NHS would be overwhelmed.
Q. Thank you, and one of the issues that we are considering is whether advice from bodies like SAGE was clear enough. It may be that your reference there to the minutes slightly makes the point that sometimes these messages can be confused. But what I really want to get to is your own view, not with hindsight but at the time,
there was a $90 \%$ probability that the reasonable worst-case scenario would not come to pass, and then, sort of, a few days later, early February, I think it was said there was a four-fifths probability that it wouldn't come to pass.

But I think one of the takeaways from this is that there needs to be much greater clarity about what is the probability that is being assigned to these different potentials, so that policymakers can understand what exactly they're being told.
Q. One way of looking at it, and this is -- I think it was Professor Woolhouse who said this, is that the point of having a reasonable worst-case scenario is that that's what you should be preparing for, and so, in a sense, you leave aside the probability of that situation eventuating, you just prepare for it. But I think, perhaps, your point is that that might be a slightly sort of -- it's too difficult to achieve that situation in real life, people are always going to want to know how likely it is that this sort of terrible event is going to happen.
A. You know, I make the point, I think, elsewhere in my statement that the government obviously has a pandemic -- sorry, has a National Risk Register and there are all sorts of reasonable worst-case scenarios
in that. If we were actually to act on all of those, ie give them a probability that, on the balance of likelihood that they're going to come about, then, you know, life would grind to a halt. So at some point when these national risks begin to crystallise you have to be clear as to whether you move from a purely theoretical possibility to: this thing is happening, do something.
Q. Let me move the conversation on, Lord Stevens, but sticking with this question of NHS overwhelm just for a few more minutes. We have been focusing on March 2020, but it's right, isn't it, that the later lockdowns, towards the end of 2020 and then into 2021 were also triggered, amongst other things, by a concern that without it the NHS would again be overwhelmed. bridges. Do you think that later in the pandemic there was a clear sense amongst decision-makers of what NHS overwhelm actually meant?
A. Yes, in the sense of -- look, I mean, if you're confronted with the situation where you have, say, 100,000 hospitals beds in England and you're being told that, if the pandemic runs out of control, you might need between 200,000 and 800,000 then, you know, that's orders of magnitude above what can be created. You
increase in the numbers infected, not just how do you match the number of people who are going to be very, very ill to the number of hospital beds?
Q. Thank you. As you say, that's a point which you develop in your witness statement and it's what I wanted to ask you about, which is: did you feel that taking the risk of NHS being overwhelmed as, if you like, the switch, the trigger for lockdowns was the right approach for the government to take?
A. Well, it was clearly highly desirable to avoid a situation where ill patients weren't able to get the healthcare that they would benefit from, and we did, I think, for the most part achieve that. But by itself that, if you're interested in saving lives, is not the only goal.
Q. Let me take you, please, to a different issue, and it is the question of the discharge of patients from hospitals into the community, into care homes, in March 2020.

Now, as you know, that's a set of issues which has already been, amongst other things, the subject of litigation, and it will also be addressed in a module of this Inquiry, so I don't want to go into it in any detail. But there is one issue that is raised in Mr Johnson's witness statement for this module, and which you touch on as well, and so l'd like to address 43

Of course then much more water had flowed under more
cannot clone a new NHS in eight to 12 weeks and you were certainly can't clone seven of them, and, by the way, nor can any other country, and the same exact issues were being confronted in France and Germany and Spain in winter 2021 as well.

So that's, I think, the, sort of, first point to make. The second point to make though is that, by the time we got to autumn 2020, actually we obviously knew a lot more about the virus, hospitals had done a lot of work to create the ability to turn on so-called surge capacity, extra critical care or other beds, as cases rose, and we had new treatments for Covid, and so forth.

So taking, as it were, England as the unit of analysis and saying just is the NHS overwhelmed or not overwhelmed in a binary way kind of misses the point because, actually, you have a graduated set of negative impacts as Covid pressures increase on the NHS. But I would make another point as well, which is that I personally do not think solely viewing the amount of Covid through the lens of whether or not there are NHS beds to cope for severely ill patients is by itself the right lens because, even with unlimited hospital capacity, if you have large amounts of coronavirus for vulnerable people, lots of people will still die.

So the right question is: how do you control the 42

## that, please.

Can we do it by going to Mr Johnson's witness statement. Excellent, we have it on the screen. It's paragraphs 330 to 331 . So starting at the bottom of the page, we see that Mr Johnson notes that, on 17 March Cabinet meeting, there was a note that over 30,000 patients were imminently expected to be discharged from hospital and into social care.

If we can go over the page --
A. Yeah, just to clarify, it wasn't that number -- I wasn't at that meeting but I do see that the full Cabinet did discuss that question before the policy was announced, yes, on 17 March.
Q. This is really just setting up, Lord Stevens,

Mr Johnson's evidence and then I'm going to ask you about it. So he describes, as we can see, on 22 March, being provided with a copy of a DHSC document, Covid-19 response was discussed, there was an estimate in that document that:
"... between 12,500 and 15,000 hospital beds could be freed by postponing non-urgent elective operations, and that potentially 15,000 further acute beds were being occupied by patients awaiting discharge or with lengths of stay over 21 days ..."
A. Can I just clarify one point, sorry. Although that may 44
well have been in the Department of Health and Social Care's draft on 22 March, that information had already been presented to and discussed with the Prime Minister on 12 March.
Q. I'm not -- it's quite a high level point I want to take you, Lord Stevens, so don't worry too much about the chronology or the dates, sorry, or the numbers.

If we can go to the next paragraph, please, it's really this that is the core of it. Mr Johnson's position, he says:
"It was very frustrating to think that we were being forced to extreme measures to lock down the country and protect the NHS [as we've said, protect it from an overwhelm] -- because the NHS and social services had failed to grip the decades old problem of delayed discharges, [he says] commonly known as bed blocking."

And he says that before the pandemic began he was trying to address that. That's the point --
A. Right.
Q. -- whether, if you like, I think as Mr Johnson might say, he'd been painted into a corner of having to have a lockdown, in part because of the people he describes as bed blockers, and that's something that you address in your witness statement, and perhaps we can go to that, please, on page 12 and footnote 9. 45

I mean, another way of saying it is, even if all of those 30,000 beds were freed up, for every one coronavirus patient who was then admitted to that bed, there would be another five patients who needed that care but weren't able to get it. So, no, I don't think that is a fair statement describing the decision calculus for the first wave. And by the way, I think when you look at the second wave, when actually a lot of these problems have been addressed by the Treasury funding a lot more community health services and social care, getting rid of the means testing, so in a sense that problem had been significantly addressed, the Prime Minister still decided to have second and third lockdowns, with this problem having been substantially resolved. So for both reasons I think that is -- that suggestion doesn't stand up to scrutiny.
Q. Thank you.

Another issue, please, and this time it's a question about PPE.
LADY HALLETT: I think I'm getting that I'm being asked to take a break now.
MR O'CONNOR: My Lady, certainly.
LADY HALLETT: I hope you were warned, Lord Stevens, that we take regular breaks. I shall return at 11.25 .
(11.10 am)

We really will have to --
A. Reading spectacles at this point, yes.
Q. I mean, Lord Stevens, this is the part of your statement where you address that assertion.
A. Yeah.
Q. And, in summary, you don't accept it. Let's not read that out, but you tell us in your own words what your response to Mr Johnson's line is.
A. Well, I think Boris Johnson is right to point to the fact that there have been long-standing problems with the availability of social care that has often meant that patients end up stuck in hospital when they could be being looked after at home. That is without a doubt correct. However, if you think about his suggestion just a moment, even if you accept that there were 30,000 hospital beds full in that way, which I think is certainly at the high end of what most people would estimate, but even if you think it's 30,000 , we, and indeed he, were being told that if action was not taken on reducing the spread of coronavirus, there wouldn't be 30,000 hospital in-patients, there would be maybe 200,000 or 800,000 hospital in-patients. So you can't say that you would be able to deal with 2 -- or 800,000 in-patients by reference to 30,000 blocked beds. So I don't think the maths works.

46

## (A short break)

(11.25 am)

LADY HALLETT: Mr O'Connor.
MR O'CONNOR: Lord Stevens, I want finally to ask you a set of questions about PPE. I think I may have said that before the break. With the same caveat as the questions about the discharge of patients in March in the sense that, of course, detailed issues about PPE will be covered in another module. But this just picks up on some evidence that Helen MacNamara gave yesterday.

So if we could go to Helen MacNamara's statement, please, INQ000273841, page 53, paragraph 104.

When it comes up on screen, Lord Stevens, we will see that this is a part of Ms MacNamara's statement where she is describing various initiatives she took in the early months of the pandemic to try to effect certain changes, encourage issues to be addressed.

We will see, about halfway down this paragraph, one of those issues that she became concerned about related to what she describes as "the inadequacies of PPE for women". She says she tried to make sure this was taken into account in any new supply.
A. $\mathrm{Mm}-\mathrm{hm}$.
Q. She gave evidence about that orally yesterday, and we looked at an internal email in which she raised this
issue in March -- sorry, in mid-April, with Simon Ridley and Mary Jones within the Cabinet Office, and that she was then told by another official within Downing Street, Cleo Watson, on 30 April that the matter had been raised, and her evidence, as you can see, is that it was the Prime Minister who raised this issue with you on April 30, 2020, and that you reassured the Prime Minister and ministers that the issues with PPE fitting women's bodies were misreported and that there wasn't a problem.

Do you recall that?
A. Well, first of all, Helen was absolutely right to raise this issue, because there were real concerns and we were very concerned about it, and we were taking action. So she raised it within the Cabinet Office, as you say.

As it happens, we were already acting and in fact a week before this meeting the Chief Nursing Officer, the National Medical Director for the NHS, had written to every head of nursing, every medical director, every chief executive in the country on this very issue of fit testing to make sure that it was being done properly and that the issues that Helen describes were taken into account.

So it certainly wasn't something that took the Prime Minister on 30 April to raise, it was already 49
backgrounds, and those with different face shapes or facial hair."

So I think the Cabinet Office's own records show that what is attributed to me second-hand is not actually what I said at the meeting.
Q. Well, that's very helpful, and -- so the answer that you gave to the Prime Minister was perhaps a holding response, saying that there was a problem but that you were looking into it?
A. Yes, and the minutes of the meeting as well from the Cabinet Office set a specific action, which was that the Department of Health and Social Care should confirm that PPE had been procured and was fit for purpose for staff in response to reports that gowns did not fasten as they were too small and that certain items did not fit women. So this was specifically being addressed.
Q. What we know, and we can see in other evidence, is that in fact this issue of misfitting PPE continued to be a problem for weeks, months, even years afterwards, didn't it, Lord Stevens?
A. I don't know about years, but it definitely was a problem as a result of the short supply of PPE overall, with the result that it was often very difficult for DHSC to get sufficient range of masks in different locations at the right time. There's no doubt 51
being specifically addressed and we were very concerned about it.

As to the specific -- as to my remarks in the meeting, I think I take it from what Helen said that she wasn't at the session itself, so that's not what I actually said, and if we could pull up the minutes of the meeting then I think that will be -- will show itself. So it's actually INQ000088643 on page 7.
Q. Sorry to interrupt you.
A. Right.
Q. But as far as I'm aware, we haven't --
A. It's on your system. Can I just at least read it, then, even if you're not going to pull it up?
Q. Yes, that's what I was going to suggest.
A. So actually the Cabinet Office's own minutes of that meeting say, first of all, that the permanent secretary at the Department of Health and Social Care responded on the availability of PPE, given that the Department of Health and Social Care has responsibility for securing PPE for the NHS, and then it goes on to say:
"The chief executive for the National Health Service said there was ongoing work to investigate the suitability of PPE for all those using it, and testing to make sure it was suitable for women, for those who are black, Asian and from minority ethnic 50
about that.
Q. Well, just finally let's look at one last document, which is INQ000097875.

A letter written by the BMA to the chief executive of Public Health England, so to be clear not either you or your organisation, but dated January 2021, not quite a year after that meeting.

If we can go to the second page, please, we see the last substantive paragraph:
"We have written separately to DHSC to raise concerns about PPE failing to meet the diverse needs of the medical workforce -- in particular, that many female doctors have reported struggling to find respiratory masks that pass fit testing."

So the message that you had given to the Prime Minister that this was being looked at, I think that's a fair summary of the minutes?
A. Well, not just looked at, that action was being taken to try to resolve the problem, given the pressures on the supply of PPE, yes.
Q. And was action still being taken to try to resolve the problem all those months later in January 2021, Lord Stevens?
A. Well, as you say, that was not -- a letter I don't think I saw, because it was sent to Public Health England.
A. Yeah.
Q. Just picking up on that, your answer to Mr O'Connor, regarding the lack of appropriate fitting PPE for women but also for people from black and ethnic minority workforce, is that, by the time it's raised with you, there's ongoing work; is that right?
A. Well, I think -- yes, essentially, yeah. 25 53
A. It is, although the two points are somewhat related, in that if you can't be certain of getting the same type of face mask or PPE with each delivery, because there's a shortage, then that is probably one of the root causes of the problems that I think you're describing.
Q. Yes, so if you know about the problem in advance, then the sufficiency of different types of PPE should be catered for?
A. Absolutely.
Q. Yes.
A. Now, of course, as you know, what was actually happening at this time was there was a worldwide scramble for PPE, given that the --
Q. Yes.
A. -- UK stockpile was not sufficient --
Q. Yes.
A. -- and the Department of Health and Social Care, the Cabinet Office, the Department for International Trade went on a huge buying spree to try and secure us the PPE we needed.
Q. Yes. So at this point, the stable door was open and the position was trying to be recovered --
A. Yes.
Q. -- and it was difficult because there wasn't PPE
available, even if you knew what you needed?
Q. Okay. So there's two issues here. First of all, in January and February 2020 NHS England did a stocktake, I think, of PPE; is that right?
A. No, I think that was Public Health England and the Department of Health and Social Care because Public Health England was responsible for creating and overseeing the PPE stockpile that supposedly would be sufficient if a pandemic struck and we all now know it wasn't.
Q. It wasn't sufficient?
A. Correct
Q. Yes, and as the chief executive of NHS England that would be a major concern to you --
A. Yes.
Q. -- and of great relevance, whoever did the stocktaking?
A. Absolutely.
Q. So that's sufficiency, first of all, it's insufficient, but this point about fitting face masks, and also training to use PPE, is a further important point, isn't it?
A. Yes.
Q. So it's sufficiency on the one hand but also, even if you have lots of it, if it doesn't fit or if your staff don't know how to use it, then that's an additional problem?

## 54

A. Yes, I mean, I think the national position and the National Audit Office had looked at this and I think their conclusion was that no individual item had a national stock-out --
Q. Yes.
A. -- but I think that's only part of the story, because obviously, if you're really up against it, then the ability to get PPE to where it's needed at the right time for the right person is much harder.
Q. Yes, and the management of it is something that no doubt the Inquiry will be going into, as Mr O'Connor indicated, in a future module, but an important point.

It's right, I think, that in 2016 NERVTAG had made a formal recommendation to the Department of Health that there should be a rolling NHS programme for the fit testing of respirators, FFP3 masks, effectively as an important part of infection control. That's right, isn't it?
A. I'd need to see the NERVTAG papers.
Q. Okay.
A. I'm not disputing that but I would need to see them, yes.
Q. As the chief executive NHS, this is something directly relevant to you, let me put it up on the screen --
A. Thank you, yeah.
Q. -- and hopefully that will jog your memory.

INQ000022737, please.
And, as you can see, the heading of it "NERVTAG Sub-committee on the pandemic influenza", so directly related to pandemics and face masks and respirators stockpile, and then formal recommendations to the Department of Health, and I'll try to deal with this quickly but, if we can go to page 2 -- I'm so sorry, it's the bottom of page 1 and then 2. Have you got that?

So under "Discussion points" and "Stockpile":
"Fit testing in the face of an emerging pandemic is a major challenge ..."

Then, going over the page, the point I'm trying to get to is the first bullet point:
"Just in time fit testing was proposed -- however, there may not be sufficient time to put this in place, between pandemic virus emergence and the first UK impact. It was agreed that there is no substitute for a rolling programme of fit-testing in NHS trusts during inter-pandemic periods. There should be a caveat about fit testing in any recommendations."

Okay? Does that help you in terms of the knowledge about this?
A. Well, I mean, this is the first time I'm seeing this
that Covid brought about.
Q. Yes, Lord Stevens, this is a document related to pandemic flu, it's related to PPE, it's related to a recommendation for a rolling programme across the NHS --
A. Sure, but the point --
Q. -- did you know about that recommendation or the issue --
A. I didn't about that specific recommendation --
Q. Yes.
A. -- but, just to be clear, the recommendation in respect of pandemic flu, it was a completely different set of PPE requirements, well not completely but substantially different, and the type of staff who would be involved in this type of fit testing, as I think this document itself suggests, were different than what we ended up with. So, look, there's no doubt --
Q. Yes, we're talking about respirators for a respiratory virus.
A. Yeah, I mean, I'm talking about the aerosol generating procedures but also the use of these PPE in far wider settings than frankly was envisaged for the flu stockpile and that's one of the great misjudgements, essentially, that was made and resulted in the fact that, when Covid struck, we did not, as a country, have

57
document, but yes, I can read what you have put up there.
Q. But you were chief executive from 2014 --
A. Sure, but this was a document I think to Public Health England and the Department of Health and Social Care, wasn't it?
Q. I fully take that point.
A. Sure.
Q. It directly relates to the NHS. It's a recommendation that the fit testing rolling programme should take place across the NHS and you're the chief executive.
A. Yeah, it may well be, but I do not want to give you an answer that is not fact based. I can certainly ask that question and make sure you get that answer --
Q. Okay --
A. But clearly, just really skimming this document now and seeing it for the first time --
Q. Yes.
A. -- it appears to be suggesting that fit testing was obviously specifically confined to intensive care units. The issue with Covid was obviously that it was a much wider set of requirements --
Q. Yes, but it's?
A. -- and, frankly, the pandemic planning for influenza flu was wide of the mark for the sort of PPE requirements 58
the PPE that we needed.
Q. Okay, let me just focus my question then. You told us that, by the time it's raised with you in April 2020, there was ongoing consideration about fit testing and the propriety of the types of PPE that you had. Was there a rolling programme of respiratory fit testing during the period from 2016 to 2020 ?
A. Well, I think it's likely there would have been in those parts of hospitals and health services that were using that PPE but, as I say, I don't want to speculate, let's find out the facts and get those to you.
Q. Yes, okay, well, that's very helpful, it's just that, when you said there was ongoing work, you obviously did look into this in April 2020 so --
A. Yeah, that was ongoing work as had been recommended for Covid.
Q. Yes, I understand that but did you understand when that ongoing work had started?
A. Well, this was specifically in response to Covid where a far wider group of health service staff were needing PPE.
Q. Yes.
A. So I think that's what the Chief Nursing Officer and the National Medical Director were focusing on.
Q. Of course the context is Covid, that's what you were 60
dealing with --
A. Yeah
Q. -- but it was about respiratory -- respirators and other PPE, which went rather beyond Covid, didn't it?
A. Well, as you know, there was a live and indeed ongoing debate, which I was not directly involved with, but a scientific debate as to the circumstances under which it was appropriate to use the type 2 R mask as against the FFP3 --
Q. Yes, okay --
A. Masks and I think it's the FFP3 masks that you're referring to specifically here.
Q. Well, I think that's something that possibly we'll leave to a different module, the granular detail of it.

But finally this, had there been a rolling programme of fit testing across the NHS, do you agree with me that these problems with non-fitting PPE for women healthcare workers or black and minority ethnic healthcare workers would have been flagged up much earlier and would have been dealt with or should have been dealt with prior to the pandemic --
A. No, I think almost the reverse, because if you were doing -- if you were doing it in a situation where there was ample PPE supply because there wasn't a pandemic on, you wouldn't actually have detected the problem. It was 61

You have -- to introduce my question, I would just like to ask you to recall that in your witness statement at paragraphs 31 to 36 you have referred to a series of fora where there were discussions of the matter of measures to free up hospital capacity.
A. $M m-h m$.
Q. And you have referred -- and that includes a discussion in Cabinet on 17 March. I think you said earlier that you didn't attend that particular meeting. You've also referred to a meeting on 18 March 2020 with the Prime Minister. I don't know whether you immediately recall that meeting. It might be helpful if you do recall whether you attended that particular meeting on 18 March.

Your reference to it, I think, is that it was specifically in relation to the matter of NHS resilience and a meeting on NHS resilience with the Prime Minister on 18 March 2020.
A. Yeah, I mean, there had been meetings with the Prime Minister before that as well, so this question was, for example, also discussed with him and others on 12 March. I know it was discussed in the Department of Health and Social Care with Matt Hancock, with DHSC officials, some of the senior doctors in the department, social care advisers and so on.
only when the shortage arose that it was so evident that there was a problem.
MR WEATHERBY: Those are my questions.
LADY HALLETT: Thank you, Mr Weatherby. Ms Harris.

## Questions from MS HARRIS

MS HARRIS: Good morning, my Lady.
LADY HALLETT: Good morning.
MS HARRIS: Good morning, Lord Stevens.
A. Good morning.
Q. I appear on behalf of Covid-19 Bereaved Families for Justice Cymru --
A. Right.
Q. -- representing bereaved families in Wales, and I would like to ask you some questions relating to just two areas, if I may.

First of all, in relation to hospital discharge, and this is said, as Mr O'Connor has already highlighted this morning, that the details in relation to discharge into care homes are going to be dealt with in another module, but they are to some extent dealt with in this module, and I wish to ask you about one particular aspect to do with the discussions that preceded the policy or the guidance in March 2020 with regards to discharge and the impact on social care settings.
Q. Thank you.
A. But I was not at that 11 March meeting, I don't believe.
Q. Thank you for that. And the guidance itself was published on 19 March, and that is referred to in your witness statement as the hospital discharge, the multi-agency hospital discharge guidance, and is it correct that the purpose was to secure swift discharge of hospital patients who were considered to be no longer in need of -- to be in hospital, to secure their swift discharge, and this included envisaging that there would be a considerable number of individuals who would be discharged into social care, including, here, care homes?
A. Not that more people would be discharged than would normally be the case, but just that the discharge would not be delayed in the way that, as we've discussed earlier this morning, was often the case.
Q. Thank you.

In terms of the impact of that guidance, I'm noting that in paragraph 32 you have quoted specifically:
"... 'to free up hospital beds over 30,000 patients were expected to leave hospital into social care imminently' ..."
A. I don't think I've quoted that, because I think actually it was -- the original modelling was that 15,000 of the 64

| bed capacity would be as a result of postponing routine | 1 |
| :--- | :--- |
| surgery, and then, if it was possible to get better | 2 |
| support for people at home and social care, which the | 3 |
| government funded and changed the regulations on, then | 4 |
| that would mean people who would have gone to | 5 |
| social care and back home or care homes would be able to | 6 |
| do so faster rather than slower, as had been happening | 7 |
| up until then. So about half of that I think was | 8 |
| attributed to the length of stay reduction, half of the | 9 |
| 30,000. | 10 |
| Q. $\begin{array}{l}\text { Thank you. } \\ \text { But in any event, it was part of the picture that }\end{array}$ | 11 |
| was envisaged resulting from the guidance that there | 12 |
| were going to be individuals discharged from hospital | 13 |
| into care home settings? | 14 |
| A. $\begin{array}{l}\text { Well, people are obviously all }- \text { - if people have been } \\ \text { living in a care home then, when they're ready to go } \\ \text { home from hospital, they would return to their }\end{array}$ | 15 |
| care homes. So it wasn't a new group of people who | 16 |
| would be going to care homes who would not otherwise | 17 |
| have done so, it was just trying to take out some of | 18 |
| the delays in the system. And indeed, of course, | 19 |
| the actual number of people who returned from hospitals | 20 |
| to care homes went down in this period, not up. | 21 |
| Q. If l could just pick up on one point there, there would | 22 | 65

number of tests? And I think the Secretary of State had said that he made that decision on 11 March as to who would be prioritised, and that did not include people being discharged into care homes. He did so on clinical advice, but that was the decision that he took.
Q. In the context of there not being testing, was there a discussion that you were aware of or were party to of the issue of possible asymptomatic cases of infectiousness going into care homes and the impact that that could have? Was that specific discussion had, about that specific type of risk?
A. I understand, looking back on it, I -- based on some of the materials that I've subsequently seen is that there was a discussion involving some of the senior clinicians and there was a balance of risk argument. I think they also contend that although the possibility of asymptomatic infection had been identified, it was not known how substantial a risk that was at that point in time. That is obviously something that there are conflicting views on and I'm sure, rightly, the Inquiry will want to look at that in very great detail when the Inquiry comes to care homes.
Q. So just to clarify, are you saying it was recognised that there was such a risk from asymptomatic discharges, even though there was uncertainty around the extent of
be some new admissions to care homes as a result of this policy, would you not agree?
A. I don't agree, no, that there would be a higher number of people, newly or returning, going back to care homes, it's just that the delays of being stuck in hospital would be reduced.
Q. But we've agreed in any event that there would be people who would be discharged from hospital into care homes?
A. As always, yes.
Q. And the question arising out of this is: what discussions were you aware of or party to with regards to the risks for residents in care homes arising from discharge plans in terms of infection?
A. Well, I think -- as I say, I know there was a discussion at the Department of Health and Social Care with ministers and senior doctors on 11 March. I also know that over the following days there was a discussion about whether the risk was greatest if people were about to need hundreds of thousands of hospital beds and instead were going to, as we'd seen in northern Italy at that time, be left in hospital car parks dying -- so there was a risk the hospital beds weren't available. I think there was a related but separate decision that the Secretary of State took, which is: if you're going to have testing, how should you allocate a limited 66
asymptomatic infectiousness?
A. I think potentially different people had different understandings of that and I don't have a, you know, comprehensive overview as to who was saying what, but I think that was, in some senses, taken into account but whether it was appropriately taken into account that's obviously something that, again, the Inquiry will have to look at very carefully.
Q. Yes, thank you.

Just on that question of whether it was appropriately taken into account, as you view matters, whose responsibility was it primarily to initiate consideration of the taking into account of that matter?
A. Well, I think, as was referred to earlier, this is something that the High Court has independently looked at, and I can't second-guess their judgment, their assessment was that it was reasonable for ministers to free up hospital capacity and it was reasonable for ministers to make the prioritisation of testing decisions that they did, but that what should have happened was clearer guidance to care homes about isolating people who were coming back to the care home. That's what the court found.

I also defer to the medical evidence that is contained in the Chief Medical Officer's review of this
matter, and their assessment is that the majority of the infections that tragically entered care homes came from the community rather than from patients returning to them.
Q. Thank you, and I note -- and I think I'm nearly at the end of my time, so I think I'll have to finish very quickly on this -- but it's correct, isn't it, that that report also does note -- that very report which I know you have referred to in your witness statement, it does also note that there -- some care home outbreaks were introduced or intensified by discharges from hospital?
A. Yes, the report does say that. The overarching evidence, I think, is that, unfortunately, in any country where Covid is out of control in the community, it found its way into care homes, and that was true in many countries around the world.
MS HARRIS: Thank you. I think I've come to the end of my time and many apologies if I went over. Thank you.
LADY HALLETT: Thank you, Ms Harris.
Mr Metzer.
Questions from MR METZER KC
MR METZER: Thank you, my Lady.
Lord Stevens, I ask questions on one topic only, on behalf of the Long Covid groups.
A. Right.

69

Is that what your second -- is that --
Q. Yes, it's really about the assistance that would be given to the NHS by messaging coming from the government.
A. Well, I mean, the root cause of the problem obviously is the amount of Covid infection, so I think, you know, there was a clear understanding that less Covid is better.
Q. Yes, but Long Covid comes from Covid infection.
A. Indeed.
Q. So do you agree that the NHS therefore would have been assisted by such a messaging campaign?
A. Sort of reminding, telling people about the existence of Long Covid so people therefore were sort of appropriately cautious about their interactions? Is that the --
Q. Yes.
A. Is that the thought? Yeah, I mean, possibly, yes. I haven't -- I mean, possibly.
Q. In August 2020, NHS England published a detailed briefing note on managing the long-term effects of Covid-19. The paper estimated that a significant number of the UK population will need some form of rehabilitation support for ongoing conditions over the year, and Long Covid is described as a new healthcare
Q. In your evidence, you said that solely viewing the amount of Covid through the lens of whether or not there were enough NHS beds was wrong and the right question, you said, was how you control the numbers of people infected. Linked to that, I wish to explore with you long-term morbidity from Covid-19 infection, which is another metric of harm in the pandemic.

NHS England announced the Your Covid Recovery platform on 5 July 2020, which was a platform to support patients suffering from prolonged symptoms after infection from Covid-19. Would it be right to say from this announcement that by July 2020 the NHS were concerned about the prevalence and risk of Long Covid?
A. Yes.
Q. Thank you. Would the NHS have been assisted by a public health messaging campaign on Long Covid at this time?
A. So I think l'd break that question into two parts, if I might. There would be public messaging for people who might be experiencing what came to be known as Long Covid, so that they were able to come forward and engage with services. But perhaps the second part of your question is a different one, which is: would it have made sense for the Government to talk about the risks of Long Covid as a way of trying to encourage people to take action to limit the spread of the virus. 70
challenge requiring actions to strengthen NHS services to meet new demand.

Do you agree that by August 2020 the NHS were concerned that emerging evidence of longer term sequelae of Covid-19 would pose an additional cost to the NHS?
A. Absolutely.
Q. And was the new healthcare challenge and its associated cost communicated to Number 10 and the Cabinet Office?
A. Well, inasmuch as we were making public announcements and they would have known we were making the announcements about the NHS services that were being responded, yes, I'm sure they would have been aware.
Q. So assuming that your answer is you agree, how, if at all, did the decision-makers respond?
A. Well, I think the Department of Health and Social Care shared our concern, and I know that senior clinicians, ministers, over the summer and into the autumn, were also engaging with the question of Long Covid and how appropriately to support, and there was a sort of active dialogue between the Department of Health and Social Care and us in the NHS about what that should look like. I can't say what the discussion was between them and the centre of government though.
Q. So does that mean you're not able to say how the decision-makers, those in Number 10 and the

Cabinet Office, responded?
A. That's right.

MR METZER: Thank you very much, Lord Stevens.
Thank you, my Lady.
LADY HALLETT: Mr Dayle.

## Questions from MR DAYLE

MR DAYLE: Thank you, my Lady.
Lord Stevens, I ask questions on behalf of FEHMO, the Federation of Ethnic Minority Healthcare Organisations. One of FEHMO's main concerns is about the UK's pandemic response, and what it perceives as a seeming lack of urgent, centralised and coherent programmatic response to the spectre of disproportionate deaths of black, Asian and minority ethnic healthcare workers and their wider communities, and certainly at the early stages of the pandemic. As such, I have four discrete sets of questions for you, and my first question is: when did it become clear that black, Asian and ethnic minority communities were disproportionately being affected by Covid-19, specifically in terms of the death rates?
A. I think -- sorry, I'm not quite sure what I -- I don't want to turn my back to you.
Q. Certainly. It's not impolite. That's been established.

LADY HALLETT: I don't want you turn away because of the 73
again probably around maybe 9 April, something like that, and also from Dr Chaand Nagpaul at the BMA, and so I pretty immediately convened a meeting to -- with them and other stakeholders to say what do we think's going on, what is the action that is needed, and we held that meeting on 15 April 2020.
Q. From your vantage point, was there an escalation of concerns around this issue, and in answer to Mr O'Connor's questions, you spoke about regular meetings with the Prime Minister, for example. Was there an escalation in terms of how this issue was addressed or what the response was?
A. Well, I think there are maybe -- there's an element that obviously relates to what we were seeing in the NHS and then there's an element that relates to the information that people like Public Health England and others were showing about in the community, the disproportionate impact on people who were getting Covid and dying. In terms of the first of those, what we were doing in the NHS -- obviously we were able to take action in respect of the second of those, the broader impact on the community -- I think that is a question that I can't answer, and that's probably a question for, you know, the Department of Health or Public Health England as to the extent to which the centre of government was having
microphones, Lord Stevens.
So you won't consider it an insult, will you
Mr Dayle?
A. Right.

I think the answer to your question is sort of early spring, and to be precise, more precise about it, I know that, for example, on 9 April 2020 the NHS National Medical Director, Professor Stephen Powis, having seen some of those emerging figures, as you rightly describe, raised the concern about the disproportionate impact at the senior clinicians group, and on the strength of that, I believe that Chris Whitty, the Chief Medical Officer, commissioned Public Health England to investigate more fully.
MR DAYLE: And that speaks to sort of an investigatory response for perhaps a more reflective response to this phenomenon. I want to button down on that in particular and ask you: do you consider that there was a timely response to this phenomenon?
A. Well, in terms of what the health service was doing, I think this matter was raised with me at about the same time as Steve Powis discussed it with those other senior clinicians, and in fact I had a very important letter from a group that I respect immensely called BAPIO, the British Association of Physicians of Indian Origin,
a policy discussion with them about that. I don't know.
Q. And finally, can you tell us about any specific targeted intervention that was put in place in those early months to address disproportionate death rates among black, Asian and minority ethnic communities?
A. So within the NHS, on 17 March, we asked every part of the NHS to make sure that staff at higher risk of Covid and having a bad outcome from it were identified and were able to work in lower risk areas. We followed that up on 29 April and 30 April with a request that specific risk assessments be done across the service, and then, at the same time, I think I commissioned Professor Kamlesh Khunti from the University of Leicester with colleagues to identify specific risk reduction frameworks that would take account of the extra risk that appeared to be in place for minority ethnic staff. And that was produced in combination, I think, with the Faculty of Occupational Medicine.
MR DAYLE: Thank you. Thank you, Lord Stevens.
Thank you, my Lady.
LADY HALLETT: Thank you, Mr Dayle.
MR O'CONNOR: My Lady, those are all the questions for Lord Stevens.
LADY HALLETT: Thank you very much indeed, Lord Stevens, 76
thank you for your help.
THE WITNESS: Thank you.
(The witness withdrew)
LADY HALLETT: I'm not going to rise but I'm told that the stenographer would like -- so we'll take our time in the handover.

## (Pause)

MR KEITH: My Lady, the next witness --
LADY HALLETT: No, you're not allowed to say anything. I'm giving the stenographer a rest.

## (Pause)

Right.

## SIR CHRISTOPHER WORMALD (affirmed)

 Questions from LEAD COUNSEL TO THE INQUIRYMR KEITH: Could you give the Inquiry your full name, please.
A. I'm Sir Christopher Wormald, I'm the permanent secretary of the Department of Health and Social Care.
Q. Sir Christopher, you are known to the Inquiry, of course, because you gave evidence in Module 1, an event you'll no doubt recall.

Thank you for your continued assistance. You've
provided a number of additional statements to the Inquiry. We don't need to bring them up, but four statements in particular relate to the subject matter of 77
Q. Can I also make plain, because of some of the questions which have been put to the previous witness, that of course matters concerning the detail of test and trace, the care sector and PPE will be addressed in detail in later modules held by this Inquiry, and therefore we won't be going into the granularity of any of those areas, we'll only be looking at them insofar as they reflect the core administrative or political decision-making.

With that context, could I ask you, please, to start by describing the role of the permanent secretary and, in particular, your role as a permanent secretary in the DHSC in January 2020.
A. Yeah, thank you. And if I may, I'd like to repeat what I said in Module 1 about the department's regret for everyone who suffered either directly or indirectly as a result of Covid and also our enormous thanks to the incredible staff in the NHS and the care sector and everyone who helped them and got them through the pandemic.
LADY HALLETT: Pause there, if you would. Could you go much more slowly, please? I'm afraid our stenographer has had a tough morning already and I think she might kill me if I let you --
A. I'm very sorry.

Module 2, and they run to many hundreds of pages, in fact.

Sir Christopher, members of the public won't know, but in preparation for your evidence today, the Inquiry provides you with particular documents on which it intends to focus. I know that you were sent those documents over the last few weeks, but in particular you were sent a number of documents up to and including late last night. You may not, therefore, have had a full chance to consider those documents. I apologise that you received them so late. We're just going to go through them and we'll just see where we go.

I also want to make plain that my questions of you are directly focused on Module 2. The Department of Health and Social Care was, of course, the lead government department in this health emergency, but Module 2 focuses on the core political and administrative decision-making at the heart of government throughout the currency of the pandemic and, therefore, we'll be looking at those areas in which the DHSC engaged with central government or gave advice to central government or met with central government, as opposed to looking at matters which were specific to the DHSC alone. Do you follow?
A. Yes.

78

MR KEITH: Sir Christopher, you know, of course, from this process before the absolute need to go slowly.
A. So the role of the permanent secretary I see as always in three chunks. You are the chief executive of the DHSC itself, and you lead the staff and systems of the department. You are the chief adviser to the Secretary of State who holds all the actual legal decision-making powers, which does not mean you provide all the advice yourself, indeed you provide very little of it yourself, but you're responsible for the system of advice. And thirdly, you are the accounting officer for the resources voted by Parliament to the department to fulfil its functions, and it's basically those three things.
Q. Just briefly focusing on some of the moving parts within the department, the Inquiry is, of course, extremely well aware of the vital role of the Chief Medical Officer, the principal medical adviser to the government. To what extent is the CMO part of the DHSC, or an adviser to the DHSC?
A. He is a completely integral part of the department, but also has a wider role across government, so he is one of the most senior staff at the department, ranked at permanent secretary level, part of the executive team that leads and runs the department. He advises
the Secretary of State on particularly public health but actually any clinical matter relating to England, and then he's adviser to both the Prime Minister and the entire Cabinet on clinical matters relating to the -- both England and the United Kingdom. So if another Cabinet minister requires clinical advice, they would go direct to the Chief Medical Officer, not via the department, and likewise with the Prime Minister.
Q. The Inquiry understands that, as a result of the demands of the pandemic, a second permanent secretary position was created within the Department of Health and Social Care, but did you remain primarily focused on Covid whilst that other second permanent secretary dealt predominantly with other aspects of finance and group operation and the --
A. Yes.
Q. -- many areas?
A. Yes, though it evolved over the period, so the original idea --
Q. Shortly, please, Sir Christopher. Did you remain responsible for the Covid -- in general terms, Covid issues?
A. Yes.
Q. An important part of the permanent secretary's role in providing advice to ministers in the department, 81
the care sector, or PPE, all of which the DHSC was centrally concerned in, would the majority, if not all of the information received from the Secretary of State, come from the department?
A. Certainly, the vast majority, but to take an example, were a Secretary of State to wish to supplement some advice on social care by talking to a local authority director of social services about what it felt like from the local authority, and they're completely free to do that, but it would normally be a supplement to advice received by the department, and, as I say, the vast majority would have come from departmental sources.
Q. And the Secretary of State wouldn't go off on his or her own and speak to somebody else without the knowledge of and possibly attendance of a member of the department or that process of meeting and the receipt of information being recorded by way of email or departmental note?
A. Yes, so the rules in force is if they, if a Secretary of State or any minister feels they have had a conversation which is relevant to public policy, they either have a private secretary in attendance who records that, or they feed back to their private office who record the conversation. And the test is not who was the conversation with, but is it relevant to the public record.
presumably that includes the Secretary of State?
A. Well, it's primarily the Secretary of State, supported by the junior ministers. I would normally be most involved in -- with the Secretary of State.
Q. How does it work? Does the Secretary of State, whoever they may be, receive advice exclusively from the department in the discharge of their function as Secretary of State, or are there other sources of advice or information or material which they may be privy to or receive from elsewhere?
A. So secretaries of state are free to take their advice from wherever they like, that might be other Parliamentarians, it might be independent experts, and it might be other Cabinet ministers. There would always be official departmental advice, but secretaries of state could choose to supplement that if they wished to.

So as a department, a civil servant, you have a right to be heard, you know, you have a right to put your advice to a Secretary of State, but not either that that advice is necessarily followed or that that is the exclusive advice that a Secretary of State would receive.
Q. On matters specific to the Department of Health and Social Care, for example, relating to test and trace, or 82
Q. Your statement makes plain, or one of your statements makes plain, Sir Christopher, that the permanent secretary is usually copied in on all advice to ministers, and of course one of your primary responsibilities is to ensure that they receive the right advice at the right time.
A. Yes.
Q. So you are, of course, aware that a number of witnesses in this Inquiry from the Cabinet Office and Number 10 have given evidence to the effect that the Secretary of State for your department regularly said things that were untrue. I want to ask you, firstly, therefore, whether you were aware during the pandemic of that view apparently held by other people in the heart of government?
A. So, there were two -- two things that were raised. There were a very small number of cases where people said the Secretary of State had said something that was untrue. I have to say I did not either witness or come across things where I thought he said something that's actually untrue. There were a lot of people who said that the Secretary of State was overoptimistic about what would happen, and overpromised on what could be delivered. That was said really quite a lot. I think it was a very small number of people who said that he
was actually telling untruths.
Q. The proposition I put to you was that there were a number of witnesses who have said that the Secretary of State regularly said things that were untrue, and I asked you whether you were aware that that was their belief. Do we take it from that past last answer that you weren't aware that witnesses, civil servants, advisers in the heart of government, were saying that the Secretary of State regularly told things that were untrue?
A. Regularly, yes. I had instances, individual instances raised, and, as I said, I couldn't see any validity to the accusation on the individual things that were raised. I didn't have it reported regularly untruth, the other category I did hear about a lot.
Q. So in fact your answer is: regularly, no, that's not something -- you didn't hear that people were regularly saying he was speaking untruths?
A. No.
Q. All right.
A. Not untruths, you know, but as I say, my two categories --
Q. We understand.

When you gathered that there were instances of untruths, as you've described, and more, perhaps 85
A. Well, as I say, there weren't instances of untruths which I raised with him, there were things he corrected, but, as I say, when -- on individual cases when they were raised, I couldn't see what untruth had been told.

On the setting, you know, the -- on the other category, we spoke about that, and he was always clear that he was doing it for a positive reason. So setting a very aspirational target not necessarily expecting to hit it, but to galvanise the system to do more. So that was -- well, you will ask Mr Hancock, I'm sure, but my understanding that was a sort of conscious decision. And of course whether that's a good thing to do or not, that is a matter of perception, not a matter of right and wrong.
Q. Sir Christopher, I've asked you about instances in which you agree he may have exaggerated the position. I wasn't asking about the setting of targets. I'm asking about instances in which you became aware that the Secretary of State had said something which just wasn't accurate, whether it was in terms of numbers of tests or things being done or things being done by the DHSC which may thereafter have required correction. What did you do when you were confronted with those instances?
A. So for those, which are the first category, I tried to
multiple, occasions of exaggeration or matters being not quite right, being said by the Secretary of State, what did you do in terms of speaking to him?
A. So when you come across something where you think either in public or to a Cabinet committee something that is not true has been passed on, I mean, in the vast majority of cases it's accidental, and in those cases the -- you have to put the record straight, as it were, and ministers do this quite a lot in Parliament and also in the Cabinet -- you know, misremembering a number, for example.

Sorry.
Q. Yes.
A. In terms of the second category, I mean, that is a matter of perception. So I'm sure Mr Hancock will say he believed that what he'd said was deliverable. And in particular, and he did make a big thing of this, his style of leadership was to set very hard challenges as a way of motivating the system. So this came up most, probably, around the 100,000 tests pledge.
Q. We will come back to that in detail, but my question to you was: what did you do in terms of speaking to Mr Hancock when you became aware that there were instances of untruths and, more often, examples of exaggeration?

86
satisfy myself whether it had happened or not. And, as I say, when I looked at the individual incidents, I couldn't identify examples where he had said something that was untrue.

So, to take an example, he was accused of misleading the Prime Minister about whether people being discharged from hospital into care homes were going to be tested. When I looked at that, I couldn't find any evidence that he had done that, I didn't witness it, and it was -- had been stated in public that we were not undertaking such tests. So I couldn't see how there had been any misleading going on. And in that case there is therefore no further action to take.

So, as I say, I didn't find any instances where he told an untruth that you could identify that you then needed to put right.
Q. But there were instances, weren't there, to use the wonderful phrase of one of your professional former colleagues, I think it was Lord Armstrong, where he may have been economic with the actuality?
A. Erm, I'm trying to think of a specific example -- well, I couldn't point to a specific example. As I say, the things that were mainly raised with me were at the level of: your Secretary of State promised 100,000 tests by the end of April, we don't think he's going to get
there. It was much more that sort of overpromising in the future as opposed to something that is not true.

Now, in that case it's of course a matter of opinion, and the Secretary of State is entitled to his opinion that he will hit his target. So the things that were raised with me, they were much more in those sorts of category of overpromising as opposed to untruth.
Q. Did you say to him, "Mr Hancock, I'm now aware that there are a significant number of people, senior civil servants and advisers in the heart of the government, seeking to respond to this appalling crisis, who believe that you are saying things regularly that are untrue or you are exaggerating or you are simply giving a wrongful impression about the reality" --
A. Not in exact --
Q. If you just let me finish my question.
A. Sorry.
Q. -- and therefore say to him, "This is damaging to the trust and the confidence which your colleagues must necessarily repose in you, and this is doing us and the department harm"?
A. So we had conversations, and I couldn't point you to, you know, a specific day, but I remember having this sort of conversation with him where I would say, you know, "People believe you are overpromising", and, 89
that from Helen before either, that it was so widespread.
Q. And he would have been in no doubt, would he, about the concern that you expressed as the permanent secretary of his department at the fact that this appeared to be an issue?
A. So --
Q. Did you express concern, Sir Christopher, to him, or did you just debate objectively whether or not there was any validity to these issues?
A. No, in those sorts of circumstances, where it's not about wrongdoing, I see my role as making sure that the Secretary of State is aware of the position, and it is then his choice as Secretary of State how he wishes to behave. It's very different if you think there has been wrongdoing, therefore breach of the Ministerial Code, where you have a professional responsibility to raise a concern. So in those sorts of situations my role is to make sure the Secretary of State knows what is going on, to the best of my knowledge, and that if he is behaving that way he is doing so in the knowledge that it is raising concerns.
Q. Sir Christopher, we're not concerned here with code of conduct. I'm asking you whether you said to him,
as I say, the Secretary of State was always very clear that he was doing -- he was saying what he was saying, (a) he believed it was possible and (b) he believed it was very important to be both optimistic and aspirational.

So -- and that is, of course, in that category, you know, it's not untrue, but people believe you are overpromising, that is then a decision for him about whether that is the image he wishes to portray. I don't think he was in any doubt that some people thought that of him. I don't think there was ... I think -- well, you'll find out when you question him. I suspect he will be surprised by how widespread it was. I mean, I think he was very well aware that Mr Cummings held those views of him and expressed them. I think he probably knew that the Cabinet Secretary occasionally made the same point --
Q. The Deputy Cabinet Secretary?
A. I suspect -- as I say, I am now guessing about what Mr Hancock will think, but my guess would be that he will be quite surprised that Helen MacNamara had the same views. And I think some of your other witnesses have said the same thing, so I think he --
Q. All right.
A. -- will be surprised, as I was, in fact I hadn't heard 90
"Secretary of State, these concerns, these views, these expressions of opinion about your truthfulness or your accuracy or a tendency to exaggerate or be overly optimistic, however you call it, these concerns have been raised. I, as your permanent secretary, am concerned about this because of the impact upon the working relationships between this department and the rest of government, and on the trust and confidence which your professional colleagues must necessarily repose in you"?
A. No, I didn't have that conversation, but, as I say, I was not aware of the widespread view that has been expressed to this Inquiry by witnesses.
Q. How many times did this conversation, this matter, come up for debate between you? You said you spoke to him. Did it stop?
A. I can only -- I can only, and, as I say, I cannot remember the date, I can only remember one conversation, but, as I say, we were mainly talking about the views of Mr Cummings, and what he was saying.
Q. So there was one time when you spoke to Mr Hancock about the views of other professionals in government about him?
A. I couldn't ... I couldn't promise there was more than one, I can remember one conversation, but, as I say,
what I was seeing at the time was a very small number of people who were not Mr Hancock's friends saying this, as opposed to a widespread thing around government. As I say, that has been presented to the Inquiry.
Q. You're not suggesting, are you, that because they weren't his friends that they should be treated any less seriously in the concerns that they expressed?
A. Erm --
Q. Helen MacNamara?
A. No, well, as I say, I didn't know that Helen held those views and she never said those views to me. It's obviously a very different conversation if you're saying "Mr Cummings is saying A, B, C, D and you need to be aware of that". That was very different from there were ten people, including lots of senior civil servants, saying.

Now, that second thing I was not aware of at the time, and therefore did not have that conversation.
Q. All right.

Do you accept that if these witnesses are right that Mr Hancock did regularly say things that they understood were untrue, that that would have been/was very damaging to the government's operations at this time, because of the lack of trust and confidence that his fellow ministers and his advisers and the advisers in other 93

LADY HALLETT: Whilst that's coming up, Mr Keith, could we break at about 12.45 , please?
MR KEITH: Yes, of course, my Lady.
Paragraph 148, Lord Sedwill refers to the NHS, and then about six or seven lines down:
"Despite the experience of its political and professional leadership, [so that's its ministers and the civil servants], dedicated and determined staff, and a surge of civilian and military personnel, DHSC was neither structured nor resourced for a public health crisis of this magnitude."

It "straddled" too many different areas, responsibilities scattered across too many areas.
"Admirably, people had pulled together and front-line staff and volunteers had performed heroics, but the programmes delivered despite not because of the legacy systems."

He says he called for major reform.
Just pause there, because there is a theme.
Mr Cummings in his statement, we won't put it up, but he says at paragraph 120:
"The DHSC was overwhelmed by the scale of the crisis in Feb-May. It didn't have anything like the people it needed. It couldn't quickly build capacity ... was bad at asking the Cabinet Office for help."
departments and civil servants could(?) place in him?
A. Categorically, yes. So at the time, I knew that there was some toxic relations both within Cabinet Office and Number 10 and between Cabinet Office and Number 10 and the Secretary of State.

What has come out very clearly from your witnesses is it was much more widespread and much more toxic in both of those categories than I knew at the time, and had I known it at the time, your statement is absolutely correct, that would be a big worry, and one of ... one of my reflections so far on the evidence that the Inquiry has heard is that the amount of time and energy that appeared to be taken up very early in the pandemic on the blame game, that energy would clearly have been much better spent solving the problems that the pandemic was bringing.
Q. Indeed.
A. So I recognise exactly the point that you are making.
Q. That is -- those questions focus on Mr Hancock and his relations with other parts of the government.

I now want to ask you some questions about the general view taken of the DHSC.
A. Yeah.
Q. Could we have, please, the witness statement from Lord Sedwill on the screen, INQ000250229, page 39. 94

It was:
"... (... hard for me to know how much of this was [Mr] Hancock and how much structural to the DHSC)."

Helen MacNamara, if we could have this up, INQ000273841, page 30, paragraph 56. Thank you:
"Further concerns were raised by Lee Cain on the communications effort, including further indications that DHSC were overwhelmed (or appeared to be). DHSC was not able (or, perhaps, not willing) to provide anyone into the Cabinet Office to support the team ... look[ing] at public sector preparedness, [to] develop the policy on the NPIs or support on the ... co-ordination effort."

Then further down the page:
"We also -- mistakenly -- [and it's the fourth to last line in that paragraph] did not appreciate that DHSC had focused and were focusing on DHSC and the impacts on the acute health system, rather than the wider and long-term health of the public. I do not think we fully understood this until too late to do anything to really remedy it."

At page 88, paragraph 181, at the bottom of the page:
"It was difficult to get the right kind of engagement from DHSC or the NHS. There was an inbuilt 96
reluctance to accept that it was possible to get to a point where the NHS was overwhelmed and/or to acknowledge that this would be something that Number 10 and the Prime Minister would need to be across and content with the handling of."

Then you know, I won't bring them up in light of the time, but perhaps one of them will suffice, you'll know that Sir Patrick Vallance, the government's own Chief Scientific Adviser, expressed on multiple occasions in his evening notes views about chaos, operational mess, inefficiency, lack of grip in the DHSC.

If we could have INQ000273901, page 594, he refers
to an email from within the DHSC describing it as
ungovernable and a web of competing parts. So that's
594 of document INQ000273901.
It is obvious, Sir Christopher, that the individuals
and the personnel did their very best. Much was asked of them, and a great deal was delivered. But structurally, systemically, there appears to be a view quite widely held that the DHSC, in the face of this admittedly unprecedented crisis, did fail to perform as it was expected to do?
A. Well, let's -- there were a lot of points, a lot of different points made in the evidence that you -- that 97
dealing with something unprecedented, and it felt -- at the time it felt incredibly tough, and a huge, huge responsibility, and people were at times very down that we weren't able to get on top of some of the problems.

So I'm not going to say this was some sort of perfect, easy situation. But I don't recognise the sort of chaos and dysfunction. I recognise the people working incredibly hard in very difficult circumstances to get on top of huge challenges.
Q. So may it just be a question of degree? You would accept that, in significant ways, the DHSC did fail to get on top of problems. It was regarded as -- regarded from the viewpoint of the professional colleagues working with it day in and out at Number 10 and Cabinet Office level as being chaotic or unable to deal with the things that it was asked to --
A. Well, let's have -- so let's break down between the four. As I say, I thought Mark's paragraph, which is largely about the structure of the health and care system, I largely agree with. Helen and he had -- he and I had had conversations about -- that's why, you know, when I received that piece of paper I recognised the view as one that had been -- that I had discussed with him. Helen's views I hadn't heard before. I'm slightly surprised that I hadn't. I would
you quote, and some of them I agree with and some of them I do not.
Q. Well, structurally, do you accept the proposition that the DHSC was, to a significant and important extent, chaotic or dysfunctional or ungovernable?
A. No, I don't think any of those things. Now, the points that were made particularly in Mark Sedwill's first comment, about the nature of the health and care system and DHSC's role within it, I completely agree with, and would recognise. And this was the picture that I was seeing, I mean, I'm obviously biased as I was very proud of the work of my department and how it stepped up to the mark.

I think the point about the structural questions about how health and care were organised, what levers we had, and in particular -- and we covered this in Module 1, and I'm of exactly the same view now -- our ability both in the health and care system and in the wider government to surge for a crisis of this size, I do think that was a big problem. So, as I say, I recognise all of those things, I don't recognise --
Q. The overall problems?
A. Yeah, I mean -- for completeness, I mean, we were obviously under a huge amount of strain. We had people working incredibly hard in very difficult circumstances, 98
be -- if she had those views I would expect her to have raised them.

Likewise with Patrick, if he had issues at particular times, as his diary clearly shows that he did, I thought we had -- I have huge respect for Patrick, I thought we had a good working relationship, and I would have hoped that he would have raised them directly with me.

And then for Mr Cummings, well, I mean, his views of government civil servants are long held and very public, so I would -- I would put the four pieces of evidence that you've given me in different categories like that.
MR KEITH: My Lady, that may be a convenient moment.
LADY HALLETT: We will break for lunch. I'm sorry we've got to ask you to come back after lunch. You were warned, I hope?
THE WITNESS: I was warned, and there are obviously lots of important questions to be answered.
LADY HALLETT: Very well, I shall come back at 1.45 , please. (12.45 pm)

## (The short adjournment)

(1.45 pm)

LADY HALLETT: Mr Keith.
MR KEITH: Sir Christopher, I now want to turn to some of the most important COBR meetings, and so that we can all 100
understand the importance of this topic, COBR was of course the crisis machinery in the heart of government that responded to and responds to crises, both acute, and as we will see, longer running. It was at those COBR meetings that some of the most important decisions and the most important realisations came to be understood.
A. Correct.
Q. Yes. The DHSC was obviously aware from an early stage of the novel virus, and the evidence shows that you chaired a number of meetings in January with your officials, you chaired regular meetings from January with the CMO, the Deputy Chief Medical Officer, strategic incident director, and other bodies with which the DHSC was associated, Public Health England, for example, NHS England.

And presumably the DHSC, through yourself and others, attended all the COBR meetings?
A. Yes. So I chaired meetings, I think, from January 20th, and I went on doing so until there were regular ministerial meetings.

The initial COBR meetings were chaired by, as
I think is well known, the Secretary of State for Health, and I attended, I think, all the COBR meetings that he chaired, and then subsequent COBR meetings where

China and is not limited to China, but is anywhere else, other than China, there would be a pandemic-like scenario with the UK impacted. That is to say, if it leaks from China, it's coming.
A. Yes, that's what -- that's certainly what it -- that's certainly what it says. The CMO's views at the time, as he expressed them, and he of course is the DHSC in this case, there wasn't a sort of -- there isn't a difference -- I think were a little more nuanced than is set out here. But those were the two broad scenarios.
Q. In that second scenario, therefore, on the basis that the virus leaks from China, to what extent did the attendees ask themselves: well, if we're being told that, if it leaks from China, there would be a pandemic-like scenario and the UK is impacted; what measures do we need to start thinking about now to stop the United Kingdom being impacted once the virus has spread from China?
A. Well, so that was the whole reason there was -- there were COBR meetings at this time at all, and -- because, as I'm sure you know, it's quite a high bar --
Q. Sir Christopher, I'm so sorry. What measures were in any or all of your minds as to -- what thoughts were in your minds as to what measures could be taken to stop 103

101
it was alternate between the Prime Minister and the Secretary of State.
Q. Yes. The first one that I want to take you to, although it's not the first in order, is 29 January 2020, page 1 of INQ000056226. With all these documents, and with all these minutes, Sir Christopher, I'm going to ask you to focus, please, on what your understanding on the part of the DHSC was when you received the information and the relevant facts --
A. Yeah.
Q. -- and so on and so forth, in the course of these meetings. We can see the attendance on the first page, the ministers. Second page, officials, including yourself in the middle of the page on the left.

If we go to page 5, we can see in paragraph 3 the CMO telling the attendees that:
"... the UK planning assumptions were based on the reasonable worst-case scenario. There were two scenarios to be considered. The first was that the spread was confined within China, the second was that the spread was not limited to China and there would be a pandemic like scenario, with the UK impacted."

It appears from this, Sir Christopher, that the DHSC, amongst all the other attendees, was being told that if the spread -- if the virus spreads from 102
this second eventuality arising?
A. Oh, sorry. I'm terribly sorry, I slightly misunderstood your question. So the measures people were thinking at the time would have been all the measures up to the full implementation of the pandemic flu plan that we've discussed before. That's what would have been in people's heads.
Q. There is no debate, if you take it from me, on the face of this document, as to what those measures might be, what can be done to start putting them into place or thinking about them or arranging them. Why is that?
A. Well, I mean, there was definitely thinking and discussion of that going on. COBR -- and this is one of the things we need to reflect on about the process. COBR tends to deal and is set up to deal with incidents, and you see that from the agenda of this thing, it was dealing with like very specific things. So from my recollection, there was definitely discussion within DHSC and within SAGE about the kinds of measures that you would need to take, and discussion of the flu plan. It's not in this particular meeting, that is true.
Q. So the answer is: it wasn't debated in COBR, which is the primary body for crisis machinery in the United Kingdom?
A. I haven't checked when it began to be discussed in COBR, 104
certainly not in this meeting.
Q. Could we look at page 6, please, paragraph 12.

The reasonable worst-case scenario planning: the
government "continuously plans for a pandemic", it's an "international issue", local resilience forums had planning assumptions for pandemic influenza.

There are then a number of bullet points about repatriation, dealing with British nationals in Wuhan, pandemic plans in place for prisons, border staff, PPE, transmission possibly of the virus through food or animals.

Then over the page, transport -- communications.
Summing-up, 16, there must be a clear communications plan. The CMO should lead communications, more detail on Wuhan returnees.

Are you surprised, looking at this now, that there was no debate at all about whether or not anything could be done to stop the virus coming once it had left China, or secondly what measures in practice might have to be contemplated?
A. I didn't think -- I have to say I didn't think so from memory about this specific meeting, because I did know all those discussions about the flu plan were -- well, they were certainly going on in DHSC. Now, I mean, the closest this meeting gets to it is the thing we went
advise people to go to particular places, wash hands, all those sorts of things, those are public health interventions done via communications, and from my mind -- and it's particularly why there's a reference to the CMO leading communications here, it's about, from memory, that sort of public health communication, you know, not is the government going to issue a press notice.
Q. You've referred twice to the flu plan.
A. Yeah.
Q. In summary, and is this a correct summation of the position, Sir Christopher, the flu plan upon which the government at this stage was still proceeding --
A. Yeah.
Q. -- dating back to 2011, the flu pandemic strategy, envisaged measures such as providing for proper legislative powers to be exercised --
A. Yeah.
Q. -- the Coronavirus -- or flu Bill, the possibility of school closures, washing hands and managing excess deaths. Were those the broad heads of --
A. Erm, plus the communications bit. So what the flu plan envisages --
Q. Just yes or no, are those the correct --
A. No.

105
past on the reasonable worst-case scenario assumptions, and that was clearly the focus of the work at the moment, was working out -- was working out those.

Now, and the only further thing l'll say is at this stage what the communications were to the general public about what they should do, that is the first stage of preparing for a novel disease. I know it's not directly relevant to your question, but it's more than just ... sorry, something very odd happened on the screen. It's more than just comms in the traditional sense.

So if I'm honest, I can't say at that meeting I was surprised, because the meeting was discussing, as it were, the business of the day.
Q. Communications appears to be at the forefront of matters considered by this committee. It appears to be the focus of the summing-up. Why was so much focus relatively placed on communications as opposed to considering the practical measures which might be taken to stop the virus reaching the United Kingdom, assuming it had left China?
A. For the reason that I just said, that the question -and I'm sure you'll want to ask our public health specialists who you're talking to later, the question of what are you advising the public to do is the first thing that you want to do -- you know, whether you 106
Q. -- heads? You say plus?
A. Yes, so -- and in some ways the heart of the flu plan is voluntary -- I must remember not to use the acronyms --non-pharmaceutical interventions, voluntary non-pharmaceutical interventions, which are dialled up and down to control, so that is the other thing in the flu plan that we were expecting to do. So the work going on in the department at this point is: can we update the flu plan for this different disease but, as you say, the presumption was that we would be following, basically, the flu plan.
Q. Forgive me. What non-pharmaceutical interventions was the DHSC actively considering other than those measures which I have already mentioned which were part of the existing flu plan, the possibility of school closures, dealing with the physical problems associated with excess deaths, arranging for legislative proposals to be advanced, and washing hands?
A. It's what advice you give to the public on how they should be behaving --
Q. Those are not non-pharmaceutical interventions. What other non-pharmaceutical interventions?
A. Sorry, those are non-pharmaceutical interventions.
Q. The ones I have mentioned are non-pharmaceutical interventions, I am asking you what else was under 108
consideration by way of other non-pharmaceutical 1 interventions, not communications to the public, I'm talking about practical measures to stop the spread of the virus?
A. Sorry, this is where we're slightly misunderstanding ourselves. Advice to the public on how to behave are non-pharmaceutical interventions designed to stop the spread of the virus, is my point.
Q. INQ000146557, pages 1 and 2.

This is an email enclosing minutes from a SAGE meeting. It is an email which goes to the permanent secretary at the dhsc.gov.uk. We can see that in the top right-hand corner. Would that have been you?
A. Yes.
Q. If we look down at the bottom of the page, we can see that Professor Sir Chris Whitty says, of the four scenarios, only two in practice are worth considering.
"The other is the opposite end of the risk scale and is our reasonable worst case scenario for which plans are also being developed. With R [the reproduction rate] of 2-3 ..."

That's one person infecting two to three other people in an unimmunised population.
"... mortality of maybe $2 \%$ (wide confidence 109
that might happen at this pace, not that it will, but it might, was the basis on which DHSC was working.
Q. Once it leaves China, it will happen?
A. Yeah, and the "once" is very important here, so Chris -and l've talked to him on a number of occasions about this -- was clear that the conditional bit of that is very important. So he is not saying there will be a pandemic, he is saying, if it's not controlled in China, then it's very likely to become a pandemic and then, as becomes clear a few days later, he is saying "And in the UK that might lead to 100 to 300,000 deaths", so I don't think there's any sort of dispute about what we thought at the time.
Q. And by the beginning of February you discovered that it had indeed left China?
A. Well, in -- at that point, in extremely small numbers. Now, this is why I say that the CMO's view is rather, slightly more nuanced, or certainly how he described it to me, than is set out here.

So, I mean, as I say, I'm sure you will ask him yourself, but his view was if you have, as it were, very small outbreaks elsewhere that can be contained, in exactly the same way as our strategy started with contain, then of course it doesn't become a pandemic, it's when you get sustainable human-to-human
intervals around both of these and all other numbers), a doubling time currently of maybe 3-5 days and an incubation period of mean 5 [days] this could within the next few weeks ..."

## Emphasise that, please, Sir Christopher.

"... become widespread and turn into a significant pandemic relatively quickly."

The Chief Medical Officer was saying, in essence, was he not, "We have a basic understanding of the reproduction rate, we've got a basic understanding of the mortality rate and, therefore, we can work out how many people might die, a doubling time, and therefore that this could spread within the next few weeks and become widespread".

With that information available, and with the knowledge from the COBR meeting that once the virus has left China, if it leaves China, it's coming, why were those two pieces of information not put together to reach the realisation, with those characteristics and with no practical means of stopping it once it's left China, we are in real trouble?
A. No, and that was the view of the department. I mean, a few days after this, the Chief Medical Officer is saying that we might be looking at 100,000 to 300,000 deaths in that scenario, and that was the basis -- that 110
transmission across a wide range of countries. At that point his view was it was very, very difficult to stop and would become a pandemic.
Q. So you're saying that the assertion in the COBR minute that the virus would become widespread -- the second contingency, it would become widespread once it leaked from China, is wrong?
A. No, it's not wrong, it's a -- certainly, as I understood the CMO's views, but of course you'll ask him yourself, that it's a -- it's about what you mean by leaked from. So a case, one case appearing in another country that is identified, contained and doesn't lead to human transmission, he would not say that is -- has leaked from China. Once you've got sustained human-to-human transmission outside China, I think that's what he would describe as -- I mean, I'm slightly -- why I'm um-ing and ah-ing --
Q. I'm not asking for the Chief --
A. That was my understanding.
Q. That's right. I'm asking for your understanding.
A. Yeah.
Q. INQ000146558 is a letter from the private secretary in Downing Street to the DHSC, because it says:
"The Prime Minister met your Secretary of State, the CST and colleagues from the centre today for his first 112

DHSC Departmental Performance meeting."
Much of this statement or this letter deals with matters concerning the NHS objectives for manifesto commitments, performance, and so on.

There was, however, in the meeting a short update on coronavirus, which appears to relate to the need to explain the plan, whatever that plan was, and dealing with travel restrictions.

Why was so little time, relatively speaking, devoted in that meeting to coronavirus, in light of the information from the COBR and that email from the Chief Medical Officer saying the plausible scenario is once the virus leaks from China it is coming?
A. So l've covered this meeting in quite some detail in my statements, but -- so the meeting was set up at the request of the Prime Minister to cover --
Q. Sir Christopher, I don't wish to be impolite. Please would you answer the question: why was so little time, relatively speaking, spent on the issue of coronavirus during this meeting?
A. Well, what time was devoted to what was the choice of the chair of the meeting, which was the Prime Minister.
Q. All right. So your answer is the Prime Minister --
A. We had -- we had asked for coronavirus to be added to the agenda, and the CMO came specially, was not 113
of the novel coronavirus had spent between seven to ten days in hospital ...
"- The two most high-risk groups appeared to be the elderly and those with pre-existing illnesses.
"...
"- The fatality rate estimate remained at 2-3\%."
Scrolling back out, please, paragraph 4 deals with the issue of returnees.

Paragraph 6 notes that screening controls would be unlikely to delay the arrival of the virus by very much.

Paragraph 7 deals with communications -- I'm sorry, it deals with repatriation of those persons coming back from China. I think maybe item 3 deals with -- item 4 deals with communication strategy, and item 3 reasonable worst-case scenario:
"The DIRECTOR OF THE CIVIL CONTINGENCIES SECRETARIAT set out the planning priorities ...
"... the following points were made:
"- The committee agreed the need for a clear communications strategy ...
"... an emergency bill for support the UK's response."

And the link between the devolved administrations and local resilience forums.

Where was the debate about whether or not borders or 115
an original invite to the meeting, because we believed that we should update on the status of Covid, which was done. How the meeting was then run in practice was, as I say, a matter for the chair.

I came out of the meeting thinking that the messages about how serious this was and what the likely death toll would be had been delivered, so I wasn't thinking that our objectives for that bit of the meeting had not been achieved, even though it covers lots of other things. In my mind, we were there to tell the Prime Minister this is very serious and the likely death toll and to hear from the CMO, and that had all been achieved.
Q. Do you agree that the letter from Downing Street reflecting upon the meeting on behalf of the Prime Minister makes absolutely no reference to the death rates?
A. No, it doesn't, which -- now, my --
Q. Just yes or no, please.
A. No, it doesn't. Just as a matter of fact it does not.
Q. The COBR meeting on 5 February, INQ000056215.

Page 1, attendees. Page 2, officials, you're there again. Page 5, paragraph 2:
"... the CMO said ...
"- On average individuals who had died as a result 114
a test and trace system or other practical form of NPI could prevent the spread of the virus if it came to the United Kingdom?
A. Well, I think, and this is from memory, if we look at the slides mentioned in paragraph 9, that is the report of the planning that is being done for the -- for the reasonable worst-case scenario, which is that the virus has escaped from China and become a pandemic. So I think it is that bit of the discussion.
Q. The planning priorities there referred to were drawn, were they not, from the 2011 pandemic flu strategy document, which, as we've discussed, talked in terms of washing hands, talked in terms of the possibility of closing schools, talked in terms of how to manage large numbers of dead people, and communication.
A. And the things I mentioned earlier.

Now, on the two things you raise specifically, so the closing of borders, and I can't remember the exact date, but our scientific and clinical advice at the time, and certainly the WHO's advice, was that closing borders would have not more than a marginal timing effect. So I'm not surprised --
Q. We've read that --
A. Yeah.
Q. -- bit out.
A. So I'm not surprised that was not discussed. At this point I don't think anyone in the UK was talking about an extensive test and trace system as being a possibility. Again, given that at this point I don't think we ... I may get my timeline wrong, but this is just -- this is the point when the first tests are being invented, as it were. Certainly no one was talking about an extensive test and trace system at this time. So I'm not surprised it wasn't discussed.
Q. So is this the position: border measures by way of screening for symptoms and the like was -- and in fact your department advised on 21 February and the measures and the advice were accepted on -- sorry, of January. The advice was accepted by the Secretary of State on 22 January, to the effect that symptom screening at borders was unlikely to be particularly effective --
A. Yes.
Q. -- and would only secure a few days' delay, if that?
A. Yeah.
Q. There was a recognition that there was no testing system scaled up or in place. Other than the first few hundred index cases, there was no real test and trace system, was there?
A. No.
Q. That was because under the 2011 pan flu strategy it was 117
was no scaling up of the test and trace system beyond the first few hundred index cases until well after --
A. Yes, that's correct. And at this point, the scientific advice we were receiving was -- I'm not quite sure what the right words are, not definitive about how good even the tests were at this point, so for quite a long period, for example, it was believed that the test did not reliably pick up either presymptomatic or asymptomatic cases and it wasn't clear how reliable it was for symptomatic cases till a bit later.

So at this point with the development of the testing technology and the understanding of the testing, nobody, as far as I know, was -- from either the policy side or the clinical or scientific side, was saying that what you're laying out was a practical proposition for stopping the virus getting into the country in the first place.

So the focus was, as is then set out in the plan on March 3rd, on the contain -- the "contain" bit and then the other stages of the plan.
Q. Do you accept that other countries turned it very much into a practical proposition?
A. Oh, well, and -- and l've said, l've said before, that some countries in South East Asia clearly did very, very well.
Q. Yes.
A. Now the only think I'd add on this, and again I think I put it in my statement, that even the countries in Europe which had a much bigger testing capacity, particularly Germany, which had a very extensive diagnostics industry, they didn't succeed in using testing to stop the virus getting in either. So it wasn't simply a question of how many tests you have -and as the Chief Medical Officer gave in his witness statement -- in his evidence to Module 1, when you look at what South Korea had done, what they'd done was a very big investment in public health in general, of which testing was one part, as it were. So what I wouldn't like to leave you the impression with was that even -- even looking at South East Asia, but the testing bit is a complete silver bullet. It was -clearly they did it very well, they did it much better than us, I think there's absolutely no doubt about that, but at this point no one in the UK was thinking of a test and trace system as being the answer.
Q. Regardless of Germany, with which we're not overly concerned in this Inquiry, regardless of whether it was a silver bullet, there was no practical or policy consideration given at all, until very much later, to the practical proposition of a test and trace system to 120
prevent the spread of the virus?
A. No, and the advice we were receiving from our clinicians and the scientists didn't include that measure, that is true.
Q. INQ00056227 is a COBR on 18 February.

At this stage, we can see there the attendees. Page 2, the officials, including yourself again. Page 5, a CMO update. A debate about the reasonable worst-case scenario. And I'm not going to deal with you with the point about whether or not focusing on the reasonable worst-case scenario and whether it would eventuate misdirected attention away from the reality of what was happening.

But this COBR minute makes plain that -- you will see from the CMO's description in paragraph 2 -- there was a risk of onward transmission, escalation to a global pandemic remained realistic possibilities.

Scrolling back out, please, repatriation, paragraph 4. Paragraph 5, the repatriation of nationals and the possibility of infection from persons entering the United Kingdom.

Scrolling back out, and then going to the next page, legislation, so again a debate about the legislative basis for anything that might need to be done.

Scrolling back out again, the following page: 121
they were good, with the Cabinet Office, and -- at political level, and we've discussed some of this already, they were rather more up and down. But we felt we had good communications, that we got a hearing, that we'd engaged with the Civil Contingencies Secretariat, that COBRs were happening, all those things we had asked for, we felt those relationships were good.
Q. You say in your statement that conflicts and tensions were time consuming and consequently affected the efficiency of the government's response, so it appears you accept that to some degree, but we mustn't overexaggerate it, the ability of the government to respond was adversely affected --
A. Yeah, I mean, so --
Q. -- clashes?
A. It wasn't surprise you I thought about my words here extremely carefully, so -- and it's exactly as I say in my witness statement. So I don't believe, and l've never believed, that the core decision-making of which NPI to implement when in this period, this March period, was affected by any of those issues. When I was -- my recollection at the time and when l've reviewed the evidence, you can see the golden thread from the scientific advice we were receiving to the decisions that the government made on NPIs. So I thought that 123
"Planning for a Reasonable Worst Case Scenario":
"The DIRECTOR OF THE CIVIL CONTINGENCIES SECRETARIAT
said that there was work to be done to create a clear plan of activity (across the UK Government) from the moment of sustained transmission to its estimated peak ..."

If you're right, Sir Christopher, that there was already thinking about NPIs and what measures reflective of the existing flu strategy or additional to the existing flu strategy could be contemplated and imposed, why was the COBR still at the stage of just talking about the need to create a clear plan of activity?
A. Well, I mean, what it says is there was still work to be done, which there was, the work had begun, but it had not finished. I think the situation is exactly as described on the page.
Q. You were obviously closely engaged with Number 10 and Downing Street and the Cabinet Office through these late days in February, were you not?
A. Yes.
Q. How effective was the working relationship at ministerial and at official level?
A. So, and again, l've done this in some detail in my witness statement, I believed that in terms of relations at official level, actually throughout the pandemic, 122
core bit was following a proper process of advice et cetera.

What was affected by the issues that you mention was, exactly as you said, it was the efficiency of the government machine to do a number of other things.
Q. Right.
A. We had two, and I think I raised -- and it's in the evidence, two very specific practical things that went wrong that made us less efficient. One was meetings being called by several different bits of Downing Street and Cabinet Office at the same time with the same people on the same subject. And the other, which I have some text exchanges with Tom Shinner and with Mark Sedwill on, is multiple commissions on the same issue, and in one case I think there were two or three commissions on a procurement issue which turned out none of them were what the Prime Minister wanted and we wasted an entire day.

So there were definite -- I'm not disputing at all, there were definitely those sorts of issues. I didn't think, and I didn't raise, therefore, that those core decisions on NPIs, I didn't see any of that being affected by those issues.
Q. But the efficiency of the government's response was affected, yes or no?
A. And in the examples I have given, and I put it on record at the time, and we dealt with them, yes.
Q. Right.

INQ000279915 is a record of a WhatsApp communication between yourself and then Sir Mark Sedwill --
A. Yeah.
Q. -- where on 18 March you were worried about the fact that Number 10 SPADs were attending SAGE?
A. Yes.
Q. By 18 March, deaths had started to occur in the United Kingdom, had they not?
A. Yeah, and by --
Q. No, just please wait for the question.
A. Oh, sorry. Yes.
Q. Why were you concerned with a matter of process of this type as to who was attending SAGE when presumably the focus of every single minister and official should have been on the delivery, the outcome of these committee meetings and what was being done?
A. Because of the part at the top of the page. So 18 March is between the decision on 16 March to go for much more extensive voluntary restrictions and then the decision on 23 March to go for full lockdown.

My concern about SAGE here, and, as I say, I was normally a big fan of SAGE, my specific concern is in 125

Let's go back a few days to another COBR, 26 February, INQ000056216.

Pages 1 to 3 give us the attendees.
If we just scroll, please, through page 2, we can see that again you're there.

Then if we look at page 5, paragraph 1, an update on the current global situation.

There was particular concern at the 26 February -COBR -- wasn't there, Sir Christopher, about the fact that in Italy there had been an explosion of the virus? There had of course been a quarantining or a lockdown of a number of northern municipalities in Italy, and concern was expressed there about sustained human-to-human transmission in Italy, which receives a high number of travellers to and from the United Kingdom.

If we scroll back out again, and just cast our eyes down the page, we have health advice for travellers and schools; over the page, international response, that's to say helping other countries and helping the WHO; and then (d) on page 6, paragraph 11 :
"... the reasonable worst case planning assumptions looked close to becoming the reasonable planning assumptions as cases in Italy demonstrated the need for heightened alertness ..."
the second text here, which was, as far as I could see, SAGE had changed its analysis particularly around, I think it was, the effects on the NHS, without there being an explanation of new data.

So that was what I was concerned about. And then I was concerned about the purity of the SAGE advice which was going to the Prime Minister and others because SPADs were available. Those were my concerns, so I raised them.
Q. Sir Christopher, a concern about the substance of the advice coming from SAGE is one thing. Why were you wasting time concerned with the process of the system?
A. Because whether the advice is pure, and this was the reference to Chilcot you will see here, that one of the key findings of the various reports around the Iraq War, including the Chilcot one, was the mixing up of the technical factual advice and the political advice. That is the reference to Chilcot.

Now, as I say, this had been a key issue in that Inquiry --
Q. I'm going to --
A. We therefore wanted to take it very seriously.
Q. Forgive me. You've made the point, you were concerned about the recommendations of the Chilcot Inquiry. We don't need to go into what they were.

Progress legislation, ensure good public communications, and there are references then to massive numbers of deaths under the reasonable worst-case scenario, which was of course appearing increasingly to be the reality, guidance on excess death management, a reference to economic impact.

And then if we just go over and scroll, pages 8, 9 and 10, we will see references to travellers -thank you -- excess death management, and actions for the processing of the Bill, the Covid-19 Bill.

Where is the practical debate about measures to stop or control the spread of the virus, which is now in Italy and is envisaged to undoubtedly, if it had not already come to the United Kingdom, to come here?
A. So I would say that would be in the HMG preparedness section that you described. Now, of course the other thing that was going on at the moment, which I think every attendee at the meeting would have known is this is when we were preparing the -- for publication the Covid action plan that went out on 3 March, and that was the big thing that was being done at that point, which was to set out that strategy, and the -- and just for completeness, we were of course still in the contain phase in the UK at this time.
Q. Yes. On 28 February, before that action plan was 128
published, a paper was prepared by the Civil
Contingencies Secretariat with the assistance of the Department of Health, correct?
A. Yes, I don't remember the paper at the time, but having read it, that is clearly the case.
Q. INQ000146569. The UK's preparedness, written by the Civil Contingencies Secretariat, paragraph 1:
"Covid-19 looks increasingly likely to become a global pandemic although this is not yet certain."
A. Yeah.
Q. Did you agree with that sentence?
A. Erm, at that point, I thought -- I mean, as I say, I don't remember the paper at the time, but, as I say, WHO at this point had not declared a global pandemic, we were still in the contain phase --
Q. I'm so sorry to interrupt, Sir Christopher, regardless of whether the United Kingdom was in a contain or delay or mitigate stage, a matter of process in a plan yet to be published, did you think on 28 February that that sentence was correct?
A. Well, as I say, I didn't see that sentence on 28 February --
Q. Were you --
A. I think -- and the danger of hindsight is very large, I think that our and the CMO's view was that it was 129
a moment -- is currently to contain the small number of cases here and reassure the public.

When you, your department, your officers, your officials, read this document, what answer did they come up for the question: how is the United Kingdom to currently contain the small number of cases here?
A. Well, so, at this point, when you've got a small number of cases, you can contain via contact tracing, and that was what was being -- happening at this time. You go into the delay phase, as it became, as you say, in the strategy, later, at the point when you can no longer do that. So that sentence, I assume, is a reference to that.
Q. The action plan, could we have, please, INQ000106107. This was, the Inquiry has heard, an action plan which was described by a number of -- or one particular official in Downing Street as being a comms plan. Mr Warner said in his statement: where was the real plan?

This plan had its genesis, although it was dated 3 March, some time before in a request from the Secretary of State in early February; correct?
A. I can't remember the exact date of that --
Q. INQ000106107.
A. -- that he commissioned, but ...
very, very likely indeed at this point.
Q. So that crucial document, setting out for the first time in this form the Civil Contingencies Secretariat's view, the crisis machinery's view in government of the UK's preparedness, starts with a sentence of vital importance that is materially mistaken, in your view?
A. Not materially mistaken, the sentence is not inconsistent with what I have said.
Q. All right.
A. I think, and, as I say, the danger of hindsight here is very high, I think, at that point, I and the CMO would have -- and particularly the CMO, would have made it stronger than that. But, as I say, my danger of hindsight, just to be completely honest, my danger of hindsight is very --
Q. Where is the hindsight, Sir Christopher? You said "I think that the CMO's view was that it was very, very likely indeed at this point".
A. No, yeah --
Q. Where is the hindsight in that?
A. Well, it's very easy to say on a particular date a view was X, which I can't evidence, but so I'm giving you what I think is my honest view.
Q. The UK's approach, underpinned by science -- we'll come back to the issue of following the science in 130
Q. 10 February, from somebody in the exchange administrative group:
"... we have discussed updating the 2011 pandemic flu strategy."

So just noting there, Sir Christopher,
the prevailing impact of that 2011 strategy on documents being brought together, drawn up in the face of the coronavirus pandemic:
"I wanted to flag that SoS has commissioned for THIS WEEK a coronavirus version of the strategy document ... there are many pan flu supporting strategies ... which are more recent ... [but] this is an additional ask", and so on.
A. Yeah.
Q. So on 10 February, an action plan designed to deal with the fast-moving new, novel viral pandemic was sought to be introduced, to be drawn up?
A. Yeah.
Q. If you look, please, at the minutes of the meeting in which that direction was made, INQ000279883, you will see:
"... We are building a campaign site which will be the public window for the plan. We'd like to get the site launched next week ..."

Then over the page, please, page 2 :

Q. This was your department's action plan, or at least an action plant to which you contributed?
A. Yeah.
Q. Did you not ask yourself on 3 March: why are we publishing a plan that provides for containment and delay in the future when I am aware that SPI-M-O has as a committee formally acknowledged the existence of sustained community transmission, that is to say absence of control in the United Kingdom?
A. Because the formal scientific advice, which is consensus advice, drawing on a range of scientific sources, was given to us by, in this case, the CMO but normally the CMO and the Government Chief Scientific Adviser on advice of SAGE, and they were at that point not advising that we were out of the contain phase, that happened, as I say, I think on 12 March, the day after WHO had declared a pandemic.
Q. But the United Kingdom's position did not of course depend on whether or not the WHO had declared a pandemic or not?
A. No, but it depended upon what the, in this case, CMO's assessment was of the consensus of scientific opinion which -- and I'm sure you will ask me this question, you know, that is a judgement call and scientists had different -- had different views, and that is how our
thereinafter adopt a strategy comprising firstly control and secondly delay?
A. Contain.
Q. Contain, I apologise: contain and then delay.

SPI-M-O had by that date formally acknowledged sustained community transmission in the United Kingdom, had it not?
A. Yeah, there was a scientific debate going on at this point. I mean, the actual decision on when you move from contain to delay was taken by, I think, the Chief Medical Officer, and I don't have it here, but there were a series of scientific debates about whether we were still in the contain phase moving into the delay phase, and that decision was finally taken on, I believe, 12 March.
Q. So at the date of publication, a formal part of the government scientific advisory process, SPI-M-O, had already formally acknowledged that there was sustained community transmission within the United Kingdom --
A. Yes.
Q. -- ie --
A. Yes, but that was not the whole of the scientific advice that we received. As I say, there was a scientific debate going on at this point which was resolved, as I say, by the scientists.

## 134

scientific advice worked.
Q. Strategy.

We are not going to re-debate, Sir Christopher, the proper meaning to be given to a one-peak strategy or mitigation versus suppression. You know very well what the debate is

You say in your statement that you believe, with hindsight, that you did place too much store in shielding as being the key measure in reducing deaths from Covid --
A. Personally, yes. Now, and I hope I made --
Q. Just will you please just wait for the question.
A. Sorry.
Q. You say in your statement you believed you placed too much store on shielding. Shielding is of course a crucial part of the mitigation, the squashing the sombrero with added herd immunity strategy, because you allow the virus to spread through parts of the population while shielding the vulnerable, and you hope, you expect a majority or some or a proportion will become infected and that will then prevent reinfection or rather prevent novel infection later and a second wave.
A. Not quite, no. So as l've described in my statement, I didn't think of herd immunity as an objective -136
Q. I'm not saying it's objective, I said it was a byproduct of the one wave mitigation strategy?
A. Yeah --
Q. No, no, I'm so sorry, Sir Christopher, you just have to wait for the question.

To what extent did you and the DHSC resist the change of strategy that took place from mitigation to suppression between 9 March and that weekend of 14/15 March?
A. That's not when the change occurred. So l'll say a couple of things. So l've been very surprised by the number of references to a one-peak strategy. I don't remember that being said at the time at all. And I know it's come up in a number of witness statements, and as I've read and listened that has surprised me. Almost all pandemics in the whole of human history have had more than one wave. It's very --
Q. Please let us not worry about why doctrinally --
A. As you --
Q. Forgive me, Sir Christopher -- why doctrinally it came to be called by some people as the one wave strategy. It is what it is.

Why, if you did, and maybe you did not, but did you resist the change in strategy that other parts of the government came to understand was required and then 137
A. Yes, there were definitely scientists saying that, and the debate, and this is very important, was about the timings of restrictions, not that there would need to be so.

So -- and the clearest description of this is at the COBR on 12 March, where SAGE sets out, Patrick Vallance describes this very clearly, the NPIs that were being considered and SAGE's recommendation of which ones should be done now and which ones should wait a few weeks.

So on 12 March, the government accepts exactly what SAGE, via the government Chief Scientist has advised on which NPIs are needed at that precise moment in time.
Q. When, Sir Christopher, did you realise, as was an inevitable part of any reasonable worst-case scenario involving 800,000 deaths, that it was that reasonable worst-case scenario that was coming to pass, and it would inevitably involve the swamping of the NHS?
A. I can't -- I can't put a specific date on it. I agreed, and I think I've said this in my witness statement, I agreed with the SAGE advice that we received on that day. It made sense to me, given the data, and, as I say, and you'll see this very, very clearly in the minutes, that the debates were not about: would we have to take further restrictions; the debate was about: what 139
began to pursue?
A. I don't think I did resist. The change happens -- and I've set this out in my witness statement, my recollection -- between 16 March and 23 March, and as I understood it, you know, basically up until 16 March we are still following basically the flu plan of voluntary, at that point quite heavy restrictions, and then between the 16th and the 23rd the government switches to legal restrictions, which become known as lockdown. I've set out in my statement why I think that change occurred. I don't think I particularly -- in fact, I don't think I did resist that strategy, and I don't think DHSC did. I think there was a general move in government that the position we established on the 16th, in line with the scientific advice at the time, of heavy voluntary restrictions wasn't going to be enough and we switched to legal restrictions on the 23rd.
Q. Do you agree that from 1 March onwards there were scientists in Imperial College London, the London School of Hygiene and Tropical Medicine, beginning to realise and beginning to say openly: with this infection fatality rate, with this infection hospitalisation rate, with this number of people in the population, there is going to be a massive wave of deaths? 138
is the best time to implement those restrictions, and that was a debate, as I say, I agreed with.
Q. The debate about what measures could work and when they should best be employed was a different debate from the stark realisation that unless something radical was done, the NHS would be overwhelmed?
A. And, as I say, the question that was being debated was: when is the right point in the upturn to implement which NPI, and that is what we received SAGE advice on, which was, in part, based on their assessment of what the effect on the NHS would be. And that changes radically between 12th and the 16th, when we get updated advice that basically says we're much further up the curve than we thought we were.
Q. On 12 March -- forgive me, on 12 March you had a WhatsApp exchange with Lord Sedwill -- could we have INQ000279901 -- where, notwithstanding the emerging scientific view that there would be a wall of death that would swamp the NHS, notwithstanding the figures from the NHS beginning to emerge as to bed capacity, and therefore the need for a radical change in strategy to suppression, Lord Sedwill said to you:
"I don't think [the Prime Minister] \& Co have internalised yet the distinction between minimising mortality and not trying to stop most people getting 140

## it."

So a reference to the herd immunity debate. Do you agree?
A. Well --
Q. Is that a reference to the herd immunity debate?
A. No, I don't think it is. So what Mark says here is pretty much identical to what Patrick Vallance says at the COBR meeting later that day that we've just been discussing. So as far as I'm concerned, Mark was reflecting the state of the scientific advice at that point --
Q. "Indeed presumably like chicken pox we want people to get it and develop herd immunity before the next wave ..."

So obviously it was a reference to the herd immunity debate, Sir Christopher?
A. Oh, yeah, he was -- he was talking about the herd immunity.
Q. And your position was:
"Exactly right. We make the point every meeting,
they don't quite get it."
Why were you, Sir Christopher, still wedded to
the mitigation herd immunity approach in the face of the emerging scientific evidence, the advisory evidence commissioned by your own department?
was leading the United Kingdom astray.
At that 5.00 pm meeting, there was debate, was there
not, about the need to accelerate and suppress -accelerate measures and suppress the virus, and you were there?
A. Yeah.
Q. Mr Cummings was there, Sir Patrick Vallance was there, Mr Warner was there, correct?
A. Yes.
Q. In Sir Patrick Vallance's notes, and in Mr Cummings' witness statement, there is a reference to you, when Sir Patrick Vallance said, "We must change course, we must accelerate practical measures, we must suppress this virus, it's going to overwhelm us", that you were incandescent, "I got a ticking off indirectly from the permanent secretary of the DHSC".
A. Yeah, and I have to say, well -- and as I've said before, I have huge respect for Patrick and he was clearly referring to something. I do not have any recollection of ticking off the Government Chief Scientist. I clearly said something that caused him to think that, and, as I say, Sir Patrick is one of the most honest and straightforward people I know, so I'm not denying his ... but I don't recall doing anything as described there, it may have been
A. I would refer you to the very clear scientific advice from the body that was charged with drawing up the consensus, which was SAGE, via the government's Chief Scientist, given to COBR on this very day endorsing that strategy.

Now, I was very, very loose in my reply, I was answering the exact question at the end of Mark's text that we should be focusing on protecting the most vulnerable. But, as I say, what Mark sets out there is pretty much exactly, as I say, what we were hearing from SAGE and what the Government Chief Scientist presented at the COBR meeting on that day, so it wasn't an unusual position here, and I accepted, as I've said, I agreed with the SAGE advice.
Q. On 15 March at 5.00 pm that weekend --
A. Yeah.
Q. -- when there were multiple meetings with the Prime Minister, Mr Cummings and Mr Warner and Ms MacNamara and others had raised their concerns about the calamity, the catastrophe that was about to overwhelm the United Kingdom. The Prime Minister had, as I said, a number of meetings in which he asked his advisers as to what should be done, and there was repeated debate about the need to change strategy and whether herd immunity approach or a mitigation approach 142
a miscommunication, and I think it says, I haven't got the thing on screen, but I think it does say indirectly, so it may have been a miscommunication, and in terms of that --
Q. Who says that?
A. Sorry, I don't have it on the screen, I thought you said indirectly, I may --
Q. Saturday mid-March:
"I dropped a bombshell of needing to move fast, I got a ticking off indirectly from the permanent secretary of the DHSC."
A. Yeah.
Q. "He was incandescent."
A. "Got a ticking off indirectly", yeah, so it may be -- as I say, I don't remember this at all, it may be when he says "I got a ticking off indirectly" somebody said to him that. I don't know who that person was and I don't know what they're referring to. Now, in terms of the meeting itself --
Q. No, no, just pause there, please, I haven't asked you about the meeting generally.

It became apparent and more and more people signed up to the change of strategy, that there had to be more stringent measures --
A. Yeah.
Q. -- imposed, and there were measures imposed on 16 March --
A. Yeah.
Q. -- and then, of course, firstly consideration had to be given, time had to be allowed to seeing whether those measures work, correct?
A. Yes.
Q. Secondly, the government had to be able to have time to put into place the practical arrangements associated with any further stringent measures, correct?
A. Yeah.
Q. And so no decision was taken to lock down over that weekend of $14 / 15$ March, was it?
A. No, and my recollection of the meeting was that, by the end of the meeting, where there had been a, as you say, a robust debate about what the right thing to do was, my recollection was everyone had coalesced around the actually rather extensive package that then went to COBR the next day --
Q. The package put into place on the 16 th?
A. Yes.
Q. Right.
A. And as far as I was concerned, the meeting and all the participants in it had, by the end of the meeting, agreed that that package was the right set of things to 145

MR KEITH: Yes, my Lady, I am.
LADY HALLETT: I think probably we will take a ten-minute break now because I suspect we are going to have to take another break because it could be a long day.
MR KEITH: I'm sorry, yes, I'm afraid so.
LADY HALLETT: So I will return at 3.05. Sorry for another interruption.
( 2.55 pm )
(3.05 pm)

LADY HALLETT: Mr Keith.
MR KEITH: Sir Christopher, the lockdown, the mandatory
stay-at-home order of 23 March. Ultimately,
the national lockdown, if I may call it that, was ordered when it became apparent that the NHS would be overwhelmed and the existing measures of 16 March proved not to be enough to ensure compliance.

In your statement, you recognised that the voluntary NPIs, if I may call them that, of 16 March proved not to be enough, which is why a lockdown had to be in the end imposed.
A. Not quite.
Q. Will you just wait for my question, please.

You do accept that, had voluntary NPIs, as you describe them, been introduced earlier, it is
do.
Q. And the DHSC was tasked with the obligation of providing a battle plan --
A. Yeah.
Q. -- an overarching plan for how these measures would work, what needed to be done, and of course envisaging any further possibility of further, more stringent --
A. Yeah, now --
Q. If you would just agree that --
A. No.
Q. -- your department took on the obligation of developing and producing a battle plan?
A. Yeah, so we were formally commissioned on, I believe, 20 March.
Q. 20 March.
A. The actual work that went into the battle plan had begun considerably before that, I think basically from the point of the strategy, so we were able to deliver the battle plan back on, I think, the 22nd. Now, we didn't develop it from scratch over those two days, as you would imagine, so it was the culmination of a large set of work within the department.
Q. All right.

Now, the lockdown decision and the time --
LADY HALLETT: Are you moving to a --
146
possible -- and I emphasise, only possible -- that they might have worked and there may have been no need for a lockdown in order to preserve the NHS?
A. I'm sorry, right. So, we don't know, and we will never know, what the effect of the 16 March package would have been, because there was not long enough between it and the national lockdown to be able to tell. Which is why I've phrased my statement in the way that I did, I think. And there is -- from what I have seen, there is some evidence that the wave was already beginning to turn because of the 16 March package, but, as I say, we will never know, because we introduced the 23 March.

And I set out in my witness statement the reasons why I think the government changed course, which was certainly a belief amongst a number of people that those measures were not enough. It was seeing lockdowns all over Europe and us being out of step, and it was a sense, driven by a lot of the media reporting, that people were not complying with the 16 March things --
Q. Stop --
A. -- so in my mind it was those three reasons, but just to be clear, I'm not -- I don't know and we can't know what the effect of that 16 March package would actually have been.
Q. But you accept it is at least possible that had those

16 March measures been thought of, conceived and imposed earlier, and I emphasise, possibility --
A. Yeah.
Q. -- then there may have been no need for a lockdown; we just don't know?
A. That is certainly a possibility. And as l've said in my statement, with hindsight we were at least a week late at all points of the NPI decisions. I agreed with the decisions at the time and the timing but, looking back, we should have done each of the things on the 12th, the 16 th, the 23 rd, if we had got to the 23 rd, at least a week earlier.
Q. Should the government have changed course earlier? If it had, then of course whatever measures were imposed on 16 March might have been imposed earlier --
A. Yeah.
Q. And there may have been an earlier realisation that there were no other practical measures open to it. Should the government have understood the position and changed course earlier?
A. So, and I hope I have been clear about this, I think 21
the decisions based on the scientific advice were completely rational at the time and I agreed with them. With hindsight, I would agree with you that we should have imposed them earlier.

As I say, this all seemed at the time to me completely rational of the timings of what we did when. As I say, looking back, I would take different decisions. Obviously I wasn't the decision-maker, but I would have supported earlier implementation, as you say.
Q. By contrast, Sir Christopher, in relation to the second lockdown, your view at the time was that that second lockdown, the lockdown of November 2020, was implemented too late?
A. Yes. Now, and I hope I've made this clear in my witness statement, so the issues in March are lack of knowledge and understanding about the virus and taking decisions in, you know, considerable uncertainty. That is not the case for the second lockdown. By this point we have a lot of testing, we know a lot about the virus, we know -- we're not modelling, we basically know how it goes up and down. And the debates, which I was nothing like so close to, so I'll give the caveat that I was, as it were, watching from DHSC rather than in the room at this point, but the debates in November are not about what is the situation, they're about what is the right strategy. And that -- that's certainly how it looked to us. It was much more: are lockdowns a good idea or not? Not, what is the timing of a lockdown and what do we 151
Q. We should have what, sorry?
A. Sorry, so with hindsight, I agree with the proposition you put to me that we should have imposed them earlier.
Q. It is obvious that it took a number of weeks for the government to understand the predicament it was in, it took a number of weeks for the whole of government to understand that, regardless of the modelling, the infection fatality rate and the lack of practical means of controlling the virus gave it very little room for manoeuvre. Should not that awareness have taken place, come to the government earlier?
A. As I say, I thought the decisions were rational at the time, and they are -- and having looked back at the record, they are fully in line with the scientific advice that was received. Now, the debate at the time, as I say, there was -- I think everyone agreed we were going to have to have more and more restrictions, the debate was about what the right timing was. And the clear view of the Chief Medical Officer and others that there were big downsides, as was proved to be absolutely correct, to our NPI regimes, and therefore going into them at the right time and coming out of them as quickly as possible to minimise, as I say, what is been correctly identified as the sort of collateral damage of NPIs and lockdowns was very, very important.

## know.

Now, my point -- and I do understand the argument, I don't agree with them, but I understand the arguments from people that lockdowns are more damage than they do, and that case is made, I understand it, I don't agree with it, but if you're going to have a lockdown, which we did, it would have been much better to do it earlier, in my view, I wasn't the decision-taker, but in my view, than when we did in November.

So I see the decision-making very, very differently in that March first lockdown, which I say was based on uncertainty, and the second and third ones which were based on certainty but disagreements about the right strategy.

Sorry, that was a long answer, but does that make sense?
MR KEITH: Well, that's not for me to answer. I have no more questions.

My Lady, there are a number of Rule 10 questions.
LADY HALLETT: There are.

## Ms Campbell.

## Questions from MS CAMPBELL KC

MS CAMPBELL: Thank you, my Lady.
Sir Christopher, I ask questions on behalf of the Northern Ireland Covid Bereaved Families. I want to 152
take you back, please, to that period in January and February 2020, and in your witness statement, I think it's perhaps your ninth one, you exhibit a document that is ultimately dated 25 February 2020, and we're going to have a look at it, if we may. It's INQ000051209.

Whilst it's coming up, Sir Christopher, and because we're limited for time, this is a Public Health England document that is endorsed by your department, and it is entitled, as you can see, "Guidance for Social/Community Care and Residential Settings".

If you just look at the very bottom of the first page, you can see it's endorsed and accredited by the Department of Health and Social Care, and indeed the Chief Medical Officer. Do you see that?
A. Yes.
Q. And, as I say, although this version is 24 February, it's ultimately published the next day.

Could we go over the page, please, to page 2 . We can see on page 2 the list of community organisations to which this is to apply, and the bottom three bullet points: care homes, which are nursing care homes; care home services without nursing; support to people in their own homes. And of course there are other children's homes, homes for people with learning disability and so on.

COVID-19 in the United Kingdom. There is no need to do
anything differently in any care setting at present."
Okay?
Now, I'm not going to put it on screen, but your department at the same time on 25 February 2020 had published a situation report, a daily situation report, and you'll be familiar with those. Isn't that right?
A. I suspect so, yes.
Q. That report indicated that, as at 25 February, fewer than 6,800 people in the UK had in fact been tested, but of those tested there were 13 confirmed cases domestically. Okay? It also indicated that the situation internationally was that China was experiencing widespread infection, causing by that stage some 2,700 deaths. The situation in Italy was rapidly deteriorating and deaths had started and doubled overnight. And of course the situation in the Diamond Princess was that short of 700 people had become infected. Okay?

You've told us in your evidence today that as at the end of January of 2020, your department was working on the basis that once the virus leaves China we're in real trouble, isn't that right?
A. As we covered earlier, yes.
Q. Yes. Why is it, then, that as at 25 February 2020, when 155

At the very bottom of page 2, the advice on 25 February, that very bottom paragraph, please: "This guidance is intended for the current position in the UK where there is currently no transmission of COVID-19 in the community. It is therefore very unlikely that anyone receiving care in a care home or in the community will become infected."

Okay? So it's very clearly stating right at the end of February that it is very unlikely that those who reside in care homes are going to be infected, much less, of course, seriously ill or die.

Before I ask you a question, let's look at a few other pieces of advice that are in this document.

Can we go to page 6, please.
It is reiterated in the top paragraph of page 6, last sentence:
"It remains very unlikely that people receiving care in a care home or the community will become infected."

Page 12, just give me one second to make sure I have the right reference.

## (Pause)

I'm so sorry, l'll read it out to you, I just can't see it as it appears on the screen here, but on page 12 it's repeated:
"Currently there is no evidence of transmission of 154
the situation internationally was grim, and that the virus had arrived domestically, you were telling the care home sector or at least endorsing the advice that risks of infection were very unlikely and that there was no need to do anything at the moment?
A. Because that was the clinical advice at the time, so at this moment actual infection numbers in England, as this was, were believed to be very low indeed. So, as I understand it, this is a description of what the situation was at that time, it was not a prediction of the future. So I think everything you've read out -I mean, obviously this was signed off by a number of clinicians, not by me, but I think everything that you have read out is entirely consistent with the actual number, believed number of cases in the UK on that date.
Q. But of course, Sir Christopher, once the virus arrived in the UK, once the virus arrived, you knew and your department knew that we needed to be acting on the reasonable worst-case scenario basis; isn't that right?
A. Well, at this point, the --
Q. Sir Christopher, I'm quoting your evidence from this morning to you.
A. In terms -- so the distinction that I think is important here is between what were our predictions of the future and what was our advice to people to do at that moment 156

| in time. So it is completely consistent that there may | 1 |
| :--- | :--- |
| be, as there were at this point, very small numbers in | 2 |
| the UK that could be contained, and that our prediction | 3 |
| of the future, the reasonable worst-case scenario of | 4 |
| what might happen, might be very high. Those -- I don't | 5 |
| see those two things as in contradiction at all. | 6 |
| Q. Let's look at it in this way: the Diamond Princess had | 7 |
| many features that are consistent with care home or | 8 |
| residential home features: high occupation, high | 9 |
| occupancy, a lot of people sharing facilities, staff | 10 |
| going from room to room and, perhaps even | 11 |
| demographically, an older age group. We know that by | 12 |
| that stage the Diamond Princess had suffered such | 13 |
| an infection that 700 people on that ship had been | 14 |
| infected. Okay? | 15 |
| Now, if we put it in context, was any consideration | 16 |
| given at that point as to whether or not you should be | 17 |
| advising care homes that your department was acting on | 18 |
| a reasonable worst-case scenario and that they may well | 19 |
| have to at least prepare to take plans to protect their | 20 |
| residents? | 21 |
| A.Well, you've displayed how this document was put <br> together, and who signed it off, and what you've just | 22 |
| described was not the clinical advice that we were | 23 |
| receiving at the time. |  |

A. Now, at the point that that guidance was put out, there was not evidence of community transmission occurring. As you say, there were, I think, from your numbers --
Q. 13 cases in the UK.
A. -- 13 cases, and from memory they were at that point largely imported cases and we didn't have evidence of community transmission. So I think the guidance is completely in line with what Professor Van-Tam has written, which is not surprising given that, as you showed at the beginning, the guidance was signed off by the Office of the Chief Medical Officer of which Jonathan Van-Tam was a part. So I don't see any inconsistency here.
Q. You say you didn't have evidence of community transmission at that point in time. There had been fewer than 7,000 tests. We had 13 confirmed cases. You knew what had happened internationally. You knew what had happened on the Diamond Princess. Would it not have been safer to operate on the basis that there was, at the very least, a risk of widespread community transmission starting from around the end of February and continuing well beyond?
A. Well, I can only repeat, we were acting on the clinical advice that we received at the moment, and -- at that time, and I'm sure we will cover this in great detail in 159
Q. Well, can we put up, please, document INQ00047541.

And to put it in context, this is a document that comes from Professor Jonathan Van-Tam. It is advice that he provide, as he says, to his DHSC colleagues on 24 January 2020

Can we please in that document scroll down to page 3. The heading is "Significant spread and transmission in the UK", and the second paragraph, please. These are his corrections to a DHSC document:
"If community transmission occurs in the UK, it [is] most likely that widespread community transmission would follow on rapidly; this would be a tipping point at which we would cease contact tracing, as it would be no longer be possible or a plausible route to stop the virus."

So as of 24 January your department was receiving advice that if community transmission occurs in the UK, it is most likely that widespread community transmission would follow. Were you aware of that advice at the time?
A. Yes, and it's completely consistent with what l've said in the rest of this hearing, and with what l've just said. So the key words in that paragraph are "if community transmission occurs".
Q. Yes.

158
future modules, but in essence there were no non-damaging options here. So it's been widely reported the damage to individuals that isolation, non-pharmaceutical interventions, lockdowns have --
Q. Sir Christopher, I'm going to --
A. -- so we were exactly with the clinical advice that you were quoting.
Q. I want to move on and ask you whether you were aware of an article, again authored by Professor Van-Tam, at this stage in 2017, in relation to the possibility of an influenza pandemic, in which he said that long-term care facility environments and the vulnerability of their residents provides a setting conducive to the rapid spread of the influenza virus and other respiratory pathogens. And later in the article he talks about the risk in care homes potentially being explosive.
A. I'm not aware of that article --
Q. Does it follow that insofar as the department endorsed this advice, it did not put together the risk to residents in long-term care facilities, the global picture and the likelihood of transmission at least moving towards being widespread in the UK?
A. Well, I can only say the same thing that I have said in response to previous questions. This was advice clearly 160
signed off by the clinicians and scientific advisers at the time about what the best thing to do was in the very specific circumstances that you've described where we did not have evidence of community transmission and therefore the kinds of things that you're describing were not triggered. I mean, I get the point you're making, but my answer is, as it were, the same, that that was the scientific and clinical advice we were receiving at that time.
Q. So the advice to those who manage care homes is: do nothing, don't worry, any risk is very small?
A. And I think at that particular moment in time that has proved to be correct. Now, obviously later in the pandemic, and as I'm sure I will be giving evidence on this in a future module, that position changes completely, but at this particular moment in time I haven't seen anything to suggest that that advice was incorrect or out of line with our scientific advice at that time.
Q. Sir Christopher, one more topic, if I may, because I'm sure I've overrun my time.

Can we please put up INQ000106319.

We understand on 31 March 2020. You can see it's
PPE guideline comparison. Can we go quickly, please, to
circumstances are to be wearing a single pair of gloves per two hours.

In relation to surgical theatre gowns, one per
patient interaction is to be changed to one per
four hours. Do you see that?
A. Yes.
Q. Were, so far as you know, ministers told that PPE, in order to prevent a crisis in availability, was going to have to be worn for longer and worn for multiple patient and colleague interactions in order to extend its usage?
A. Sorry, were ministers --
Q. Yes. Yes. They were aware of that, is that right?
A. Yeah, I mean, this was -- this was being widely debated, it was very high up our issues list, we were very worried about it, and I think ... I'll have to go away and check and give you the answer afterwards, but I think at this point ministers are holding several meetings a week on PPE, possibly daily. So I think they were very well sighted on these issues.
Q. Were you aware whether the proposals made in this document were the result of any UK trials having been undertaken to test whether they were safe, both for patients and staff?
A. I couldn't tell you. Now --

MS CAMPBELL: Well, those are all my questions. Thank you.

This is a paper produced again by your department. 161
page 2. There will be a great deal of other evidence in this module and indeed in future modules about procurement of PPE, but on 31 March your department was proposing, under the intensive care column on the right-hand side, that to deal with the problem of a lack of PPE or a risk of lack of PPE, FFP3 respirators which had been recommended to be one per patient interaction was to be changed, and those who work in intensive care were to wear one over the course of two hours. Do you see that?
A. Yes.
Q. And you would accept no doubt that that would mean many patient interactions and indeed colleague interactions potentially within that two hours?
A. I should say I am not an expert in infection control at all, so --
Q. I'm not asking you for your expertise in infection control, but you do know that those who work within intensive care facilities may well encounter several patients and several colleagues over a two-hour period?
A. Yes.
Q. If we go down, please, to gloves, one per patient interaction is to be proposed to be changed to one per two hours.

So, again, those who work in those intensive care 162

LADY HALLETT: It's not your fault, Ms Campbell, but we have another witness to get through this afternoon, so I'm sorry to interrupt you.

Mr Metzer.

## Questions from MR METZER KC

MR METZER: My Lady, I have been asked and I have agreed to limit my questions further in light of the position today.

Sir Christopher, I ask some questions on behalf of the Long Covid groups.

On 7 July 2020, it was confirmed by email that the DHSC had planned to raise public awareness about the long-term effects of the Covid-19 but it was only on 21 October 2020 that the DHSC finally launched its one and only video on indiscriminate risk of Long Covid, which was directed at young people. Why was there a delay of over three months in publishing the single awareness-raising video on Long Covid?
A. I don't know about the video, I can go and check, but there had been a lot of activity on Long Covid before that, going back to 5 June, when the NHS issued its first guidance on the aftercare needs of inpatients recovering from Covid-19 and then the Secretary of State holds a roundtable on Long Covid on 1 July. So we were well aware of the issue and I should say, as it hasn't 164
come up before, it's a very serious issue that we take very seriously but, as I say, I don't know about the video. I can find out but there was a lot of activity on Long Covid before the dates you're describing.
Q. Okay. Leave this video aside, there was no reason, was there, to delay the accompanying press release?
A. Again, I couldn't tell you. I can find out.
Q. Yes, please.

Do you agree that this one public health video over three years was insufficient to warn people, including parents, of both the symptoms of Long Covid and that Long Covid is caused from infection of Covid-19?
A. I think if the video had been the one thing that had happened, I would agree with you. But, as I've said, there was an awful lot of other activity on Long Covid from when it became apparent after the first wave that this was going to be an important thing for the country and for its sufferers. So, I mean, I'm terribly sorry, I can't really focus on the video because I don't actually --
Q. I'll ask you a more general question: do you agree overall that the information provided was insufficient to warn people, including parents, of two things: the symptoms of Long Covid and the cause, the fact that Long Covid is caused from infection by Covid-19? 165
making here is about the cross-government nature of the communications, as opposed to that done directly by the NHS, I think that's the point. I mean, again, I'm sorry, I don't know the story of this in the detail that your questions require, so again, on some of these l'll take your questions away and come back, if that's okay, with a more detailed and more expert answer.
Q. You certainly agree that the DHSC hadn't implemented a communications strategy by that point?
A. Well, as I say, I think what Ed is talking about, but I need to go away and check, is about the cross-government wider implications, I mean, my understanding is there was a lot of communication being done by the NHS, as it were, on the straight clinical issues, in the way that we do for all conditions. I think he's making a point about the wider government but, as I say, I'll check and give you a better informed answer than I can give today.
Q. Thank you.

Do you know whether the discussions of the Long Covid oversight board fed into Cabinet Office messaging on Long Covid?
A. I don't know, off the top of my head, I know that my ministers, and particularly, at this point, I think it was Lord Bethell, took a very keen interest in
A. No, I don't. I mean, there are other witnesses from my department and related who your questions will be better answered than particularly the clinicians. My impression is that, actually, we and our colleagues in the NHS were very front footed about Long Covid, both in terms of its research and what we put in place around its treatment. I'm sure more is needed, as I say, this is a very significant thing, but I don't, certainly from what I have seen, I haven't seen either a lack of focus or a lack of action on this important issue.
Q. Please can we put up INQ000061266, bottom of page 2, and the top of page 3 , under item 5 .

Eight months later, after the video, the DHSC convened the Long Covid oversight board with other government departments to co-ordinate the whole of government activity and policy development. We can see from these minutes of the first meeting in June 2021 that ES, who I am assuming is Ed Scully, raised concern that there was a gap on the broader government view of Long Covid and how that was being communicated.

Why at this point had the DHSC still not implemented a communications strategy for Long Covid?
A. I think, well, there was a lot of communication about Long Covid, I think the point -- and I think you're correct that it's Ed Scully -- I think the point he's 166

Long Covid so I know it was a very important thing within the department, with a lot of escalation, and obviously the NHS, as I'm sure you know, have done an awful lot in this area. I couldn't tell you what was put to Cabinet Office.
Q. All right. Do you know whether there was a Cabinet Office strategy on public messaging of the risk of developing Long Covid from Covid-19 infections, either in June 2021 or at any time since?
A. Again, I don't know, but l'll find out.
Q. Okay, thank you.

You've said in your evidence today that advice to the public on how to behave are non-pharmaceutical interventions designed to stop the spread of the virus. Do you agree that the public had the right to know about the risk of Long Covid so they could protect themselves from it?
A. Yes, and I think whatever we knew and the NHS knew about Long Covid was put into the public domain. I don't think there's a point when we have information that we don't share. Again, l'll have to go and check with my experts on this, and confirm, but I'm not aware there was ever a delay in, as it were, our scientists knowing something about Long Covid and that being made public, but, once again, I'll have to check.
Q. Thank you. On 5 June 2020 --

LADY HALLETT: Sorry, Mr Metzer, but I'm afraid -- I think if you've got questions, it sounds as if this witness can't really answer them and that he could put them into writing.
A. Yes, if you would like to write l'd be absolutely delighted to get somebody much more expert than me to ...

MR METZER: My Lady, I --
LADY HALLETT: Make this the last one, Mr Metzer.
And anything else we'll put into writing, all right?
MR METZER: Thank you very much, my Lady.
On 5 June 2020 -- l'll say it as speedily as I can -- the DHSC identified longer term sequelae of Covid-19 as one of four major implications for the health and care system in a presentation. I'm not going to cite it, you probably know it. Despite the DHSC's concern about this, you say in your witness statements that you can't recall that the risk of Long Covid was taken into account for decisions taken in relation to the second and third lockdowns. Thank you.
A. Yes, that's factually true. I don't think those lockdown decisions -- I think they were taken on the basis of the hospitalisation rate, the spread of the disease and the likely death rate, I think those were 169
strict with you as well, and then Mr Menon, because we have another entire witness to go.

Mr Dayle.
Questions from MR DAYLE
MR DAYLE: Thank you, my Lady.
Sir Christopher, I ask questions on behalf of FEHMO, that's the Federation of Ethnic Minority Healthcare Organisations, and I have three hopefully very brief topics that I wish to deal with with you.

Firstly, were there specific considerations or actions targeted interventions, if you will, that were pursued to identify and address the additional support needs of black, Asian and minority ethnic healthcare workers during the pandemic?
A. Yes. Yes, there were. I do think this is an area where we learned a lot and ramped up our activity accordingly. The two biggest things I would point you to is the CMO and SAGE commissioned PHE study done by Professor Fenton and others in April 2020, specifically on these issues, and then the development of the QCovid tool, commissioned in May 2020, that was trying to take a much more individualised approach to assessing people's risks, including not just their clinical risks but their socioeconomic risks as well.

I think those were probably -- certainly in the
the three big conversations. Now, I should emphasise that that doesn't mean that Long Covid was not being taken seriously. It's just in the context of, as it were, the very extreme measure that a national lockdown is. I don't think that Long Covid was one of the considerations. It was certainly important to the government but I don't, as far as I know, the decision-makers were not doing it on that basis.
Q. I'm going to reduce the question still further, and we will probably do a fuller request in writing, thank you.

Do you agree that there was a difference in approach to Long Covid between the DHSC and Cabinet Office?
A. I'll check, I'm not aware that there was. You would expect the Department of Health and the NHS to have a focus on a medical condition that was much greater than that of Cabinet Office with all its responsibilities. I don't think you would expect much more from us than them. I don't think -- I'm not aware that there was ever a disagreement between us and them on this subject.

MR METZER: All right. So final question --
LADY HALLETT: We'll leave it there, Mr Metzer, I'm sorry. MR METZER: Thank you, my Lady.
LADY HALLETT: Anything else will have to be in writing.
Mr Dayle, I'm afraid I'm going to have to be very 170
early stages, those are probably the two biggest things I would point you to.
Q. Second topic, how did the DHSC respond to the concerns and experiences of black, Asian and minority ethnic healthcare workers regarding PPE and the recommendations issued by the Public Accounts Committee on February -in February 2021, which included "improving understanding of the experience of frontline staff, particularly focusing on those from different ethnic backgrounds"?
A. I'll have to check what exactly we did -- yes, I'm talking the wrong way, sorry. I'll have to check exactly what we did with that specific recommendation. We report to the PAC on their recommendations quite regularly so there will be a published report of what we did with that specific recommendation. On the general, and I think we've set this out in our witness statements, so I won't repeat, there was a basically escalating action to deal with the very important issues that you raise, and certainly my understanding is we moved from a position where we had not very much understanding of these important issues to having a much greater understanding and that significant action was taken.
Q. Thank you.

| My third and final topic, this question arises from | 1 |
| :--- | :--- |
| WhatsApp messages between yourself and Lord Mark Sedwill | 2 |
| on 25 March 2020 regarding PPE, and the reference -- and | 3 |
| it's not necessary to bring it up -- is INQ000279918. | 4 |
| In that exchange, Lord Sedwill writes at 5.31: | 5 |
| "Stories like this in The Telegraph likely to come | 6 |
| up. Nurses in near revolt as some used bin liners to | 7 |
| protect themselves." | 8 |
| My question is: from your vantage point, what would | 8 |
| you say was done to ensure that PPE provided was | 9 |
| suitable to fit and properly protect all staff, | 10 |
| including black, Asian and minority ethnic healthcare | 11 |
| workers? | 12 |
| Well, that is a huge question that would require a very, | 13 |
| very detailed answer. And I think, as we'd said | 14 |
| earlier, there's an entire module on procurement, | 15 |
| including PPE, and I think it would probably -- I think | 16 |
| the substantialness of that question demands more than | 17 |
| a sort of few seconds answer, so I think it would | 18 |
| probably be better, if that's okay, to answer that | 19 |
| question in the module that's devoted to it. | 20 |
| LADY HALLETT: We'll have to come back to it, Mr Dayle, | 21 |
| sorry. | 22 |
| MR DAYLE: Very well. | 23 |
| LADY HALLETT: Thank you. 173 |  | 173

MR O'CONNOR: Can you give us your full name, please.
A. My name is Yvonne Doyle.
Q. Thank you. Professor Doyle, you provided at our request a witness statement for the Inquiry. We can see the first page of it is on screen now. We don't need to look at the last page, but you have signed that last page of the document below a statement indicating that you believe the contents of the statement are true, with the date of 17 October this year. Are the contents of the statement true, Professor?
A. Yes.
Q. Thank you.

Professor, you set out some considerable detail about your career in that witness statement. In summary, it's right, isn't it, that you are by training a medical doctor?
A. Yes.
Q. You have acquired a range of qualifications over your career, and indeed you have held a series of appointments in the field of public health?
A. Yes.
Q. That includes a series of roles acting as a director of public health for various local and regional authorities in England?
A. Yes.

## Mr Menon?

MR MENON: Having listened to the evidence of Sir Christopher today and reflected further, we have no questions.
LADY HALLETT: Thank you, Mr Menon.
MR MENON: We aim to please, my Lady, we aim to please.
LADY HALLETT: I think you've just made yourself one of the most popular people in the room, Mr Menon!

I'm really sorry that we've had to cut people short and I know that Mr Metzer wanted to ask more questions but I'm sure we can get the answers that you seek, even if -- maybe if at another stage we could read them out, if we get them, if that helps, Mr Metzer.

So thank you very much, Sir Christopher, I feel, as you've envisaged, that this isn't the last time that we shall meet.

THE WITNESS: I suspect not.
LADY HALLETT: So thank you.
I'm now going to keep quiet, everybody else is going to keep quiet while we do the handover for the next witness, so the stenographer can rest her fingers.

## (The witness withdrew)

LADY HALLETT: Yes.
PROFESSOR YVONNE DOYLE (sworn) Questions from COUNSEL TO THE INQUIRY 174
Q. In June 2019, you were appointed as the medical director and director of health protection for the organisation Public Health England, or PHE?
A. Yes
Q. From February to July 2020, you were PHE's senior responsible officer for the input of your organisation into the response to the Covid pandemic?
A. Yes
Q. And I think it's right that you remained in post at PHE until that organisation was dissolved in October 2021?
A. Yes.
Q. And you then became the director for public health at NHS England, and you stayed in that role until you retired earlier this year?
A. Yes.
Q. Professor, as with other witnesses today, we will be asking you questions relating to PHE's involvement with the pandemic, but we will do so conscious that many of those issues touch on much broader areas that will be the subject of further examination by the Inquiry at further modules, in particular issues relating to test and trace and also PPE.

So we will be endeavouring today to ask you questions around the interface, if you like, between the activity of PHE and core political and administrative
decision-making during the pandemic.
Before we get into those issues, can you give us, Professor, a brief outline, first of all, of, in general terms, PHE and what it did back in the days when it existed, and more specifically its role in relation to combatting infectious disease?
A. Yes. PHE was remitted to undertake four main functions: the protection of the population, including the instigation and curation of specialist -- certain specialist infection services, particularly laboratories, the oversight and the implementation of programmes on wellbeing, and health improvement of the population; the surveillance of disease and the curation of various disease registers; the support to the NHS, particularly on the reduction of inequalities in the NHS, but also on value and support to clinicians; and finally, the development and ensuring of the development of the workforce in public health.
Q. So I think it's clear from what you've said that where there is a novel infectious disease that needs to be combatted in this country, that can engage several or perhaps even all of those areas that you just described?
A. Yes. And you asked about its particular role in infectious diseases, where there were several subfunctions. First being the oversight and management
protection, but also specifically to manage
the chemicals, radiation, environment and emergency planning services.
Q. I see.

Could we look briefly at paragraph 8 of your
statement, please, Professor, it's on page 3.
A. Yes.
Q. You describe in this paragraph, in the six months or so after you joined PHE, having to deal with a series of outbreaks of other diseases, we're talking before 2020 now, so not Covid, but as listed here, listeria, what was then called monkeypox but which we have now been told is Mpox, and also Lassa fever.

I don't want to spend a great deal of time talking about other disease outbreaks, Professor, but it may be that dealing with those outbreaks was more typical of the more that PHE regularly undertook in those days than Covid, which we'll come to talk about.

If that's right, can you just give us a sense of the work that PHE undertook on those issues in 2019?
A. That's correct. So these would be the more spectacular end of health protection outbreaks, or emergencies. There were 10,000 incidents a year that the health protection service looked after as well, which were much more local, many of them actually did relate to areas

177
and running of the specialist laboratories, the development and the execution of field services for the control of outbreaks, the running of the emergency service, training and testing, training particularly, and exercising, and then specialist areas in radiation, chemicals and environmental health, which were based at Chiltern.
Q. Now, we've said, Professor, that your role that you were appointed to in 2019 at PHE was that of medical director and director of health protection. Give us a sense of the scope of your duties in that role.
A. Well, the organisation had changed somewhat, it's in my statement, that before 2018 the whole health protection service encompassed both the national infection service, the laboratories and the field services, and health protection teams, and then also the chemicals, radiation and environment services, and an important surveillance service which I should have mentioned actually as part of its core health protection function.

Now, in 2019 that changed, in the appointment of a national infection service director, and my role remained as the health protection director and medical director, but my responsibilities for health protection were mainly to oversee the whole -- that the whole system held together, we co-operated for health
that were affected eventually by Covid.
These were very special outbreaks, they absorbed a lot of resource. The listeria outbreak, sadly patients died in the NHS, but the complexity of what we had to deal with there in terms of the food chains that we were dealing with was immense and took a lot of time. It took eight weeks, really, for that whole incident to work its way through, and there was still work afterwards.

Mpox, at the time monkeypox, was one case. Again, a very complex case, needed a lot of contact tracing. Dozens of people had to be contacted on a travel basis. And it also called up the elements of the high-consequence infectious disease work.

Then the repatriation, interestingly, again recurred during the pandemic, because we did have to get very involved with repatriations early in the pandemic.

So these -- in many ways, they were spectacular but not typical. What they showed me was that we were running very hot at the end of 2019, we were very busy, and this was just the thin end of a very large wedge of outbreaks.
Q. Right.

That takes us, then, to 2020. You describe in your statement PHE being first informed of a potentially
serious threat of pandemic on 2 January 2020, and can we take it that that triggered early investigative work at PHE?
A. Yes. So in fact I was informed on New Year's Eve by our on-call incident director that he was concerned that there were problems in China and that this could have implications for our ports. But we -- certainly from our reports coming from the WHO and elsewhere, we alerted DH and CMO early in January on a precautionary basis, yes.
Q. A little further on in your statement you describe how in the following weeks, January and going into February I think, PHE developed a test for this new strain, what we know as Covid-19. That, we see referenced in other documents, has been recognised as one of the early successes of PHE in terms of combatting the virus.

Can you explain in a few sentences how that came about?
A. Yes. The test was developed in PHE based and using the learning from MERS in 2012 and indeed developed on a multiple platform of viruses, and was able to be stood up really for clinical use by the end of January, which was rapid by the scale of this, given how novel it was and that the actual genomic recipe for it really had only appeared in January.
that it spreads -- particularly in healthcare settings,
but it spreads rapidly; it's difficult to detect; and it needs a very complicated, enhanced response.

So it would be appropriate entirely for a novel virus of this nature to be designated in this way. The consequence -- and it was decided by the four countries, actually. There is a standing four-country infectious disease group of clinicians.
Q. Just pause there a second. Is that because, as early as 10 January, you knew that Covid had all of those characteristics, or was it done on a precautionary basis?
A. It was done on a precautionary basis. We didn't know all of that. But on the other -- and there was very little information to go on at that time. However, on a precautionary basis the four countries decided this was the right thing to do.
Q. Did it become apparent over the weeks, maybe months, that followed that in fact Covid did not warrant that classification?
A. Yes. So here was the first balance decision, really. So we were still learning about the virus, but by 28 February there were other consequences, as you've asked. For instance, high-consequence infectious diseases require a certain category of lab, a category 3

That was because we had expert virology, which is part of our function, it's to meant an expert infection service.
Q. Was that work done by you alone or was it -- did it involve international co-operation of any sort?
A. It certainly involved international co-operation, but the UK, through PHE, was an important contributor to that. The recipe had come through China, WHO, and GISAID had been able to share that, and there was very quick co-operation with a number of countries, including the UK, Germany, the USA, to get this test functioning.
Q. You mentioned, I think it was in the context of Mpox, this HCID, as you put it, which stands, doesn't it, for high-consequence infectious disease?
A. Yes.
Q. In your statement you refer to the fact that Covid-19 was designated as an HCID at a very early stage, on 10 January 2020.

Can you explain to us, please, what that -- first of all, designation means, but also what consequences went with it?
A. Yes. So high-consequence infectious diseases are designated on the basis of a number of criteria: first and foremost, a high case fatality rate, so a lot of people who get this will die, that's the assumption; 182
lab, which means they're very contained and very limited, and that's correct, and also only people -certain people who are trained to deal with them, because they may be very dangerous to staff. That dreadfully limits the number of laboratories that can actually engage in this.

So, given that we felt that it was more important to have, you know, a huge influx of other help into the laboratory system, we applied -- the four countries applied to de-escalate this to a category 2. And that had to go through a number of -- it had to go through a number of committees to escalate and it had to go through those committees to de-escalate.
Q. We don't need to get into the detail of that process, Professor, but I think you say, was it on 16 March that in fact that process was complete and Covid was de-escalated so that it was no longer had that classification?
A. Yes, that's correct.
Q. And as you say, the practical consequence of that was that whereas previously only a very small number of perhaps your high sort of security, if you like, laboratories were allowed to do Covid work, once the disease had been declassified, it became possible for a far larger number of more routine laboratories to
work on the disease, including testing?
A. Correct.
Q. We're going to come to the question of testing in a moment, but since we're on this subject, in the dairies that we have that were written by the Government Chief Scientific Adviser, Patrick Vallance, there is an entry -- I'm not going to bring it up on screen, I'll read it out -- there is an entry on 2 April 2020, so within a couple of weeks of the disease being declassified, where he refers to Crick, and I think that's the Crick laboratories, having offered 300 scientists, and in his words "and got no response from PHE. Crazy". That's his words.

Was there an offer from the Crick laboratories to provide 300 of their scientists, or perhaps laboratory space, to assist you dealing with Covid at that stage?
A. Yes, there was. Not to me personally, but there was to senior executives in PHE. And as far as I'm aware, it was welcome. However, there were issues about how testing could proceed on an end-to-end basis. This by the way is not a comment about the Crick at all. But in general, every laboratory wanted to help, small laboratories of every kind, and what they needed to be able to offer was a system of accruing the tests, doing the tests, which they were offering, and then getting 185
Q. If we look over the page, in fact, on to the second page of this document we can see that it was someone called Nick Phin from Public Health England?
A. Yes.
Q. Can we take it that, routinely, there would have been someone at COBR meetings from Public Health England?
A. Usually. It depended on the -- obviously what the orientation of the meeting was, but in the period of the pandemic usually there was somebody, but I have to say possibly not at every COBR meeting.
Q. But you say on occasions it was you, but, as we can see, not this time?
A. Not this time.
Q. We've looked at this set of minutes for a number of different reasons. This time can we go, please, to I think it's page 8. It's the last page. Yes.

So here is the set of actions from the meeting, and if we look at point 7 , we see:
"Public Health England to develop and run a Ministerial table top exercise within the fortnight to consider the range of decisions that may be required in the event of a reasonable worst case scenario."

So there is a tasking to Public Health England to conduct, as it is said, an exercise. Was that something that, at least within this type of series of events, was 187
the tests back out through usually the NHS but elsewhere into the community or whatever, so that there was what we called an end-to-end service, so that the test was taken and the patient got the response they needed.

Now, as I understand it, not all laboratories could do that either, and the first group of partners who could were the NHS laboratories, and they were recruited pretty quickly by our national infection service directors.

But eventually, the whole testing arrangements really expanded pretty quickly actually after a seminar on 17 March.
Q. We'll come back to the question of testing shortly, professor, but thank you for that.

I want to move on to a slightly different subject, and it's one that we have -- the Inquiry at least -considered already today, and that is Operation Nimbus, which I know you have at least some familiarity with.

Could we look, please, at a document, it's a set of COBR minutes, INQ000056226. Professor, I had intended to ask you previously: were you someone who attended either COBR meetings or SAGE meetings during this period?
A. I did attend COBR meetings but not this one, to my knowledge.

## 186

unusual or exceptional?
A. No, it wasn't. COBR and government were at -- were obviously at will to ask anything of PHE that was in its remit, and exercising was, so in this case that inquiry, that commission would have been taken through into Public Health England
Q. We know that what followed from this instruction was indeed Operation Nimbus which took place on 12 February, so just inside the fortnight. Were you involved in organising Operation Nimbus yourself, Professor?
A. No, I wasn't.
Q. Perhaps we can take it then that you weren't there, personally?
A. I wasn't there, but my team would have supported the running of the exercise.
Q. I know that you have at least some familiarity with what happened --
A. Yes.
Q. -- on that occasion. We've seen the slides that were prepared for Operation Nimbus, the reasonable worst-case scenario, the synopsis, the scenario being a wave in which 800,000-odd people would die in a 16-week period, I think it was.

Are you able to help us with who attended the tabletop exercise, Professor?

188
A. I'm not able to give you exact names, I'm afraid. I know that the NHS, that the Department for Health and senior public health members of PHE were involved, possibly PHE on a basis of running the exercise, and the Cabinet Office would have been, because the Cabinet Office actually took the commission and required PHE to run the exercise. That would not be unusual.
Q. When you say "commission" there, you simply mean they were the ones who, as we've seen from these minutes, as it were, instructed or asked PHE to undertake that exercise?
A. Yes.
Q. Could we look at another document, please.

It's INQ000273915.
This is, in fact, a document which I think PHE have helpfully provided possibly today, certainly very recently.
A. Yes.
Q. Yes, thank you, and I know you're familiar with this document, Professor. This is, as we see, a "Summary Note on Exercise Nimbus", and it says "Novel Coronavirus Preparation", but I think it's clear from the content of the note that it was prepared after the exercise had happened; is that right?
A. Correct.
recommendations, describing what took place at the
exercise and everything that flowed from it.
Would you have expected something detailed by way of report or recommendations to emerge from this exercise?
A. Yes, and that would be a normal outcome from -- well, output, really, from something like this. The report might be written by our emergency planning team, but the recommendations would be agreed with the commissioner, and the implementation would be assigned to the responsible body, who in this case would have been the commissioner as well.
Q. You've referred to the commissioner, but you mean?
A. I mean the Cabinet Office in this case. In other exercises, if I could explain, just to be helpful, recommendations can often be delegated to the most appropriate body within government or the NHS to implement.
Q. Can we take it at least that PHE has no further material, no detailed summary of the exercise, no detailed recommendations from it, and that, if we were to look for such material, we would need to ask the Cabinet Office and perhaps the contingencies secretariat --
A. As I understand it, that's correct.
Q. All right. Well, I won't ask you any further questions
Q. If we can look briefly at page 2, there is a very short and high-level description of what the exercise was about, its aims, objectives, a format.

Then, going on to page 3, please, there is a description of a scenario, which really just reflects what we've already seen in the slides.

There is a very brief reference to participants. We see 55 people, including ten to 15 ministers. It appears that people -- representatives from the devolved administrations were there. Are you able to help us perhaps not from your knowledge, but who would you have expected from the devolved administrations to have attended an exercise like this?
A. I would expect very senior administrators and ministerial presence as well. I cannot say who was at this meeting, I'm afraid, and I understand that the Cabinet Office retain that information, as we speak.
Q. Just then finally on this document, we see under "Actions", it says:
"Cabinet Office circulated findings internally and implemented the appropriate actions."

Professor, the Inquiry in Module 1 has seen the documents relating to an exercise called Cygnus, which took place some time before the pandemic, and there are very detailed ex post documents prepared, learnings, 190
about that, Professor, thank you.
Lastly on this early period January/February, can we look at paragraph 98 of your statement. It's on page 33.

Professor, you state here that your main concern in late January/February 2020 was that your situational awareness advice was not always welcome. You say that this led to a distancing for a period from offering direct advice, and you add that it was never clear which parties were most offended and why, a situation you say you encountered when professional information was presented in good faith to inform the public, and you also say there was general confusion and increasing concern as to who was in charge in government and why delays were occurring in getting, for example, key guidance documents out to the public.

It's our fault, I'm sure, but that's all quite vague. Can you put some detail onto exactly what these concerns that you had in this period were?
A. Well, they encompass a number of issues which were concerning to me. The first was what I'm relating to here in terms of the distancing, and this is put on paper really to explain that there was a distance between the end of January and quite a bit of February actually, between myself and ministers, particularly the 192

Secretary of State, and --
Q. Just pause there for a minute. Which Secretary of State?
A. The Secretary of State for Health, and it followed a media interview I had done at the end of January where I said straight that there could well be cases in the country, which of course there were about ten days later, and that we were unclear about -- but were prepared to consider that asymptomatic infection could occur, very unclear about transmission at that point, and that it would take possibly six months for a vaccine to be developed. I was rather, I think, optimistic about that.

This did not go down well, I'm afraid. It may well my presentation or the way I did that interview or the set of interviews, but I felt it was the truth, I was telling the truth.

The way that was handled was that I was advised not to do any further media, and that the Secretary of State would need to clear all media, which, of course, we agreed to. But also that it was probably best if I just kept a distance for a while until things settled down, which I did.
Q. You describe the press interviews on a particular day. Did you meet the Secretary of State on that day, or were 193
with my work.
I did eventually stand on platforms in
Downing Street and did media in March, and right up to
April, and indeed one episode in May. So it did resolve.
Q. But I think you've said that you were told, either by Mr Hancock or others, that you shouldn't have any direct contact with him for a period of time after this incident?
A. Not quite. I was advised by colleagues in the civil service that this would be the best way to calm things down, and I understood that, and I complied.
Q. But this was at a time when, you tell us, but perhaps you would have expected to have quite frequent contact with the Secretary of State, given the developing pandemic?
A. Yes, and had had, actually, very frequent contact up to 2020.
Q. Were there things that you would otherwise have wanted to say to the Secretary of State that you felt that you couldn't during that period?
A. No, because there were good colleagues who were able to convey that, and deputies stepped in. So we managed to continue the work, and I really felt that the public population should not suffer in any way because of this, 195
you simply told that he was not happy with what you had done?
A. No, I did meet the Secretary of State on that day and he did make his displeasure clear.
Q. In what way?
A. He asked me not to patronise him.
Q. What did you reply?
A. Well, I apologised, actually. I remember my words, I said, "I really am sorry if you think the science has let you down".
Q. Did you think that you had let him down, Professor?
A. I did, in that our ethos always is to support our ministers, and this was not a good outcome. So I did feel I had let him down in some way, but I still felt I had spoken the truth.
Q. From what you've said, you weren't trying to do anything that would either let the Secretary of State down or, indeed, anything other than promote the objectives of Public Health England and the Department of Health?
A. Absolutely.
Q. So what was then the aftermath of this incident?
A. I didn't make any fuss about it. I continued with my job, as -- and I was asked to be SRO mid-February to do various elements of the internal management of the incident in Public Health England, and I just continued 194
and therefore we found ways to continue the work.

## MR O'CONNOR: Yes.

My Lady, I'm about to move to another topic.
I think you had intended to take one more short break.
If you were, now would be a good time.
LADY HALLETT: Right. Very well, five minutes, no more.
( 4.22 pm )

## (A short break)

( 4.27 pm )
LADY HALLETT: Mr O'Connor.
MR O'CONNOR: Professor, I want to move back to the question of test, trace and isolate, and it's right, of course, that contact tracing is a fundamental weapon against the spread of an infectious disease. I think it was the Mpox disease in 2019 where you indicated that there had been quite a significant degree of contact tracing on that occasion.
A. $\mathrm{Mm}-\mathrm{hm}$.
Q. It's also right, isn't it, that viruses such as Covid-19, where patients are infectious at the presymptomatic stage, are viruses where contact tracing can be particularly important?
A. Yes.
Q. Generally speaking, is there a point at the development of a disease, of a virus, where contact tracing ceases 196
to be effective?
A. Yes, it is actually difficult to identify people at presymptomatic stage, if they're the first case, of course. But contact tracing works best when there are low numbers of cases, particularly in community settings, because it's then quite reasonable to be able to follow each one and really put the fire out, that's what contain is about, is stop an outbreak from spreading.

When there are large numbers of cases, it becomes difficult logistically but it also becomes probably impossible to contain, and there are a number of reasons for that. But the first point is that, with small numbers of cases, the hope is that you can actually extinguish the virus at that point from contacting.

What we were looking for and what became very important is where it was clear that there were cases that were called second, third, fourth generation -- in other words contacts of contacts of contacts -- which were out there which didn't have a known link to what we understood were the sources of the virus in the community, and that happened predominantly at the end of February, first case was 28 February.
Q. Yes.

Now, you refer to February and Covid; we know that 197
hadn't, and, incidentally, the scale of that became
clearer later in the pandemic when there were attempts
to recruit 18,000 people to contact trace, so that was
the scale of what we would have to deal with in a widespread infection within the population.

But to answer your question, at this point Public
Health England was still committed to doing everything
it could to find every case and contact that it could,
within its capacity, and its capacity was still extant,
it was still in existence in mid-March.
Q. Let's look at a set of SAGE minutes, Professor, if we can go to INQ000052098, please.

We can note, Professor, that this is a set of minutes for a meeting that took place in February 2020 ?
A. Yes.
Q. Just underneath, we see that these minutes were published some months later in May. Do you see that?
A. Yes.
Q. It's much smaller writing.
A. Yes.
Q. The Inquiry has heard that in February it was not practice, was it, to publish these minutes, but steps were taken --
A. Indeed.
Q. -- some time later to publish them, and that's why we
A. That's correct, for large scale contact tracing it
see the difference there.
There has been some debate about an entry on -I think it's page 2 of the minutes, yes. Casting our eyes just briefly up the list, up that page, we see that there seem to have been two people there from PHE, Sharon Peacock and Maria Zambon, but not you?
A. Not me.
Q. At paragraph 7, as I say, there is an entry which states, we will recall this was mid-February:
"Currently PHE can cope with five new cases a week (requiring isolation of 800 contacts). Modelling suggests this capacity could be increased to 50 new cases a week ( 8,000 contact isolations) but this assumption needs to be stress tested ..."

Was that correct, Professor?
A. It wasn't quite correct. I understand what it may have been trying to convey. So the five was five introductions, and these were introductions from abroad. They were not five cases in country, they were five introductions. The paper on which it was based was a modelling paper which looked at a pooled set of data from several European countries, and looked at the genetic variation and the likelihood of onward contacts in this group of people. And the -- so the paper was suggesting that five contacts -- sorry, I beg your
pardon, five introductions would lead to, in each case, the -- each generation for each case, up to a fourth generation, would lead to thousands of contacts. So it was a proposition that this would rapidly get out of control. It was basically saying multiple generations will yield very rapid numbers of contacts, very quickly, because of what is known about the transmissibility of this virus.

Unfortunately, that got translated into popular narrative as "Public Health England can only cope with five cases a week", and this was not the case.
Q. Well, if that's right, why were the minutes drafted in that way, but, perhaps more important apply because we know that mistakes can be made, why weren't the maintenance corrected either in February, shortly after the meeting, or certainly before they were published in May?
A. I don't know and, unfortunately, it was probably our misstep not to have picked this up and corrected it sooner.
Q. Would you routinely, not you necessarily personally, but PHE as an attender at a SAGE meeting, have been asked to approve the minutes in the way that perhaps is normal in other committee meetings?
A. When I eventually attended SAGE the minutes were 201
worked, you mentioned disparities as being one of those issues that you were tasked to addressing. And of course that is something that applied particularly at a time of emergency like the Covid pandemic?
A. Yes.
Q. We've heard much evidence now about the very early indications of the disproportionate impact of Covid, probably first of all disproportionate impact on elderly people, but very shortly followed by evidence of disproportionate impact on the black, Asian and minority ethnic communities, particularly in the healthcare sector.
A. Yes.
Q. It's right, isn't it, that Public Health England was commissioned, I think by Chris Whitty, to conduct research into those issues early in the pandemic, I think it probably was April or May 2020; is that right?
A. That's correct.
Q. And that resulted in a report, did it not -- thank you, it's been brought up on screen -- called "Disparities in the Risk and Outcomes of Covid-19".
A. Yes.
Q. Were you involved in any way in either researching or writing this report?
approved at the next meeting of SAGE, yes. But generally they were written and agreed internally first and then presented to SAGE. And very often the agendas were very pressured and crowded and it simply may have been missed.
Q. This is obviously important in its own terms, Professor, but there is also a wider question about the accuracy, the comprehensibility of SAGE minutes, because this is not the first occasion where we have found that people didn't understand what SAGE was trying to say in its minutes.

Do you think it could have been done -- there could have been a better process for your organisation but also other organisations agreeing on the accurate and clear content of SAGE minutes?
A. It was certainly a cogent lesson for Public Health England that they really could have moved quicker to put this to rights and help, actually, Professor Vallance, you know, who was a very busy person, and his secretariat. I don't think we picked this up fast enough, and it became into popular narrative, which became very difficult to deal with.
Q. I want to move on to another subject, Professor, and when I asked you at the beginning of your evidence about the different areas in which Public Health England 202
A. I was involved, first in identifying the signals, I didn't do the epidemiology, but I asked my colleagues, as SRO, to find those signals, and then to -- we stood up a team to get involved in producing in report for the CMO, yes.
Q. It was published on 2 June 2020 and if we look at the third page of the report, please, we can see from its contents that it had sections throughout the report on different vulnerable sectors within the population.
A. Yes.
Q. We've also heard that, almost as soon as the report was published, there was criticism of it, and we can see if we go to another document, please, INQ000097872.

This is a letter, in fact, to Matt Hancock dated 12 June, so a week or so, ten days after the publication of that report. In summary, Professor, there was criticism that the report which we've just looked at, first of all, didn't contain the input that had been received from inequality and other groups, but more importantly, perhaps, didn't include any recommendations. One might have thought that recommendations were at the heart of the purpose of a report like this.

First of all, do you agree, and secondly, if so, why didn't that report contain any recommendations?

204
A. I do agree, and the criticisms were understood, and I was very -- very concerned and sensitive about that, as was my good colleague, Professor Kevin Fenton. We did get those recommendations out into the public domain, it took some time, there were six or seven of them, they were challenging to us, and the recommendations eventually went to the minister for disparities and into the Cabinet Office -- sorry, to the office for disparities within government, and there were quarterly reports about how that -- those recommendations or requests really were being dealt with. So there was some follow-on.
Q. The short question, though, Professor, is: why were those recommendations not published with the report containing the research on which the recommendations were based?
A. Well, initially there were a number of issues that led to these delays. The first was that it wasn't entirely accepted that the -- this kind of qualitative work had the same value as the quantitative work, and therefore, you know, we needed to make sure that everybody understood this was a very balanced piece of work. It was intended to show the epidemiology, but also get the voices of people into this discussion, and also what they were telling us that needed to happen, which was 205
and the Cabinet Office were interested also, because we gave talks across government on it. But I do agree with Professor Khunti that it will take hard work to continue to implement some of this. For instance, there's a lot of recommendation around fair assessment at work, work that is, you know, culturally well orientated towards people from various communities and so on, and that takes quite a lot of system change. And, therefore, one of my recommendations is that we need to keep this very much in sight, the findings of these reviews, and not lose sight of this, which can be so easy to do.
Q. If we can just go back, Professor, to that report, so it's INQ000101218, and look at page 3.

That, you'll recall, is the contents page, so we see the different chapters of the report. As I indicated, a range, if you like, of vulnerable groups.

We don't see there a section on disabled people, Professor. Why were they not identified as a vulnerable group who ought to be included in this work?
A. Well, people with disabilities certainly had been identified as vulnerable groups throughout the pandemic. We were requested and did undertake a further review of people with learning disabilities and autism, and that was published in the autumn of 2020, and its main purpose was to raise awareness of the vulnerability
going to be challenging.
That, I think, needed -- those recommendations, those requests did need some discussion internally in government as to who owned them, they were very much about cross-government, they weren't simply about the NHS. So it did take time, but it did emerge into the public domain and there was a commitment which was followed on. So in that sense, the work had some impact.
Q. Professor, I'm not going to take you to the recommendations themselves. I know you're familiar with them. They were contained in a subsequent report, were they not?
A. Yes.
Q. But you know that the Inquiry has heard evidence from Professor Khunti criticising the recommendations, saying that they were too general, they didn't contain a clear programme of action, they didn't contain any timeframes for delivery, or methods of implementation. In summary, you've already in part defended the recommendations, but what do you say to those criticisms?
A. I completely agree that, if recommendations don't have named organisations or individuals preferably, they don't go anywhere, and these recommendations were taken through the Race Disparity Unit, which was appropriate, 206
particularly of this group in terms of mortality, which it did, and that was presented then to -- particularly to the interested parties in the NHS and clinicians and others in the care home sector who would benefit from knowing this information.
Q. Learning disabilities and autism, but what about physically disabled people?
A. Well, physical disabilities, they're -- I'm not sure whether they're actually included in here, but they certainly have come across various groups. It may well have been that we should have concentrated on that particular group as well.
MR O'CONNOR: Yes. Professor, thank you very much. Those are all my questions for you.

My Lady, there are, as you know, some questions from core participants.
LADY HALLETT: There are.
I think, Ms Mitchell, you're going first.

## Questions from MS MITCHELL KC

MS MITCHELL: I'm obliged, my Lady.
Professor Doyle, I ask questions on behalf of Scottish Covid Bereaved.

You say in your statement that Public Health England has a specific remit from the Secretary of State and that remit includes the UK's national focal point, and 208
that deals with International Health Regulations, or you ensure that you comply with them.

Given this was a UK remit, what I would like to understand is what part Scotland, be it Public Health Scotland or what you've described in your evidence as the standing four countries infectious disease group, what input did Scotland have into that process?
A. Well, before 2020, there was, and there continued to be, a four-country group of health protection directors, senior leaders, which my department supported, and the chair rotated. I think it was with Wales just before 2020, but it had been with Scotland. So we were equal partners in that.

We had the four-country infectious disease consultants and the four-country infection prevention control experts who met regularly; we had the regular clinicians' meetings, which were four countries, during the pandemic; and I chaired, throughout 2021, a four-country genomics group. My purpose there was to ensure that the devolved countries got their fair share of funding for the development of their genomic services.

As well as that, we had regular -- every day we had situation awareness with the four countries and, when they wished to join, the Republic of Ireland, and we 209
procedures designated as aerosol generating. We are therefore calling on [Public Health England] to support the wider use of RPE in other high-risk settings across primary and secondary care."

Professor, so the first question I have for you is:
appreciating that there was considerable uncertainty in the early stages of the pandemic, when did Public Health
England first become aware that aerosol transmission was a significant transmission route of Covid-19, including through daily actions such as coughing, talking, et cetera?
A. Thank you. So there was always a recognition, well, from fairly early on, that aerosol transmission could occur. I think what changed over the months, and particularly after the summer of 2020, was the work that had been done particularly through SAGE and through its subgroup, and Professor Noakes, of course, and the importance of aerosol -- the balance of aerosol transmission versus droplet versus fomite, and, you know, surface transmission. And that balance changed.

Professor Noakes is part of a number of scientists who wrote to WHO and asked them to change their advice on this as well.

But in the early months, we had certainly provided 211
kept very close contact on an ad hoc basis with our colleagues in Public Health Scotland.
MR WILCOCK: My Lady, thank you, I don't have any other questions. My other questions were answered earlier.
LADY HALLETT: Thank you very much indeed.

## Mr Stanton.

## Questions from MR STANTON

MR STANTON: Thank you, my Lady.
Professor, l'll be asking you a small number of questions on behalf of the British Medical Association. I apologise for the slightly awkward positioning. Please don't feel any need to face me.

I'd like to bring to your attention a letter of the BMA as context for the questions I have. The letter is document INQ000097875.

At the fourth paragraph, I'll just read -- I beg your pardon, I should say the letter is addressed to Michael Brodie, who at the time was interim chief executive. You may not have seen this letter before, but it's possible you have, given your role.

The fourth paragraph reads:
"There are significant and growing concerns about the role of aerosol transmission of COVID-19 in healthcare settings, and the need for wider use of RPE (for example, FFP3 respirators) outside of those 210
guidance for those who were in the context of what were known to be aerosol-generating procedures, and certainly a precaution around the importance of social -- of distancing, and, where at all feasible, the use of face coverings.

Now, that came again to a discussion later in 2020, and I am aware of this letter in 2021 which Mr Brodie received. He did ask for -- the guidance that had been produced around this letter was a four-country guidance and it was also NHS and DHSC, so it was the infection prevention and control group who had produced the guidance on what protective equipment was needed and aerosol procedures.

The IPC cell, this infection prevention control cell, was asked to look at that guidance again at the end of 2020, which they did. This also did this in conjunction with the New and Emerging Virus Group, NERVTAG, and they had a good look also at the evidence, because there was a lot of testing going on in various healthcare settings, this was about healthcare, and the testing had shown that actually -- this was in the context of the Alpha variant -- that there hadn't been an increase in serious illness among healthcare workers, but that healthcare worker to healthcare worker transmission was important, and therefore a CAS alert 212
had been issued, which I think Mr Brodie was able to advise the BMA, which recommended the strengthening of infection control procedures.

There was obviously an interest in ensuring that those who needed to use the highest level of equipment had access and did so, and guidance was produced on donning and doffing so that they could do so in the most effective way. But I can accept that this remained an area of serious concern throughout the pandemic.
Q. Thank you, Professor.

Professor, could you help clarify how infection prevention control guidance is produced? Is it written or was it written at the time by Public Health England?
A. Well, it's not entirely just by Public Health England.

There is a national infection prevention control manual, and there is the four-country infection prevention control expert group, and there are a number of subgroups like NERVTAG which also advise on this.

So the infection prevention control guidance takes account of the current evidence, which was very dynamic. It is put together by the infection control prevention -- it is agreed by the infection control prevention group. Public Health England will write the guidance, and will brand it with the NHS and with DHSC, but it's often called Public Health England guidance, 213
most exposed to dangerous situations, and that's what a lot of the guidance and the donning and doffing was also put out there to support.
MR STANTON: Thank you very much, Professor.
LADY HALLETT: Thank you, Mr Stanton. Ms Morris.
MS MORRIS: Thank you, my Lady.
My questions are on Operation Nimbus so, at the risk of knocking Mr Menon off his perch, I have also reflected and $\mathrm{Mr} \mathrm{O}^{\prime}$ Connor has dealt with the matters that I was going to deal with with Professor Doyle, but we agree with the Inquiry for the need for further inquiry to be made of the Cabinet Office and the CCS in particular in that regard. So, thank you.
LADY HALLETT: Very well. Whenever you and Mr Metzer -I can't remember who else was asking about Nimbus, but anyway, whenever we have the answers to the questions in an agreed form, please let me know and if you wish them to be read out, then l'll be very happy to.
MS MORRIS: It may be for another witness in fact, my Lady.
LADY HALLETT: Right, okay. Thank you.
Sorry, Mr O'Connor.
MR KEITH: No. My Lady, that concludes the questioning for this witness, and also for today.
LADY HALLETT: Thank you very much indeed, Professor.
but it is more than that.
Q. Thank you, Professor.

Professor, did you, over the period of the pandemic, whilst contributing to infection prevention control guidance, detect any reluctance to impose measures that might otherwise have been required for reasons of resource or operational strain that they might place on the NHS?
A. The whole pandemic was characterised by no easy decisions and the need to balance the least bad option, and sometimes that related to supplies and sometimes it related to scientific opinion, which wasn't always in agreement, and sometimes it simply related to the right thing to do that some parties didn't agree with. But there was always tension in these decisions, there was no easy decision.

So it is perfectly plausible that decisions had to be made that were certainly not optimal in normal times.
Q. Might decisions around the provision of FFP3 masks be one of those decisions, do you think?
A. Well, I can't really comment on this in great detail just now, but we were very conscious of the need to ensure that FFP3 masks were used in the places where they were most needed by the people who were -you know, healthcare workers particularly -- who were 214

THE WITNESS: Thank you, my Lady.
(The witness withdrew)
LADY HALLETT: That completes the evidence for today, as Mr O'Connor says, so we return at 10.30 on Monday. Is that right?
MR O'CONNOR: My Lady, yes.
LADY HALLETT: Thank you all.
( 5.00 pm )
(The hearing adjourned until 10.30 am on Monday, 6 November 2023)

| INDEX |  | 1 | Questions from COUNSEL TO THE INQUIRY | 174 |
| :---: | :---: | :---: | :---: | :---: |
|  | PAGE | 2 |  |  |
| LORD SIMON STEVENS (affirmed) | 1 | 3 |  |  |
|  |  | 4 | Questions from MS MITCHELL KC ............... | 208 |
| Questions from COUNSEL TO THE INQUIRY ........ | 1 | 5 |  |  |
|  |  | 6 | Questions from MR STANTON .................. | 210 |
| Questions from MR WEATHERBY KC ............. | 53 | 7 |  |  |
|  |  | 8 |  |  |
| Questions from MS HARRIS .................... | 62 | 9 |  |  |
|  |  | 10 |  |  |
| Questions from MR METZER KC .................. | 69 | 11 |  |  |
|  |  | 12 |  |  |
| Questions from MR DAYLE ..................... | 73 | 13 |  |  |
|  |  | 14 |  |  |
| SIR CHRISTOPHER WORMALD (affirmed) | 77 | 15 |  |  |
|  |  | 16 |  |  |
| Questions from LEAD COUNSEL TO THE INQUIRY .. 77 |  | 17 |  |  |
|  |  | 18 |  |  |
| Questions from MS CAMPBELL KC ............... | 152 | 19 |  |  |
|  |  | 20 |  |  |
| Questions from MR METZER KC ................ | 164 | 21 |  |  |
|  |  | 22 |  |  |
| Questions from MR DAYLE .................... | 171 | 23 |  |  |
|  |  | 24 |  |  |
| PROFESSOR YVONNE DOYLE (sworn) ...............217 | 174 | 25 |  |  |
|  |  |  | 218 |  |

LADY HALLETT:
[45] 1/3 47/20 47/23 48/3 53/12 62/4 62/8 69/19 73/5 73/25 76/22 76/25 77/4 77/9 79/21 95/1 100/14 100/19 100/23 146/25 147/2 147/6 147/11 152/20 164/1 169/2 169/10 170/22 170/24 173/22 173/25 174/5 174/7 174/18 174/23 196/6 196/10 208/17 210/5 215/5 215/15 215/21 215/25 216/3 216/7
MR DAYLE: [5] 73/7 74/15 76/20 171/5 173/24
MR KEITH: [11] 77/8 77/15 80/1 95/3 100/13 100/24 147/1 147/5 147/12 152/17 215/23
MR MENON: [2]
174/2 174/6
MR METZER: [7] 69/22 73/3 164/6 169/9 169/12 170/21 170/23
MR O'CONNOR: [11]
1/4 1/8 47/22 48/4 53/9 76/23 175/1
196/2 196/11 208/13 216/6
MR STANTON: [2]
210/8 215/4
MR WEATHERBY:
[2] 53/15 62/3
MR WILCOCK: [1]
210/3
MS CAMPBELL: [2] 152/23 163/25
MS HARRIS: [3]
62/7 62/9 69/17
MS MITCHELL: [1]
208/20
MS MORRIS: [2]
215/7 215/20
THE WITNESS: [4]
77/2 100/17 174/17 216/1
$\cdot$
to [1] 64/21
1
1 July [1] 164/24
1 March [1] 138/19
1.45 [1] 100/19
1.45 pm [1] 100/22

10 [17] 10/9 11/8

12/17 19/19 20/10 20/13 72/8 72/25 84/9 94/4 94/4 97/3 99/14 122/17 125/8 128/8 152/19
10 February [4]
132/1 132/15 133/12 133/22
10 January [2] 12/12 183/10
10 January 2020 [1] 182/18
10 March [1] 133/21 10 October [1] 11/16 10 October 2020 [1] 10/23
10,000 [1] 179/23 10.00 am [1] $1 / 2$ 10.30 [1] 216/4 10.30 am [1] 216/9 100 [1] 111/11 100,000 [2] 41/22 110/24
100,000 tests [2] 86/20 88/24 104 [1] 48/12 11 [1] 127/21 11 March [3] 64/2 66/16 67/2
11.10 am [1] $47 / 25$ 11.25 [1] 47/24 11.25 am [1] 48/2 12 [4] 45/25 105/2 154/19 154/23 12 February [5] 32/13 34/18 36/18 39/2 188/8
12 February 2020 [2] 29/21 31/5
12 June [1] 204/15 12 March [8] 45/4 63/22 134/15 135/16 139/6 139/11 140/15 140/15
12 weeks [1] 42/1
12,500 [1] 44/20
12.45 [1] 95/2
12.45 pm [1] 100/20

120 [1] 95/21
12th [2] 140/12 149/10
13 [3] 6/15 159/4 159/5
13 confirmed [2] 155/11 159/16 13 March [3] 36/18 37/3 37/14
14 April [1] 32/12
14/15 March [2] 137/9 145/13
148 [1] 95/4
15 [1] 190/8
15 April 2020 [1] 75/6

15 March [1] 142/15 15,000 [3] 44/20 44/22 64/25
150 billion [1] 3/24 16 [2] 33/3 105/13 16 March [13] 125/21 138/4 138/5 145/2 147/16 147/19 148/5 148/11 148/19 148/23 149/1 149/15 184/15
16-week [1] 32/20
16th [5] 138/8 138/15
140/12 145/20 149/11
17 March [5] 44/5
44/13 63/8 76/6
186/12
17 October [1] 175/9
18 February [1]
121/5
18 March [4] 63/14
125/7 125/10 125/20
18 March 2020 [2]
63/10 63/18
18,000 people [1] 199/3
181 [1] 96/22
19 [25] 33/22 38/9
44/17 62/11 70/6
70/11 71/22 72/5
73/20 128/10 129/8
154/5 155/1 164/13
164/23 165/12 165/25
168/8 169/15 181/14
182/16 196/20 203/22
210/23 211/9
19 March [1] 64/4
2
2 April 2020 [1]
185/8
2 January 2020 [1]
181/1
2 June 2020 [1]
204/6
2 March [2] 133/13
133/22
2 November 2023 [1]
1/1

2,700 [1] 155/15
2-3 [2] 109/22 115/6
2.55 pm [1] 147/8

20 March [2] 146/14 146/15
200,000 [2] 41/24
46/22
2011 [5] 107/15
116/11 117/25 132/3 132/6
2012 [3] 2/19 2/22
181/20
2014 [3] 1/23 23/23
58/3
2016 [2] 56/13 60/7
2017 [1] 160/10

2018 [1] 178/13
2019 [8] 23/25 24/2
176/1 178/9 178/20
179/20 180/20 196/15
2020 [74] 6/18 7/11
9/7 10/23 11/13 12/5 12/10 16/14 22/16 24/8 24/11 24/13 25/21 25/24 26/12 26/20 27/16 29/21 31/5 38/4 41/12 41/13 42/8 43/18 49/7 54/2 60/3 60/7 60/14 62/24 63/10 63/18 70/9 70/12 71/20 72/3 74/7
75/6 79/13 102/4
151/9 153/2 153/4
155/5 155/21 155/25
158/5 161/24 164/11
164/14 169/1 169/13
171/19 171/21 173/3
176/5 179/10 180/24
181/1 182/18 185/8
192/6 195/18 198/4
198/18 199/14 203/17
204/6 207/24 209/8
209/12 211/15 212/6 212/16
2021 [13] 1/24 2/6
24/17 41/13 42/5 52/6
52/22 166/17 168/9
172/7 176/10 209/18
212/7
2022 [1] 3/9
2023 [2] 1/1 216/10
20th [1] 101/19
21 [2] 29/10 33/14
21 days [1] 44/24
21 February [1]
117/12
21 October 2020 [1]
164/14
22 [1] 45/2
22 January [1]
117/15
22 March [1] 44/16
22 September [1]
1/16
22nd [1] 146/19
23 March [4] 125/23
138/4 147/13 148/12
23rd [4] 138/8 138/18
149/11 149/11
24 February [1]
153/16
24 hours [1] 31/10
24 January [1]
158/16
24 January 2020 [1] 158/5
24th February [1]
133/6
25 February [2]
154/2 155/9

25 February 2020 [3]
153/4 155/5 155/25
25 March 2020 [1]
173/3
26 [1] 198/20
26 February [2]
127/2 127/8
28 February [5]
128/25 129/19 129/22
183/23 197/23
29 April [1] 76/10
29 January [2] 29/18
39/25
29 January 2020 [1]
102/4
2nd March [1] 133/7
2R [1] 61/8
3
3 February [1] 23/1
3 March [5] 38/7
128/20 131/21 133/25
135/4
3 March 2020 [1]
38/4
3-5 days [1] 110/2
3.05 [1] 147/6
3.05 pm [1] 147/10

30 [2] 49/7 96/5
30 April [3] 49/4
49/25 76/10
30,000 [7] 46/15
46/18 46/21 46/24
47/2 64/21 65/10
30,000 patients [1] 44/7
300 [1] 185/15
300 scientists [1]
185/12
300,000 [2] 110/24
111/11
31 [1] 63/3
31 March [1] 162/3
31 March 2020 [1]
161/24
32 [1] 64/20
33 [1] 192/4
330 [1] 44/4
331 [1] 44/4
36 [1] 63/3
39 [2] 19/9 94/25
3rd [1] 119/19
4
4.22 pm [1] 196/7
4.27 pm [1] 196/9

## 5

5 February [1]
114/21
5 July 2020 [1] 70/9
5 June [1] 164/21
5 June 2020 [1]
169/1

(57) 5.00 pm - agreement

A
ah [1] 112/17
ah-ing [1] 112/17 aim [2] 174/6 174/6
aimed [1] 30/9
aims [1] 190/3
alert [1] 212/25
alerted [1] 181/9
alertness [1] 127/25 all [101] 4/15 4/23
5/6 5/17 6/4 6/6 6/9 6/20 6/21 7/13 8/24 9/9 9/21 11/12 15/12 16/1 17/8 22/14 23/11 23/17 28/12 29/9 39/2 40/25 41/1 47/1 49/12 50/16 50/23 52/22 54/1 54/8 54/17 62/17 65/16 72/14 76/23 80/7 80/9 83/1 83/2 84/3 85/20 90/24 93/19 98/21 100/25 101/18 101/24 102/5 102/5 102/24 103/21 103/24 104/4 105/17 105/23 107/2 110/1 113/23 114/12 118/6 120/24 123/6 124/19 130/9 137/13 137/16 144/15 145/23 146/23 148/16 149/8 151/1 157/6 162/16 163/25 167/15 168/6 169/11 170/16 170/21 173/11 177/3 177/22 182/20 183/10 183/14 185/21 186/5 191/25 192/17 193/20 198/8 198/12 203/8 204/18 204/24 208/14 212/4 216/7 all right [12] 4/15 6/6 16/1 85/20 90/24 93/19 113/23 130/9 146/23 168/6 169/11 191/25
allocate [1] 66/25
allocation [1] 33/11
allow [1] 136/18
allowed [3] 77/9
145/5 184/23
almost [4] 6/21 61/22 137/15 204/11
alone [2] 78/24 182/4
along [1] 24/9
Alpha [1] 212/22
already [16] 32/9
43/20 45/2 49/16
49/25 62/18 79/23
108/14 122/8 123/3 128/14 134/18 148/10 186/17 190/6 206/20
also [63] 2/5 3/22
4/10 5/6 5/17 10/14

12/17 16/12 19/1 26/4 $196 / 3$ 202/23 204/13 27/3 31/2 36/21 36/25 41/14 43/21 53/22 54/18 54/22 59/21 63/9 63/21 66/16 67/16 68/24 69/8 69/10 72/18 75/2 78/13 79/1 79/17 80/22 86/9 96/15
109/21 133/7 155/12 176/22 177/16 178/16 179/1 179/13 180/13 182/20 184/2 192/13 193/21 196/19 197/11 202/7 202/14 204/11 205/23 205/24 207/1 212/10 212/16 212/18 213/18 215/3 215/9 215/24
alternate [1] 102/1 although [8] 39/2 44/25 55/1 67/16 102/3 129/9 131/20 153/16
always [13] 7/23 28/6 40/19 66/9 80/3 82/14 87/6 90/1 192/7 194/12 211/12 214/12 214/15
am [15] 1/2 22/22 47/25 48/2 53/16 90/19 92/5 108/25 135/6 147/1 162/15 166/18 194/9 212/7 216/9
ambiguity [1] 39/17 among [2] 76/4 212/23
amongst [5] 41/14 41/18 43/20 102/24 148/15
amount [5] 42/19 70/2 71/6 94/12 98/24 amounts [1] 42/23 ample [1] 61/24 analysis [2] 42/14 126/2
analysts [1] 37/23
animals [1] 105/11
announce [2] 23/7 23/10
announced [2] 44/12 70/8
announcement [1] 70/12
announcements [2] 72/9 72/11
another [25] 16/3 16/24 18/17 24/14 42/18 47/1 47/4 47/18 48/9 49/3 62/20 70/7 81/6 112/11 127/1 147/4 147/6 164/2 171/2 174/12 189/13
answer [29] 23/6
25/4 28/7 51/6 53/20 58/13 58/14 72/13 74/5 75/8 75/23 85/7 85/16 104/22 113/18 113/23 120/20 131/4 152/15 152/17 161/7 163/16 167/7 167/18 169/4 173/15 173/19 173/20 199/6
answered [4] 17/25 100/18 166/3 210/4
answering [1] 142/7 answers [3] 6/2 174/11 215/17
antiviral [1] 118/10 any [54] 11/10 18/21 30/16 31/10 31/16 36/11 42/3 43/22 48/22 57/22 65/12 66/7 69/13 76/2 79/6 81/2 83/19 85/12 88/8 88/11 88/14 90/10 91/9 93/6 98/6 103/24 111/12 118/14 123/21 124/22 139/15 143/19 145/10 146/7 155/2 157/16 159/12 161/11 195/7 195/25 198/8 203/24 204/20 204/25 206/18 210/3 210/12 214/5
anybody [1] 39/13 anyone [4] 19/20
96/10 117/2 154/6
anything [15] 26/6 77/9 95/23 96/21 105/17 121/24 143/25
155/2 156/5 161/17 169/11 170/24 188/3 194/16 194/18
anyway [3] 6/10
22/11 215/17
anywhere [2] 103/1 206/24
apologies [1] 69/18
apologise [3] 78/10
134/4 210/11
apologised [1] 194/8
appalling [1] 89/11
apparent [7] 11/24
37/18 38/16 144/22
147/15 165/16 183/18
apparently [1] 84/14
appear [3] 17/9 23/20 62/11
appeared [6] 76/16 91/6 94/13 96/8 115/3 181/25
appearing [2] 112/11

163/21 168/9 182/5 April [19] 1/23 12/5 191/25 193/19 194/22 $\quad 32 / 12$ 49/1 49/4 49/7 195/4 203/17
April 2014 [1] 1/23
April 2020 [1] 171/19
April 30 [1] 49/7
Ara [1] 22/22
Ara Darzi [1] 22/22
are [125] 1/18 7/5
11/10 13/17 16/15 17/12 18/5 19/12 19/25 20/17 22/14 22/15 22/19 30/4 30/6 30/15 32/11 32/16 34/17 34/24 35/10 38/20 39/4 40/19 40/25 42/20 43/2 50/25 53/10 55/1 62/3 62/20 62/21 65/16 67/19 67/23 75/13 76/23 77/19 78/14 80/4 80/6 80/11 82/8 82/11 84/8 87/25 89/9 89/12 89/12 89/13 89/13 89/25 90/7 93/5 93/20 94/18 100/10 100/17 105/7 105/16 106/24 107/2 107/24 108/5 108/21 108/23 108/24 109/6 109/18 109/21 110/21 117/6

128/4
119/5 128/2 132/11 132/12 132/22 135/4 136/3 138/6 139/13 146/25 147/3 150/13 150/14 151/12 151/21 151/24 152/4 152/19 152/20 153/21 153/23 154/10 154/13 157/8 158/9 158/23 163/1 163/17 163/25 166/1 168/13 172/1 175/8 175/9 175/15 182/22 184/3 188/24 190/10 190/24 196/20 196/21 197/4 197/10 197/12 208/14 208/15 208/17 210/22 211/1 213/17 215/8
area [3] 168/4 171/15 213/9
areas [14] 17/22
19/24 62/16 76/9 78/20 79/7 81/17 95/12 95/13 176/19
177/22 178/5 179/25 202/25
argue [1] 34/23
argued [1] 17/2
argument [2] 67/15 152/2
arguments [1] 152/3
arises [1] 173/1 49/25 60/3 60/14 74/7 arising [3] 66/10 75/1 75/6 76/10 76/10 66/12 104/1 88/25 171/19 185/8 Armstrong [1] 88/19

## arose [1] 62/1

around [26] 15/20
17/16 18/14 23/24 26/8 30/13 31/6 32/19 36/13 67/25 69/16 75/1 75/8 86/20 93/3 110/1 126/2 126/15 145/17 159/21 166/6 176/24 207/5 212/3 212/9 214/19 arrangements [3] 18/10 145/9 186/10 arranging [2] 104/11 108/17
arrival [1] 115/10 arrived [3] 156/2 156/16 156/17 article [3] 160/9 160/15 160/18 as [377]
As I say [4] 21/7 118/5 150/12 151/3 Asia [2] 119/24 120/15

## Asian [8] 50/25 73/14

 73/18 76/5 171/13 172/4 173/12 203/10 aside [3] 26/11 40/15 165/5| A |  | 67/7 72/12 80/17 84/8 | 183/13 183/16 185/20 |  |
| :---: | :---: | :---: | :---: | :---: |
| ask [44] 25/23 29/7 | 3/ | 84/13 85/5 85/7 86/23 | 189/4 210/1 |  |
| 31/11 33/6 34/5 35/2 |  |  | battle [4] | 61/15 61/19 61/20 |
|  | astray [1] | 91/13 92/12 93/1 | 146/12 146/16 1 | 61/20 63/19 65/7 |
| 58/13 62/15 62/22 | asymptomatic [6] | 93/17 101/9 133/8 | battle plan [2] 146/16 | 65/16 67/17 70/1 |
| 63/2 69/23 73/8 74/18 | 67/8 67/17 67/24 68/1 | 135/6 158/19 160/8 |  | 71/11 72/12 73/24 |
| 79/10 84/12 87/10 | 119/9 193/9 | 160/18 163/12 163/20 | be [297] | 79/2 86/6 87/4 88/1 |
|  |  | 164/25 168/22 170/13 | bear [1] 5 | 88/11 88/20 91/3 |
| $\begin{aligned} & 94 / 21 \quad 100 / 15102 / 6 \\ & 103 / 14106 / 22111 / 20 \end{aligned}$ | at PHE [1] | 170 | became [16] | 91/16 92/5 92 |
| $\begin{array}{lll} 112 / 9 & 132 / 12 & 135 / 4 \\ 135 / 23 & 152 / 24 & 154 / 12 \end{array}$ | at present [2] 38/ |  | 8 |  |
|  | 155/2 | awareness | 87/18 131/10 14 | 104/4 104/6 109/1 |
| 160/8 164/9 165/21 | attempt | 150/10 164/12 | 147/15 165/16 176 | 114/7 |
| 171/6 174/10 176/23 | attempted [1] | 192/7 207/25 209/2 | 184/24 197/16 198/16 | 125/18 126/19 |
|  | attempts [1] 199/2 | a | 199/1 202/21 202/22 | 127/11 133/21 133 |
| $\begin{aligned} & 186 / 21 ~ 188 / 3 ~ 191 / 21 \\ & 191 / 25 ~ 208 / 21 \\ & 212 / 8 \end{aligned}$ | attend [6] 6/16 9/3 |  | because [66] 12/24 | 137/11 141/8 143/25 |
| 191/25 208/21 212/8 asked [29] 5/21 7/8 | 9/7 10/5 63/9 186/24 | away [6] 19/4 | 14/8 16/1 17/15 18/9 | 144/3 145/15 147/25 |
|  | attendance [3] 83/15 | 121/12 163/15 167/6 | 21/8 27/18 28/17 39/5 | 148/2 148/6 148/24 |
| 16/8 17/12 17/24 |  | 16 | 42/16 42/22 45/14 | 149/1 149/4 149/15 |
| $\begin{aligned} & 17 / 2532 / 1147 / 20 \\ & 53 / 1176 / 685 / 587 / 15 \end{aligned}$ |  | awful [2] | /2 | 149/17 149/21 150/23 |
| $\begin{aligned} & \text { 53/11 76/6 85/5 87/15 } \\ & 97 / 18 \text { 99/16 113/24 } \end{aligned}$ | 29/11 63/13 101/18 | 168/4 | 54/5 55/3 55/24 56/6 | 152/7 155/10 157/14 |
| 123/6 142/22 144/20 | 101/24 186/21 188/24 | awkward [1] 210/11 | 61/22 61/24 64/24 | 159/15 159/19 160 |
| 164/6 177/23 183/24 |  |  | 73/25 77/20 79/1 92 | 162/7 163/21 164/ |
| 189/10 194/6 194/23 |  |  |  | 164/20 165/13 179/12 |
| 201/22 202/24 204/ | attendees [6] 102/16 |  | 95/19 103/21 105/22 | 181/15 182/9 |
| $211 / 23212 / 15$ | 102/24 103/14 114/22 | 6/18 17/2 18/7 23/21 | 106/12 112/23 114/1 | 187/5 188/5 189/5 |
| asking [14] 5/10 | 121/6 127/3 | 24/14 26/1 26/8 | 117/25 118/7 125/20 | 191/10 196/16 198/23 |
|  | attender [2] 9 | 36/15 39/17 65/6 66/4 | 126/7 126/13 133/16 | 200/2 200/5 200/1 |
| 24/21 25/5 87/17 |  | 67/12 68/22 73/23 | 135/10 136/17 147/3 | 201/22 202/5 202/1 |
| $108 / 25 \text { 112/18 112/20 }$ | atte | 83 | 147/4 148/6 148/1 | 202/13 203/21 204/ |
| 162/17 176/17 210/9 | 125/8 125/16 | 100/19 107/15 115/7 | 148/12 153/6 156/6 | 207/20 208/11 20 |
|  | attention [2] 1 |  | 161/20 165/19 171/1 | 211/16 212/8 212 |
| 215/16 |  | 121/25 127/1 127/17 | 180/16 182/1 183/9 | 213/1 214/6 |
| aspects [2] 21/3 | att |  | 189/5 195 | een/was [1] |
| $\begin{aligned} & 81 / 14 \\ & \text { aspirational [2] } 87 / 8 \end{aligned}$ |  |  |  | fore [34] 3/8 121 |
|  |  | 164/21 167/6 173/22 | 202/8 207 | 31/10 34/5 |
|  | Au |  | 21 | 4/10 37/3 44/12 |
| 90/5 <br> assertion [2] 46/4 | 25/24 26/12 71/20 |  | become [19] 37/15 | 45/17 48/6 49/17 |
| assertion [2] 46/4$112 / 4$ |  |  | 39/21 73/18 110/6 | 80/2 91/1 |
|  |  |  | 110/14 111/9 111/24 | 4/6 119/23 128/25 |
| assessing [1] 171/22 assessment [6] 10/8 | 25/24 71/20 72 | bad [4] | 112/3 112/5 112/6 | 31/21 141/13 |
| $68 / 17 \text { 69/1 135/22 }$ | authored [1] | 95/24 214/10 | 116/8 129/8 136/21 | 146/17 154/12 164/20 |
|  | authorities [1] |  | 138/9 154/7 154/18 | 16 |
| 140/10 207/5 | 175/23 |  | 155/18 183/18 211 | 178/13 179/10 |
| $\begin{aligned} & \text { assessments [1] } \\ & 76 / 11 \end{aligned}$ | authority | 214/ | becomes [3] 111/10 | 1/16 209/8 209/11 |
| assigned [2] 4 | 7 83/9 |  | 197/10 197/11 | 0/19 |
|  | [2] | IO [1] |  | [ |
|  |  |  | bed [5] 45/16 45/23 | 10/16 |
|  |  |  | 140 | began [3] 45/17 |
|  | 11/13 26/7 27/1 | 152/11 | ockers [ | 104/25 138 |
|  | 27/20 42/8 72/17 | 1152 |  | [1] 4 |
| $1 / 12$ |  | 81/19 | beds [15] 36/8 | inning [8] |
|  | au |  | 42/11 4 | 138/2 |
| $101 / 15108$ | 42/ |  | 44/20 44/2 | 10/20 148/10 159 |
|  |  |  | 46/16 46/24 47/2 | 202/24 |
| 74/25 210/10 |  |  | 6/19 6 | 2] 122/ |
|  | 163/ |  |  | 146/16 |
| med [2] 3 | available [4] 55 | 138/6 140/13 146/17 | been [124] 6/10 | If [10] 53/17 |
|  | 66/22 110/15 126 | 72/ | 1 | 99/24 73/8 |
|  | average [1] | basis [21] | 13/24 15/8 15/8 1 | 114/15 152/24 164 |
|  | avoid [1] 43/10 | 111 | 23/17 24/6 24/10 | 171/6 208/21 210/10 |
|  | avoided [1] 8/6 | 1/2 | 2 | behave [3] |
|  | ting [1] | 155/22 156/19 159/19 | 32/14 33/4 37/9 37/12 | 109/6 168/13 |
| $182 / 2520$ | [ | 169/24 170/8 180/12 | 37 | ving [2] 91 |
|  | /15 50/11 66/11 | 181/10 182/23 183/1 | 45/1 45/3 45/21 46/10 | 108/20 |

(59) ask - behaving
behavioural [2]
38/14 38/15
behind [1] 27/6
being [74] 9/22 17/24
18/4 32/25 36/12
36/16 36/23 37/17 39/4 39/13 40/8 40/10 41/22 42/4 43/7 44/17 44/23 45/11 46/13 46/19 47/20 49/21 50/1 51/16 52/16 52/18 52/21 53/4 66/5 67/4 67/6 72/11 73/20 83/17 86/1 86/2 87/21 87/21 88/6 99/15 102/24 103/14 103/18 109/21 116/6 117/3 117/6 120/20 124/10 124/22 125/19 126/4 128/21 131/9 131/17 132/7 136/9 137/13 139/7 140/7 148/17 160/16 160/23 163/13 166/20 167/13 168/24 170/2 177/25 180/25 185/9 188/21 203/1 205/11
belief [2] 85/6 148/15 believe [13] 1/17
25/14 26/6 64/2 74/12
89/11 89/25 90/7
123/18 134/15 136/7
146/13 175/8
believed [10] 86/16
90/3 90/3 114/1 119/7
122/24 123/19 136/14
156/8 156/15
believes [1] 26/6
below [1] 175/7
benefit [3] 13/2 43/12 208/4
bequeathed [1] 3/12
bereaved [5] 53/17
62/11 62/14 152/25
208/22
best [12] 10/3 15/18 22/23 28/6 91/20 97/18 140/1 140/4 161/2 193/21 195/11 197/4
Bethell [1] 167/25
better [10] 8/16 65/2
71/8 94/15 120/17
152/7 166/2 167/17 173/20 202/13
between [38] 1/23
2/24 4/2 7/22 12/11
19/5 21/3 23/18 25/7 27/7 27/24 41/24 44/20 57/18 72/20 72/22 92/7 92/15 94/4 99/17 102/1 115/1

115/23 125/5 125/21 137/8 138/4 138/8 140/12 140/24 148/6 156/24 170/12 170/19 173/2 176/24 192/24 192/25
beyond [4] 17/10 61/4 119/1 159/22 bias [1] 39/11
biased [1] 98/11
big [10] $8 / 2426 / 5$
86/17 94/10 98/20 120/12 125/25 128/21 150/20 170/1
bigger [1] 120/4 biggest [2] 171/17 172/1
bike [1] 27/6
bill [4] 107/19 115/21
128/10 128/10
billion [1] $3 / 24$
bin [1] 173/7
binary [1] $42 / 15$
bit [15] 2/8 11/25
12/20 16/19 28/9
107/22 111/6 114/8
116/9 116/25 119/10 119/19 120/16 124/1 192/24
bits [1] 124/10
black [10] 50/25
53/22 61/18 73/14
73/18 76/4 171/13
172/4 173/12 203/10
blame [1] 94/14
blocked [1] 46/24
blockers [1] 45/23
blocking [1] 45/16
BMA [4] 52/4 75/2
210/14 213/2
board [4] 4/7 4/8
166/14 167/21
bodies [4] 2/25 38/21 49/9 101/14
body [5] 2/19 104/23
142/2 191/10 191/16
bombshell [1] 144/9
border [2] 105/9 117/10
borders [4] 115/25
116/18 116/21 117/16
Boris [4] 25/8 26/13 27/14 46/9
Boris Johnson [4]
25/8 26/13 27/14 46/9
boss [1] $4 / 5$
bosses [1] $4 / 8$
both [16] 12/13 13/12
22/15 47/15 81/3 81/5 90/4 94/3 94/8 98/18
101/4 110/1 163/22
165/11 166/5 178/14
bottom [10] 33/16
44/4 57/9 96/22

109/16 153/11 153/20 $215 / 13$
154/1 154/2 166/11 Cabinet Office [30] 5/4 10/9 16/22 20/9 30/21 49/2 49/15
55/18 72/8 73/1 84/9 94/3 94/4 95/25 96/10 99/15 122/18 123/1 124/11 167/21 168/5 170/12 170/16 189/5 190/20 191/13 191/22 205/8 207/1 215/13
Cabinet Office's [2] 50/15 51/3
Cabinet Secretary [2] 90/16 90/18
Cain [1] 96/6
calamity [1] 142/20
calculus [1] $47 / 7$
call [7] 29/16 32/2 92/4 135/24 147/14 147/19 181/5
called [18] $5 / 22$
10/10 12/18 29/8 30/1 42/10 74/24 95/18 124/10 137/21 179/12 180/13 186/3 187/2 190/23 197/18 203/21 213/25
calling [1] 211/2
calm [1] 195/11
came [14] 10/1 24/9 69/2 70/19 86/19 101/6 113/25 114/5
116/2 118/16 137/20 137/25 181/17 212/6
campaign [3] 70/16
71/12 132/22
Campbell [4] 152/21
152/22 164/1 217/19 can [124] 6/2 6/14 6/15 7/17 8/2 8/14 9/4 11/1 12/1 13/5 14/1 15/9 15/11 15/12 15/20 15/24 16/6 18/12 19/7 20/19 22/16 22/25 23/14 23/15 24/20 25/11 29/16 29/22 31/16 32/2 32/8 33/13 33/17 34/23 38/24 40/9 41/25 42/3 44/2 44/9 44/16 44/25 45/8 45/24 49/5 50/12 51/17 52/8 57/3 57/8 58/1 58/13 76/2 79/1 92/17 92/17 92/18 92/25 100/25 102/12 102/15 104/10 108/8 109/12 109/16 110/11 111/22 121/6 123/23 127/4 131/8 131/11 153/9 153/12 153/19 154/14 158/1 158/6 159/23 160/24 161/22

161/24 161/25 164/19 165/3 165/7 166/11 166/16 167/18 169/14 174/11 174/21 175/1 175/4 177/2 177/21 179/19 181/1 181/17 182/19 184/5 187/2
187/5 187/11 187/15 188/12 190/1 191/15 191/18 192/2 192/18 196/22 197/14 198/20 199/12 199/13 200/10 201/10 201/14 204/7 204/12 207/11 207/12 213/8
can't [27] 6/20 14/7
15/3 18/9 18/11 23/15 27/17 42/2 46/22 55/2 68/16 72/22 75/22
106/11 116/18 118/18 130/22 131/23 139/19 139/19 148/22 154/22 165/19 169/4 169/19 214/21 215/16
cannot [3] 42/1 92/17 190/15
capacity [15] 15/15
16/8 17/11 37/7 42/11
42/23 63/5 65/1 68/18
95/24 120/4 140/20
199/9 199/9 200/12
car [1] 66/21
car parks [1] 66/21
cards [1] 39/7
care [97] $4 / 34 / 23$
5/18 26/23 27/1 27/3 27/4 27/9 28/19 35/1
35/3 35/9 35/22 36/7
36/8 38/1 42/11 43/18 44/8 46/11 47/5 47/11 50/17 50/19 51/12 54/5 55/17 58/5 58/20 62/20 62/25 63/23 63/25 64/12 64/13 64/22 65/3 65/6 65/6 65/15 65/17 65/19 65/20 65/24 66/1 66/4 66/8 66/12 66/15 67/4 67/9 67/22 68/21
68/22 69/2 69/10
69/15 72/15 72/21
77/18 78/15 79/4
79/18 81/12 82/25
83/1 83/7 88/7 98/8
98/15 98/18 99/19
153/10 153/13 153/21
153/21 153/22 154/6
154/6 154/10 154/17
154/18 155/2 156/3
157/8 157/18 160/12
160/16 160/21 161/10
162/4 162/8 162/19
162/25 169/16 208/4 211/4

## C

care home [7] 65/15
68/22 69/10 153/22
156/3 157/8 208/4
care homes [24]
4/23 43/18 62/20
64/13 65/6 65/19 65/24 66/1 66/4 66/8 66/12 67/4 67/9 67/22 68/21 69/2 69/15 88/7 153/21 153/21 154/10 157/18 160/16 161/10
care sector [3] 79/4
79/18 83/1
Care's [1] 45/2
career [3] 1/20
175/14 175/19
careful [1] 39/10 carefully [2] 68/8 123/17
carry [1] 31/16
CAS [1] 212/25 case [59] 4/3 7/23 18/18 30/1 30/3 32/21 35/19 37/20 38/13 39/5 39/18 39/20 39/21 40/2 40/13 40/25 64/15 64/17 88/12 89/3 102/18 103/8 105/3 106/1 109/20 112/11 112/11 115/15 116/7 121/9 121/11 122/1 124/15 127/22 128/3 129/5 135/12 135/21 139/15 139/17 151/15 152/5 156/19 157/4 157/19 180/10 180/11 182/24 187/22 188/4 188/20 191/10 191/13 197/3 197/23 199/8 201/1 201/2 201/11
cases [31] 11/23 42/11 67/8 84/17 86/7 86/7 87/3 117/22 119/2 119/9 119/10 127/24 131/2 131/6 131/8 155/11 156/15 159/4 159/5 159/6 159/16 193/6 197/5 197/10 197/14 197/17 198/12 200/10 200/13 200/19 201/11
cast [1] 127/17
Casting [1] 200/3
catastrophe [1] 142/20
Categorically [1] 94/2
categories [3] 85/22 94/8 100/12
category [9] 85/15 86/14 87/6 87/25 89/7

90/6 183/25 183/25 184/10
catered [1] 55/8 cause [4] 8/9 8/12 71/5 165/24
caused [3] 143/21 165/12 165/25 causes [1] 55/4 causing [1] 155/14 cautious [1] 71/15 caveat [3] 48/6 57/21 151/19
CCS [1] 215/13
cease [1] 158/13 ceases [1] 196/25 cell [2] 212/14 212/15
cellphone [1] 22/17 central [3] 78/21 78/22 78/22
centralised [1] 73/12 centrally [1] $83 / 2$ centre [5] 10/11 19/20 72/23 75/25 112/25
certain [8] 13/20 48/17 51/15 55/2 129/9 177/9 183/25 184/3
certainly [42] 6/23 7/4 12/9 20/19 23/17 31/19 35/7 38/16 42/2 46/17 47/22 49/24 58/13 73/15 73/24 83/5 103/5 103/6 105/1 105/24 111/18 112/8 116/20 117/7 148/15 149/6 151/23 166/8 167/8 170/6 171/25 172/20 181/7 182/6 189/16 201/16 202/16 207/20 208/10 211/25 212/2 214/18 certainty [1] 152/13 cetera [2] 124/2 211/11
Chaand [1] 75/2
chains [1] 180/5
chair [5] 12/20 37/5 113/22 114/4 209/11 chaired [9] 8/5 8/16 8/21 101/11 101/12 101/19 101/22 101/25 209/18
challenge [3] 57/13
72/1 72/7
challenges [2] 86/18 99/9
challenging [2] 205/6 206/1
chance [4] 11/9
12/24 19/10 78/10
Chancellor [2] 11/4 12/3
change [15] 24/2
36/19 36/22 53/3 137/7 137/10 137/24 138/2 138/11 140/21 142/24 143/12 144/23 207/8 211/23
changed [15] 12/20 31/23 36/24 65/4
126/2 148/14 149/13 149/20 162/8 162/23 163/4 178/12 178/20 211/14 211/21
changes [4] 3/8
48/17 140/11 161/15 changing [1] 133/8 chaos [3] 24/1 97/10 99/7
chaotic [2] 98/5 99/15
chapters [1] 207/15 characterised [1] 214/9
characteristics [3]
110/19 118/8 183/11
charge [2] 26/7 192/14
charged [1] 142/2
check [9] 163/16
164/19 167/11 167/17 168/21 168/25 170/13 172/11 172/12
checked [1] 104/25
chemicals [3] 178/6 178/16 179/2
chicken [1] 141/12
chief [41] 1/22 2/2
2/6 2/9 3/20 4/6 49/17 49/20 50/21 52/4
54/12 56/23 58/3
58/11 60/23 68/25 74/12 80/4 80/6 80/17 81/7 97/9 101/13 110/8 110/23 112/18 113/11 120/9 133/18 134/10 135/13 139/12 142/4 142/11 143/21 150/19 153/14 159/11 185/6 198/3 210/18 Chief Scientist [3] 139/12 142/4 143/21 Chilcot [4] 126/14 126/16 126/18 126/24 Chilcot Inquiry [1] 126/24
children's [1] 153/24
Chiltern [1] 178/7
China [27] 102/20 102/21 103/1 103/1 103/2 103/4 103/13 103/15 103/19 105/18 106/20 110/17 110/17 110/21 111/3 111/9 111/15 112/7 112/14 112/15 113/13 115/13

116/8 155/13 155/22 181/6 182/8
choice [2] 91/14 113/21
choose [1] 82/16
chooses [1] 20/12
chosen [1] $8 / 22$
Chris [6] 11/4 35/23
74/12 109/17 111/4 203/15
Chris Whitty [4] 11/4 74/12 109/17 203/15
Chris Wormald [1] 35/23
Christmas [1] 23/7
Christopher [44]
35/21 77/13 77/17 77/19 78/3 80/1 81/20 84/2 87/15 91/8 91/24 97/17 100/24 102/6 102/23 103/23 107/12 110/5 113/17 122/7 126/10 127/9 129/16 130/16 132/5 136/3 137/4 137/20 139/14 141/16 141/22 147/12 151/7 152/24 153/6 156/16 156/21 160/5 161/20 164/9 171/6 174/3 174/14 217/15 chronology [1] 45/7 chunks [1] 80/4 circulated [1] 190/20 circumstances [10] 29/5 34/23 34/24 35/9 61/7 91/11 98/25 99/9 161/3 163/1
cite [1] 169/17
civil [15] 21/17 82/18 85/7 89/9 93/15 94/1 95/8 100/10 115/16 122/2 123/5 129/1 129/7 130/3 195/10 civilian [1] 95/9 clarify [4] 44/10 44/25 67/23 213/11
clarifying [1] 25/3
clarity [1] 40/7
clashes [1] 123/15 classification [2] 183/20 184/18
clear [40] $2 / 14 / 1$ 18/19 25/5 26/24 27/5 36/10 37/6 37/20 38/21 39/7 41/6 41/18 52/5 59/11 71/7 73/18 87/6 90/1 105/13
111/6 111/10 115/19 119/9 122/3 122/12 142/1 148/22 149/21 150/19 151/11 177/19 189/22 192/9 193/20 194/4 197/17 198/1 202/15 206/17
clear-cut [1] 18/19 clearer [2] 68/21 199/2
clearest [1] 139/5 clearly [17] 37/11 43/10 58/16 94/6 94/15 100/4 106/2
119/24 120/17 129/5 139/7 139/23 143/19 143/21 154/8 160/25 198/11
Cleo [1] 49/4
Cleo Watson [1] 49/4 clinical [15] 34/15 67/4 81/2 81/4 81/6 116/19 119/14 156/6
157/24 159/23 160/6 161/8 167/14 171/23 181/22
clinicians [12] 37/23
67/14 72/16 74/11 74/23 121/2 156/13 161/1 166/3 177/16 183/8 208/3
clinicians' [1] 209/17
clone [2] 42/1 42/2
close [3] 127/23
151/19 210/1
closely [1] 122/17
closest [1] 105/25
closing [3] 116/14
116/18 116/21
closures [2] 107/20
108/16
CMO [16] 80/19
101/13 102/16 105/14
107/5 113/25 114/12
114/24 121/8 130/11
130/12 135/12 135/13
171/17 181/9 204/5
CMO's [7] 103/6
111/17 112/9 121/15
129/25 130/17 135/21
co [7] 96/13 140/23
166/15 178/25 182/5
182/6 182/10
co-operated [1]

## 178/25

co-operation [3]
182/5 182/6 182/10
co-ordinate [1]
166/15
co-ordination [1] 96/13
coalesced [1] 145/17
COBR [42] 6/17 6/22
6/24 7/4 7/7 7/18 8/5
8/23 29/18 39/24
100/25 101/1 101/5
101/18 101/22 101/24
101/25 103/21 104/13
104/15 104/22 104/25
110/16 112/4 113/11
114/21 121/5 121/14

| C |  | $\mathbf{c o}$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COBR... [14] 122/11 | commis <br> 133/12 | complying [1] 148/19 | consensus [4] 27/9 <br> 135/10 135/22 142/3 | $20$ |
| 127/1 127/9 139/6 $141 / 8142 / 4142 / 12$ | 133/12 commissions [2] | complying [1] 148/19 comprehensibility [1] | 135/10 135/22 142/3 consequence [7] 3/7 | 205/15 containme |
| $141 / 8142 / 4142 / 12$ $145 / 18186 / 20186 / 22$ | $124 / 14124 / 16$ | $\begin{aligned} & \text { comprenensidility [1] } \\ & \text { 202/8 } \end{aligned}$ | 180/14 182/14 182/22 | Cont |
| 186/24 187/6 187/10 | commitment [1] | comprehensive | 183 | contemplated [2] |
| 188/2 |  |  |  |  |
| COBR minutes [1] |  |  |  | contend [1] 67/16 |
| 6/22 |  |  |  |  |
| COBRs [5] 7/13 7/22 | committed [1] committee [8] | concentrated | conseq | 189/22 202/15 contents [5] 1 |
| 8/17 8/21 123/6 |  | concern [17] 41/14 | 23 |  |
| code [2] 91/17 91/24 | 125/19 135/7 172/6 | 54/13 72/16 74/10 | 9/11 74/2 74/18 78/10 | 207/14 |
| cogent [1] 202/16 | 201/24 | 91 | 187/21 193/9 | xt |
| coherent [1] 73 | committees [3] | 0 | considerable [4] | 0/25 67/ |
| coincided [1] 8 | 184/12 184/13 | 127/8 127/13 166/18 | 64/11 151/14 175/ | 6 |
| collateral [1] 150/24 | commonly [1] | 69/18 192/5 192/14 | 211/6 | 82/12 210/14 212/1 |
| colleague [3] 162/13 |  |  | der |  |
| 163/10 205/3 |  |  |  |  |
| colleagues [13] | co |  | consideration [6] | 115/16 122/2 123/5 |
| 76/14 88/19 89/19 |  | 0/13 72/4 83/2 91/24 |  | 129/2 129/7 130/3 |
| 92/9 99/13 112/25 | communication | 92/6 120/22 125/15 | 120/24 145/4 157/1 | /22 |
| 158/4 162/20 166/4 | 7/6 115/14 116/15 | 26/ | considerations [2] | g |
| 195/10 195/22 204/2 | 125/4 166/23 167/13 | 126/23 141/9 145/23 |  |  |
| 210/2 | communications [18] | 181/5 205/2 | considered [6] 37/19 | continue [3] 195/24 |
| College [1] 1 | 6/7 105/12 105/13 | concerning [3] 79/3 | 64/8 102/19 106/15 | 196/1 207/3 |
| column [1] 16 |  |  |  | continued [6] |
| combatted [1] | 106/17 107/3 107/5 | concerns [14] | considering | 77/22 |
|  | 107/22 109/2 115 | 52/11 73/10 75/8 | 38/20 106/18 108 | /25 209 |
|  | 115/20 123/4 128/2 | 91/23 92/1 92/4 93 | 109/18 | inuing |
| 18 | 166/22 167/2 167/9 | 142/ | consistent [4] | 22 |
|  | communities [5] | 172/3 192/19 210/22 | 156/14 157/1 157/8 | nuous |
| $76 /$ | 73/15 73/19 76/5 | [1] 215/23 | 158/21 | 05/4 |
|  | 20 | [1] | constru | ntradicti |
| $13 / 1316 / 3$ | community [27] | condition [1] 170/15 |  |  |
| 24/11 31/21 36/5 | 43/18 47/10 69/3 | conditional [1] 111/6 | consultants [ | rary [1] |
| 37/21 40/2 40/5 41/3 | 69/14 75/17 75/22 | conditions [2] 71/24 | 209/15 | ontrast [1] 151/7 |
| 69/17 70/20 83/4 | 134/6 134/19 135/8 |  | consultation | ntribute [1] 5/2 |
| 83/12 84/19 86/4 | 15 | conducive [1] 160 |  | buted [2] |
| 86/21 92/14 94/6 | 154/7 154/18 158/10 | conduct [3] 91/25 | consuming [1] 123/9 | 135/2 |
| 100/15 100/19 118 | 158/11 158/17 158/1 | 187/24 203/15 | contact [18] 131 | ontributing [2] |
| 128/14 128/14 130/24 | 158/24 159/2 | conducted [1] 16/10 | 158/13 180/11 195/8 |  |
| 131/4 137/14 150/11 | 159/14 159/20 161/4 | confidence [5] 25/7 | 195/14 195/17 196/13 | contributor [1] 182 |
| 165/1 167/6 173/6 | 186/2 197/5 197/22 | 89/19 92/8 93/24 | 196/16 196/21 196/25 | control [24] 41/23 |
| 173/22 179/18 182/8 | comparison [1] | 109/25 | 197/4 198/19 198/22 | 42/25 56/17 69/14 |
|  | 161/25 | confident [1] 133/17 | 198/25 199/3 199/8 | 0/4 108/6 128/12 |
|  | competing [1] 97/15 | confined [2] 58/20 | 200/13 210/1 | 34/1 135/9 162/1 |
| 67/22 71/9 158/3 | complete [2] 120/16 | 102/20 | contacted [1] 180/12 | 162/18 178/3 201 |
| coming [15] 3/6 26 | 184/ | confirm [2] 51/12 | contacting [1] | 09/16 212/11 21 |
| 95/1 103/4 | completely [14] | 16 | 197 | 13/3 213/12 213 |
| 105/18 110/17 113/13 | 24/10 59/12 59/13 | confirmed [3] 155/1 | contacts [9] 197/19 | 213/17 213/19 213 |
| 115/12 126/11 139/17 | 80/21 83/9 98/9 | 159/16 164/11 | 197/19 197/19 198/13 | 213/22 214/4 |
| 150/22 153/6 181/8 | 130/14 149/23 151/2 | conflicting [1] | 200/11 200/23 200/25 | controlled [1] 111/8 |
| comment [4] 17/18 | 157/1 158/21 159/8 | conflicts [1] 123/8 | 201 | controlling [2] 5/2 |
| 98/8 185/21 214/21 | 161/16 206/22 | fronted [3] 41/21 | contain [22] |  |
| commentary [1] 15/3 | completeness [2] | 42/4 87/23 | 19/19 128/23 | controls [1] 115 |
| commission [3] |  | confused [1] | 31 | convened [2] 75/3 |
| 188/5 189/6 189/8 | completes [1] 21 | onfusing [1] 3/11 | $1 / 8$ |  |
|  | complex [1] 180/11 | confusingly [1] 2/18 | 34/4 134/10 | convenient |
| 74/13 76/12 131/25 | complexity [1] 180/4 | confusion [1] 192/13 | 134/13 135/15 197/8 | 100/13 |
| 132/9 141/25 146/13 | compliance [1] | conjunction [1] | 197/12 198/12 204/1 | conversation [12] |
|  | 147/17 | 212/17 | 204/25 206/17 206/18 | 21/1 |
| commissioner [3] | complicated [1] | connected [1] 34/9 | contained [7] 1/17 | 83/23 83/24 89/24 |
|  | 183/3 | conscious [3] 87/11 | 68/25 111/22 112/12 | 92/11 92/14 92/18 |

(62) COBR... - conversation
conversation... [3]
92/25 93/12 93/18
conversations [6]
19/21 27/18 30/12
89/22 99/21 170/1
convey [2] 195/23
200/17
cope [3] 42/21
200/10 201/10
copied [1] 84/3
copy [3] 1/11 11/7 44/17
core [13] 5/15/12
37/11 45/9 53/11
78/17 79/8 123/19
124/1 124/21 176/25 178/19 208/16
core participants [2] 53/11 208/16
corner [2] 45/21 109/13
coronavirus [13]
42/23 46/20 47/3
107/19 113/6 113/10 113/19 113/24 115/1 118/23 132/8 132/10 189/21
correct [31] 16/14 24/24 46/14 54/11 64/7 69/7 94/10 101/8 107/11 107/24 118/2 119/3 129/3 129/20 131/22 143/8 145/6 145/10 150/21 161/13 166/25 179/21 184/2
184/19 185/2 189/25
191/24 198/25 200/15 200/16 203/19
corrected [3] 87/2
201/15 201/19
correction [1] 87/22
corrections [1] 158/9
correctly [1] 150/24
cost [2] 72/5 72/8
coughing [1] 211/10
could [63] 1/8 5/15
12/21 12/22 13/2 21/10 27/5 28/23 29/18 38/17 44/20 46/12 48/11 50/6 65/25 67/10 77/15 79/10 79/21 82/16 84/23 88/15 94/1 94/24 95/1 96/4 97/13 103/25 105/2 105/17 110/3 110/13 116/2 122/10 126/1 131/14 140/3 140/16 147/4 153/18 157/3 168/16 169/4 174/12 179/5 181/6 185/20 186/5 186/7 186/19 189/13

191/14 193/6 193/9 199/8 199/8 200/12 202/12 202/12 202/17 211/13 213/7 213/11 couldn't [14] 85/12 87/4 88/3 88/8 88/11 88/22 89/22 92/24 92/24 95/24 163/24 165/7 168/4 195/21 COUNSEL [6] 1/7 77/14 174/25 217/5 217/17 218/2
countries [16] 69/16 112/1 119/21 119/24 120/3 127/20 182/10 183/6 183/16 184/9 198/7 200/22 209/6 209/17 209/20 209/24 country [24] 2/21 17/17 18/15 26/23 36/13 42/3 45/12 49/20 59/25 69/14 112/11 119/16 165/17 177/21 183/7 193/7 198/6 200/19 209/9 209/14 209/15 209/19 212/9 213/16
couple [4] 22/12 33/6 137/11 185/9
course [62] 2/13 5/18 6/9 9/1 12/15 13/17 19/17 24/1 24/8 24/9 28/4 29/3 39/14 39/19 39/23 41/16 48/8 55/11 60/25 65/22 77/20 78/15 79/3 80/1 80/16 84/4 84/8 87/12 89/3 90/6 95/3 101/2 102/11 103/7 111/24 112/9 118/18 127/11 128/4 128/16 128/23 135/18 136/15 143/12 145/4 146/6 148/14 149/13 149/14 149/20 153/23 154/11 155/17 156/16 162/9 193/7 193/20 196/12 197/4 198/16 203/3 211/17
court [2] 68/15 68/23 cover [2] 113/16 159/25
covered [5] 5/9 48/9 98/16 113/14 155/24 coverings [1] 212/5 covers [1] 114/9 Covid [129] 2/3 3/16 5/16 5/17 6/8 9/16 9/16 9/20 9/22 9/22 10/5 10/5 10/10 11/19 11/23 12/6 12/14 12/21 14/2 21/7 21/15 24/9 24/11 24/15 30/3 32/10 33/22 33/24 38/9 38/18 42/12

42/17 42/20 44/17 53/17 58/21 59/1 59/25 60/16 60/19 60/25 61/4 62/11 69/14 69/24 70/2 70/6 70/8 70/11 70/13 70/16 70/20 70/24 71/6 71/7 71/9 71/9 71/14 71/22 71/25 72/5 72/18 73/20 75/18 76/7 79/17 81/12 81/21 81/21 114/2 128/10 128/20 129/8 136/10 152/25 154/5 155/1 164/10 164/13 164/15 164/18 164/20 164/23 164/24 165/4 165/11 165/12 165/12 165/15 165/24 165/25 165/25 166/5 166/14 166/20 166/22 166/24 167/21 167/22 168/1 168/8 168/8 168/16 168/19 168/24 169/15 169/19 170/2 170/5 170/12 176/7 179/11 179/18 180/1 181/14 182/16 183/10 183/19 184/16 184/23 185/16 196/20 197/25 203/4 203/7 203/22 208/22 210/23 211/9 Covid pressures [1] 12/14
Covid Taskforce [3] 10/10 21/7 21/15
COVID-19 [25] 33/22 38/9 44/17 62/11 70/6 70/11 71/22 72/5 73/20 128/10 129/8 154/5 155/1 164/13 164/23 165/12 165/25 168/8 169/15 181/14 182/16 196/20 203/22 210/23 211/9
Covid-O [4] 9/16 9/20 9/22 10/5
Covid-S [3] 9/16 9/22 10/5
Crazy [1] 185/13
create [5] 24/4 27/8
42/10 122/3 122/12 created [5] 2/19 10/9 35/1 41/25 81/11
creating [1] 54/6
creation [2] 118/19 118/20
Crick [4] 185/10 185/11 185/14 185/21
crises [1] 101/3
crisis [10] 26/7 89/11 95/11 95/22 97/22 98/19 101/2 104/23 130/4 163/8
criteria [2] 36/6 182/23
critical [3] 36/7 36/8 42/11
criticising [1] 206/16
criticism [2] 204/12 204/17
criticisms [2] 205/1 206/21
cross [5] 9/24 27/10 167/1 167/12 206/5 cross-cutting [1] 9/24
cross-government
[3] 167/1 167/12 206/5
crowded [1] 202/4
crucial [2] 130/2
136/16
crude [1] 36/11
crudely [1] $4 / 5$
crystalised [1] 34/4
crystallise [2] 24/14
41/5
CST [1] 112/25
culmination [1]
146/21
culturally [1] 207/6
Cummings [15]
22/16 23/2 23/9 23/18
26/1 26/13 27/14
27/17 90/14 92/20
93/13 95/20 100/9
142/18 143/7
Cummings' [3] 25/12 26/16 143/10
cunt [1] 26/7
curation [2] 177/9 177/13
currency [1] 78/19
current [4] 38/10
127/7 154/3 213/20
currently [7] 17/3
110/2 131/1 131/6 154/4 154/25 200/10
curve [1] 140/13
cut [3] 18/19 26/24
174/9
cutting [1] 9/24
Cygnus [2] 34/9
190/23
Cymru [1] 62/12
D
daily [5] 12/18 24/23
155/6 163/18 211/10
dairies [1] 185/5
damage [3] 150/24
152/4 160/3
damaging [3] 89/18
93/22 160/2
danger [4] 129/24
130/10 130/13 130/14
dangerous [2] 184/4

215/1
Darzi [3] 22/22 24/21
24/24
dashboard [1] 12/19 data [4] 3/2 126/4 139/22 200/21
date [14] 1/15 32/12
32/13 33/1 92/18
116/19 130/21 131/23
133/20 134/5 134/16
139/19 156/15 175/9
dated [5] 10/22 52/6 131/20 153/4 204/14 dates [3] 2/1 45/7 165/4
dating [1] 107/15
day [24] 12/11 12/22
20/12 31/7 31/24
89/23 99/14 106/13
118/22 124/18 133/11
133/11 135/16 139/22 141/8 142/4 142/12 145/19 147/4 153/17 193/24 193/25 194/3 209/23
Dayle [10] 73/5 73/6 74/3 76/22 170/25 171/3 171/4 173/22 217/13 217/23
days [18] 13/18 15/2 22/25 40/3 44/24 66/17 110/2 110/3 110/23 111/10 115/2 122/19 127/1 146/20 177/4 179/17 193/7 204/15
days' [1] 117/18 de [4] 3/16 184/10 184/13 184/17
de facto [1] $3 / 16$ de-escalate [2] 184/10 184/13 de-escalated [1] 184/17
dead [1] 116/15 deal [22] 6/8 9/24 35/17 46/23 57/7 97/19 99/15 104/15 104/15 121/9 132/15 162/1 162/5 171/9 172/19 179/9 179/14 180/5 184/3 199/4 202/22 215/11
dealing [14] 6/9 6/10 19/18 20/3 61/1 99/1 104/17 105/8 108/16 113/7 118/2 179/16 180/6 185/16
deals [7] 113/2 115/7 115/11 115/12 115/13 115/14 209/1
dealt [8] 61/20 61/20
62/20 62/21 81/13
125/2 205/11 215/10
death [10] 37/10
73/21 76/4 114/6 114/12 114/17 128/5 128/9 140/18 169/25
deaths [14] 32/19
33/5 73/14 107/21
108/17 110/25 111/12 125/10 128/3 136/9 138/25 139/16 155/15 155/16
debate [32] 16/25 33/21 35/18 61/6 61/7 91/9 92/15 104/8 105/17 115/25 121/8 121/23 128/11 133/3 134/8 134/24 136/3 136/6 139/2 139/25
140/2 140/3 140/4 141/2 141/5 141/16 142/24 143/2 145/16 150/15 150/18 200/2 debated [3] 104/22 140/7 163/13
debates [5] 5/21
134/12 139/24 151/18 151/21
decades [1] 45/15
December [1] 12/10 decide [1] 34/3
decided [4] 7/1 47/13
183/6 183/16
deciding [1] 35/9
decision [40] 5/2 5/6
5/7 5/12 10/3 10/17 13/20 13/23 14/24
15/7 15/10 15/19 24/7 35/19 41/18 47/6
66/23 67/2 67/5 72/14 72/25 78/18 79/9 80/8 87/11 90/8 123/19 125/21 125/22 134/9 134/14 145/12 146/24 151/4 152/8 152/10 170/8 177/1 183/21
214/16
decision-maker [1] 151/4
decision-makers [5] 10/17 41/18 72/14 72/25 170/8
decision-making [14] 5/2 5/6 5/7 5/12 14/24 15/10 15/19 35/19 78/18 79/9 80/8 123/19 152/10 177/1 decision-taker [1] 152/8
decisions [37] 5/3 7/1 14/3 14/5 14/5 14/14 14/18 15/6 15/14 15/15 15/17 20/17 20/21 20/23

33/10 34/14 35/13 36/12 37/9 68/20 101/6 123/24 124/22 149/8 149/9 149/22 150/12 151/4 151/13 169/20 169/23 187/21 214/10 214/15 214/17 214/19 214/20
declared [3] 129/14 135/17 135/19 declassified [2] 184/24 185/10
decreased [1] 12/6 dedicated [1] 95/8 defended [1] 206/20 defensible [1] 35/5 defer [2] $8 / 2568 / 24$ deficit [1] 20/6 definite [1] 124/19 definitely [5] 51/21 104/12 104/18 124/20 139/1
definitive [1] 119/5 defying [1] 25/20 degree [5] 21/21 23/25 99/10 123/11 196/16
delay [12] 115/10 117/18 129/17 131/10 134/2 134/4 134/10 134/13 135/6 164/17 165/6 168/23
delayed [2] 45/15 64/16
delays [4] 65/22 66/5 192/15 205/18
delegated [1] 191/15
delighted [1] 169/7 deliver [1] 146/18 deliverable [1] 86/16 delivered [4] 84/24 95/16 97/19 114/7 delivery [3] 55/3 125/18 206/19
demand [2] 38/12 72/2
demands [2] 81/9 173/18
demographically [1] 157/12
demonstrated [1] 127/24
demonstration [1] 32/5
denying [2] 29/2 143/24
department [69] 4/3
7/24 28/19 34/25
35/22 35/25 45/1
50/17 50/18 51/12
54/5 55/17 55/18
56/14 57/7 58/5 63/22
63/25 66/15 72/15
72/20 75/24 77/18

78/14 78/16 80/6 80/12 80/16 80/21 80/23 80/25 81/8 81/11 81/25 82/7 82/18 82/24 83/4 83/11 83/15 84/11 89/21 91/5 92/7 98/12 108/8 110/22 117/12 129/3 131/3 141/25 146/11 146/22 153/8 153/13 155/5 155/21 156/18 157/18 158/16 160/19 161/23 162/3 166/2 168/2 170/14 189/2 194/19 209/10 department's [2] 79/15 135/1

## departmental [4]

82/15 83/12 83/17 113/1
departments [8] 7/22 10/12 30/7 30/11 30/23 31/6 94/1 166/15
depend [1] 135/19
depended [2] 135/21 187/7
depending [1] 12/21
deputies [1] 195/23
Deputy [3] 90/18 101/13 198/3
describe [14] 6/14 7/15 13/24 16/17 29/22 33/8 74/9
112/16 133/3 147/25 179/8 180/24 181/11 193/24
described [16] 4/11
6/6 21/2 25/2 71/25
85/25 111/18 122/16 128/16 131/16 136/24 143/25 157/24 161/3 177/22 209/5
describes [5] 44/16 45/22 48/20 49/22 139/7
describing [10] 13/4
18/25 47/6 48/15 55/5 79/11 97/14 161/5 165/4 191/1
description [6] 20/8
121/15 139/5 156/9
190/2 190/5
designated [4]
182/17 182/23 183/5 211/1
designation [1] 182/20
designed [4] 109/7
132/15 168/14 198/23
desirable [2] 34/21
43/10
despite [3] 95/6
95/16 169/17
detail [18] 11/25
13/13 20/22 43/23
dial [1] 13/9
dialled [1] 108/5 61/14 67/21 79/3 79/5 dialogue [1] 72/20 86/21 105/14 113/14 122/23 159/25 167/4 157/7 157/13 159/18 175/13 184/14 192/18 Diamond Princess 214/21
detailed [11] 16/9
[3] 157/7 157/13 159/18
19/21 21/9 48/8 71/20 diary [1] 100/4 167/7 173/15 190/25 did [126] 6/16 9/3 9/7
191/3 191/19 191/20 $\quad 9 / 11$ 10/5 10/5 10/7
details [1] 62/19 $\quad 12 / 2$ 13/9 14/4 17/4
detect [2] 183/2
214/5
detected [1] 61/25
deteriorating [1]
155/16
determined [1] 95/8
devastating [1] 30/6
develop [5] 43/4
96/11 141/13 146/20 187/19
developed [6] 109/21
181/13 181/19 181/20
193/12 198/7
developing [3]
146/11 168/8 195/15
development [8]
119/11 166/16 171/20
177/17 177/17 178/2
196/24 209/21
devolved [4] 115/23
190/9 190/12 209/20
devoted [3] 113/9
113/21 173/21
DH [1] 181/9
DHSC [56] 44/17
51/24 52/10 63/24
78/21 78/24 79/13
80/5 80/19 80/20 83/1
87/22 94/22 95/9
95/22 96/3 96/8 96/8
96/17 96/17 96/25
97/12 97/14 97/21
98/4 99/11 101/9
101/15 101/17 102/8
102/24 103/7 104/19
105/24 108/13 111/2
112/23 113/1 137/6
138/13 143/16 144/11
146/2 151/20 158/4
158/9 164/12 164/14
166/13 166/21 167/8
169/14 170/12 172/3
212/10 213/24
DHSC officials [1]
63/24
DHSC's [2] 98/9
169/17
dhsc.gov.uk [1]
109/12
diagnostic [2] 118/21 118/22
diagnostics [1] 120/6 die [7] 30/5 34/3
die... [5] 42/24
110/12 154/11 182/25 188/22
died [2] 114/25 180/4
difference [4] 8/24
103/9 170/11 200/1
different [40] 2/20
2/25 8/1 9/14 18/10
21/25 27/21 30/7 34/8 34/19 40/8 43/16 51/1 51/25 55/7 59/12 59/14 59/16 61/14 68/2 68/2 70/22 91/15 93/12 93/14 95/12
97/25 100/12 108/9 124/10 135/25 135/25 140/4 151/3 172/9 186/15 187/15 202/25 204/9 207/15
differently [2] 152/10 155/2
difficult [13] 13/22
40/18 51/24 55/24 96/24 98/25 99/8 112/2 133/16 183/2
197/2 197/11 202/22
difficulties [1] 13/19
Digital [1] 3/2
dilemma [1] 34/4
diplomatically [1] 9/10
direct [6] 12/25 13/3 21/10 81/7 192/9 195/7
directed [1] 164/16
direction [1] 132/20
directly [16] 3/9 3/22
5/21 17/17 17/19
18/12 22/24 56/23
57/4 58/9 61/6 78/14 79/16 100/8 106/7 167/2
director [18] 49/18 49/19 60/24 74/8 83/8
101/14 115/16 122/2
175/22 176/1 176/2
176/12 178/9 178/10
178/21 178/22 178/23
181/5
directors [2] 186/9 209/9
disabilities [4]
207/20 207/23 208/6
208/8
disability [1] 153/25
disabled [2] 207/17
208/7
disagreement [1] 170/19
disagreements [1] 152/13
disaster [1] 35/3
discharge [13] 43/17 44/23 48/7 62/17 62/19 62/25 64/5 64/6 64/7 64/10 64/15 66/13 82/7
discharged [7] 44/8 64/12 64/14 65/14 66/8 67/4 88/6
discharges [3] 45/16 67/24 69/11 disconnectedness [1] 21/3
discourage [1] 35/7
discovered [1] 111/14
discrete [1] 73/17 discuss [2] 11/19 44/12
discussed [15] 26/22
44/18 45/3 63/21
63/22 64/16 74/22
99/24 104/6 104/25
116/12 117/1 117/9
123/2 132/3
discussing [3] 14/2
106/12 141/9
discussion [22] 7/3 7/24 16/21 24/12 26/19 33/9 57/11 63/7 66/14 66/17 67/7 67/10 67/14 72/22 76/1 104/13 104/18 104/20 116/9 205/24 206/3 212/6
discussions [11] 6/13 7/20 14/18 17/10 23/17 23/21 62/23 63/4 66/11 105/23 167/20
disease [19] 106/7 108/9 169/25 177/6 177/13 177/14 177/20 179/15 180/14 182/14 183/8 184/24 185/1 185/9 196/14 196/15 196/25 209/6 209/14 diseases [5] 3/4 177/24 179/10 182/22 183/25
disparities [4] 203/1 203/21 205/8 205/9
Disparity [1] 206/25 displayed [1] 157/22 displeasure [1] 194/4
disproportionate [7] 73/13 74/10 75/17 76/4 203/7 203/8 203/10
disproportionately
[1] 73/19
dispute [1] 111/12 disputing [2] 56/21 124/19
dissatisfied [1] $26 / 13$ 190/18 204/13 210/15 done [41] 10/4 15/24 dissolved [1] 176/10 documents [11] 22/7 distance [2] 192/23 $78 / 5$ 78/7 78/8 78/10 193/22
distancing [3] 192/8 192/22 212/4
distinction [2]
140/24 156/23
distributed [1] $2 / 24$
diverse [1] 52/11
do [111] 5/11 5/15
8/17 11/12 11/15 11/15 12/1 19/20 22/1 23/17 25/14 25/23 27/13 27/15 28/25 30/14 30/19 31/12 32/1 39/1 41/7 41/17 42/19 42/25 43/1 44/2 44/11 49/11 58/12 61/16 62/23 63/13 65/7 71/11 72/3 74/18 75/4 78/24 83/9 85/6 86/3 86/9 86/22 87/9 87/12 87/23 93/20 96/19 96/20 97/23 98/2 98/3 98/20 103/17 106/6 106/24 106/25 108/7 114/14 119/21 124/5 131/11 138/19 141/2 143/19 145/16 146/1 147/24 151/25 152/2 152/4 152/7 153/14 155/1 156/5 156/25 161/2 161/10 162/9 162/18 163/5 165/9 165/21 167/15 167/20 168/6 168/15 170/10 170/11 171/15 174/20 176/18 183/17 184/23 186/6 193/19 194/16 194/23 198/15 198/21 199/17 202/12 204/2 204/24 205/1 206/21 207/2 207/11 213/7 214/14 214/20
doctor [1] 175/16
doctors [3] 52/13 63/24 66/16
doctrinally [3] 118/7 137/18 137/20
document [42] 9/5 10/19 11/8 11/9 16/6 16/20 19/4 19/11 30/19 30/20 44/17 44/19 52/2 58/1 58/4 58/16 59/2 59/15 97/16 104/9 116/12 130/2 131/4 132/10 153/3 153/8 154/13 157/22 158/1 158/2 158/6 158/9 163/21 175/7 186/19 187/2 189/13 189/15 189/20 $\quad 207 / 17$ 210/3 210/12

27/5 27/10 42/9 49/21
65/21 76/11 87/21
102/5 132/6 181/15
190/23 190/25 192/16
does [15] 17/9 23/20
26/3 57/23 69/8 69/9
69/12 72/24 80/8 82/5 82/5 114/20 144/2 152/15 160/19
doesn't [10] 20/16 22/24 47/16 54/23 111/24 112/12 114/18 114/20 170/2 182/13 doffing [2] 213/7 215/2
doing [18] 10/11 18/17 21/4 25/7 35/14 61/23 61/23 74/20 75/19 87/7 89/20 90/2 91/22 101/20 143/24 170/8 185/24 199/7 domain [3] 168/19 205/5 206/7
domestically [2]
155/12 156/2
Dominic [9] 22/16
23/2 23/9 25/12 26/13 26/16 27/14 27/17 27/18
Dominic Cummings
[6] 22/16 23/2 23/9 26/13 27/14 27/17
Dominic Cummings'
[2] 25/12 26/16
don't [92] $1 / 144 / 1$
11/7 11/10 14/4 19/10 28/14 29/4 31/14 31/14 36/2 43/22 45/6 46/6 46/25 47/5 51/21 52/24 54/24 60/10 63/11 64/2 64/24 66/3 68/3 73/22 73/25 76/1 77/24 88/25 90/9 90/11 98/6 98/21 99/6 111/12 113/17 117/2 117/4 118/1 118/1 123/18 126/25 129/4 129/13 134/11 137/12 138/2 138/11 138/12 138/13 140/23 141/6 141/21 143/24 144/6 144/15 144/17 144/17 148/4 148/22 149/5 152/3 152/5 157/5 159/12 161/11 164/19 165/2 165/19 166/1 166/8 167/4 167/23 168/10 168/19 168/21 169/22 170/5 170/7 170/17 170/18 175/5 179/14 184/14 201/18
dropped [1] 144/9
during [33] $2 / 35 / 13$
87/21 88/9 104/10 105/18 107/3 114/3 116/6 120/11 120/11 121/24 122/3 122/14 122/23 125/19 128/21 139/9 140/6 142/23 146/6 149/10 167/2 167/14 168/3 171/18 173/10 182/4 183/11 183/13 193/5 194/2 202/12 211/16
donning [2] 213/7 215/2
door [1] 55/21
dotted [1] 33/2
doubled [1] 155/16 doubling [2] 110/2 110/12
doubt [10] 46/13
51/25 56/10 59/17
77/21 90/10 91/3
120/18 133/13 162/12
down [27] $2 / 69 / 2$
16/20 33/13 45/12
48/18 65/24 74/17
95/5 96/14 99/3 99/17
108/6 109/16 123/3
127/18 145/12 151/18
158/6 162/22 193/14
193/22 194/10 194/11
194/14 194/17 195/12
Downing [10] 5/3
13/8 19/25 49/3 112/23 114/14 122/18
124/11 131/17 195/3
Downing Street [10]
5/3 13/8 19/25 49/3
112/23 114/14 122/18
124/11 131/17 195/3
downsides [1]
150/20
DOYLE [6] 174/24
175/2 175/3 208/21 215/11 217/25
Dozens [1] 180/12 Dr [2] 53/1 75/2
Dr Chaand Nagpaul [1] 75/2
Dr Nagpul [1] 53/1 draft [1] 45/2
drafted [1] 201/12 drawing [3] 37/13
135/11 142/2
drawn [4] 36/10 116/10 132/7 132/17 dreadfully [1] 184/5 driven [1] 148/18
droplet [1] 211/19

5/18 6/23 7/11 12/5

| D | $122$ | 19 | 21 | 73/14 73/19 76/5 |
| :---: | :---: | :---: | :---: | :---: |
| during... [27] 12/7 |  |  | d [1] 8/18 | 76/17 171/7 171/13 |
| 20/4 20/14 | effectiveness [1] | 70/2 | ensuring [3] 27/2 | 172/4 172/9 173/12 |
| 24/8 24/10 24/13 25/9 |  |  |  |  |
| 27/15 28/4 28/21 29/3 |  |  | entered [1] 69 | hos [1] 194/12 |
| 36/1 36/4 39/18 39/22 | 126/3 164/13 | encouraging [1] 22 | entering [1] | Europe [2] 120/4 |
| 57/21 60/7 84/13 | efficiency [3] | end [27] 36/21 4 | entire [4] 81/4 124/ | 48 |
| 113/20 171/14 177/1 | 124/4 124/24 | 46/12 46/17 69/6 | 171/2 173/16 | European [1] 200/2 |
| 180/16 186/22 195/21 | efficient [1] | 69/17 88/25 109/ | entirely [5] | Eve [1] 181/4 |
| 180/16 186/22 195/21 | effort [2] | 142/7 145/15 145/2 | 156/14 183/4 20 | even [20] 20/20 |
| 1 | eight [3] 42/1 166/13 | 147/21 154/8 155/21 | 213/14 | 21/22 38/14 42/2 |
| 2] $24 / 15$ 26/21 |  | 159/21 179/22 180/20 | entitled [2] 89/4 | 15 46/18 47 |
| dying [2] 66/21 75/18 | Eight m | 180/21 181/22 185/20 | 153 | 50/13 51/19 54/22 |
|  | 166/13 | 185/20 186/3 186/3 | entry [4] 185/7 185/8 | 55/25 67/25 114/9 |
| $\begin{aligned} & \text { a } \\ & \text { d } \end{aligned}$ | eight w | 192/24 193/5 197/2 | 200/2 200/8 | 119/5 120/3 120 |
|  |  |  | environment | 57/ |
| dysfunctiona | eit | en | 178/17 179 | 177/22 |
| 98/5 | 15/8 52/5 79/16 82/20 |  | environmental [ | g |
| E | 4/19 86 | ended [1] |  |  |
|  | 166/9 168/9 18 |  | 160/12 | 40/20 65/12 66/7 |
| 149/10 197/7 201/1 | 186/22 194/17 195 | endorsing [2] 1 | envisaged [6] | 187/22 |
| 201/2 201/2 | 201/15 203/24 | 156/3 | 59/22 65/13 107/16 | events [3] 133 |
| earlier [27] | elderly [2] | energy [2] | 3 174/1 | 133/17 187/ |
| 21/20 25/3 25 |  |  | envisages [1] 107/23 | eventuality [1] |
| 37/18 37/19 61/19 | el | en | envisaging [2] 64/10 | eventually [5] 180 |
| 63/8 64/17 68/14 | elective [1] 44/2 | 177/21 18 | 146/6 | 186/10 195/2 201 |
| 116/16 147/25 149/2 | element [2] 75/1 | engaged [5] 23/ | epidemiolog | 205/7 |
| 149/12 149/13 149/15 |  | 32/25 78/21 122/17 |  | eventuate [1] 121/12 |
| 149/17 149/20 149/25 | elements [2] 180/13 | 123/5 | epidemiology [ | eventuating [1] |
| 150/3 150/11 |  |  |  | 40/16 |
| 152/7 155/24 173/16 |  |  | episode [1] 195/4 | [2] |
| 176/14 210/4 | 53/7 83/14 103/1 | engaging [2] 28/1 | epithets [1] 26/17 | 170/19 |
| early [31] 6 | 169/11 170/24 |  | equal [1] 209 | every [16] |
| 8/17 9/7 11/24 12/10 | 174/19 215/16 | E | 仿 | 12/22 47/2 49/19 |
| 21/4 22/15 39/23 40/3 | elsewhere [6] 17/20 | 1/23 2/10 2/17 2/18 | 212/12 213/5 | 49/19 49/19 76/6 |
| 48/16 73/16 74/5 76/3 | 40/22 82/10 111/22 | 2/18 2/25 3/1 3/3 3/9 | Erm [4] 88/21 93/8 | 125/17 128/18 141/20 |
| 94/13 101/9 131/22 | 181/8 186/1 | 3/11 3/14 3/18 3/21 | 107/22 129/12 | 185/22 185/23 187/ |
| 80/17 | email [10] 10 | 3/24 4/2 4/6 4/7 4/8 | ES [1] 166/18 | 199/8 209/23 |
| 181/9 181/15 182/17 | 10/24 11/2 48/25 | 4/20 5/5 7/10 41/22 | escalate [3] 184/10 | everybody [4] 29/6 |
| 183/9 192/2 198/17 | 83/17 97/14 109/10 | 42/13 52/5 52/25 53/6 | 184/12 184/13 | 53/7 174/19 205/21 |
| 203/6 203/16 211/7 | 109/11 113/11 164/11 | 54/2 54/4 54/6 54/12 | escalated [1] 184/17 | everyone [6] 9/15 |
| 21 | emails [1] | 58/5 70/8 71/20 74/13 | escalating [1] 172/19 | 17/3 79/16 79/19 |
|  | emerge [3] 140/2 | 75/16 75/24 81/2 | escalation [4] 75/7 | 145/17 150/16 |
| 198/17 | 191/4 206/6 | 101/15 101/16 153/7 | /16 168/2 | everything [5] 5/1 |
| East [2] 1 | em | 156/7 175/24 176/3 | escaped [1] 116/8 | 156/11 156/13 191 |
| 120/15 | en | 176/13 187/3 187/6 | essence [3] 6/6 | 99 |
| easy [5] 99/6 130/21 | 179/22 | 187/19 187/23 188/6 | 110/8 160/1 | evidence [57] 10/ |
| 207/11 214/9 214/16 | emergency [6] 78/16 | 194/19 194/25 198/10 | essentially [6] 5/2 | 13/18 13/21 14/9 |
| ebbed [1] 12/5 | 115/21 178/3 179/2 | 198/15 199/7 201/10 | 9/20 10/25 36/6 53/25 | 15/11 18/1 19/15 |
| economic [2] 88/20 | 191/7 203/4 | 202/17 202/25 203/14 | 59/24 | 21/15 25/18 27/25 |
| 128/6 | emerging [6] | 208/23 211/2 211/8 | established [2] 73/2 | 28/13 28/15 30/2 |
| Ed [3] 166/18 166/25 | 72/4 74/9 140/17 | 213/13 213/14 213/23 | 138/ | 34/11 44/15 48/10 |
| 167/10 | 141/24 212/17 | 213 | estimate [3] 44/18 | 48/24 49/5 51/17 |
| Ed Scully [2] 166/18 | emphasise [4] 110/5 | enhanced [1] 183/3 | 46 | 68/24 69/13 70/1 |
|  |  | enormous [3] 2/1 | estimated [2] | 77/20 78/4 84/10 88 |
| ion [2] 3/1 3/2 | employed [1] 140/4 | 2/13 79/17 | 2/5 | 94/11 97/25 100/ |
| effect [10] 8/9 8/12 | enclosing [1] 109/10 | enough [9] | et [2] 124/2 211/11 | 101/10 120/10 123/2 |
| 31/15 48/16 84/10 | encompass [1] | 38/22 70/3 138/1 | et cetera [2] 124/2 | 124/8 130/22 141/24 |
| 116/22 117/15 140/11 | 192/20 | 147/17 147/20 148/6 | 211/11 | 141/24 148/10 154/25 |
| 188/5 148/23 | encompassed [ | 148/16 202/21 | ethical [3] 33/21 35/ | 155/20 156/21 159/2 |
| effective [7] 7/17 | 178/14 | ensure [9] 3/5 | 35/25 | 159/6 159/14 161/4 |
| 9/12 10/6 117/16 | encounter [1] 162/19 | 84/5 128/1 147/17 | ethnic [14] 50/25 | 161/14 162/1 168/12 |
|  | encountered [1] | 173/10 209/2 209/20 | 53/22 61/18 73/9 | 174/2 202/24 203/6 |

(66) during... - evidence

## E

evidence... [6] 203/9
206/15 209/5 212/18 213/20 216/3
evident [1] 62/1
evolved [2] 39/22 81/18
ex [1] 190/25
ex post [1] 190/25
exact [7] 38/12 42/3
89/15 116/18 131/23
142/7 189/1
exactly [16] 16/15 40/10 94/18 98/17 111/23 122/15 123/17 124/4 139/11 141/20 142/10 160/6 172/11 172/13 192/18 198/15 exaggerate [1] 92/3 exaggerated [1] 87/16
exaggerating [1] 89/13
exaggeration [2]
86/1 86/25
examination [1] 176/20
example [19] 13/9
15/18 20/23 37/4
37/23 39/24 63/21
74/7 75/10 82/25 83/5 86/11 88/5 88/21
88/22 101/16 119/7
192/15 210/25
examples [3] 86/24
88/3 125/1
exceed [1] 38/13
Excellent [1] 44/3
exceptional [2] 35/9 188/1
excess [6] 32/19
33/5 107/20 108/17
128/5 128/9
exchange [3] 132/1 140/16 173/5
exchanges [4] 13/16 19/5 25/18 124/13
exclusive [1] $82 / 22$
exclusively [1] 82/6
execution [1] 178/2
executive [16] $1 / 22$
2/2 2/6 2/9 3/20 4/6
49/20 50/21 52/4
54/12 56/23 58/3
58/11 80/4 80/24
210/19
executives [1] 185/18
exercise [31] 29/14 29/17 29/20 29/23 29/25 30/17 31/3 33/2 33/8 33/19 34/9 37/8 37/10 39/3 39/12

187/20 187/24 188/15 extend [1] 163/10 188/25 189/4 189/7 extensive [5] 117/3 189/11 189/21 189/23 $117 / 8$ 120/5 125/22 190/2 190/13 190/23 191/2 191/4 191/19 198/22
Exercise Cygnus [1] 34/9
exercised [1] 107/17 exercises [1] 191/14 exercising [2] 178/5 188/4
exhibit [1] 153/3
exist [1] 30/20
existed [2] 30/19
177/5
existence [4] 36/1
71/13 135/7 199/10
existing [5] 108/15 115/4 122/9 122/10 147/16
expand [1] 7/17
expanded [2] 19/15 186/11
expect [5] 100/1 136/20 170/14 170/17 190/14
expected [8] 15/8
30/20 44/7 64/22
97/23 190/12 191/3 195/14
expecting [2] 87/8 108/7
experience [7] 14/1
19/18 20/3 20/3 28/2
95/6 172/8
experienced [1] 15/5
experiences [1] 172/4
experiencing [2]
70/19 155/14
expert [6] 162/15
167/7 169/7 182/1 182/2 213/17
expertise [3] 20/11
21/9 162/17
experts [3] 82/13
168/22 209/16
explain [5] 113/7 181/17 182/19 191/14 192/23
explanation [1] 126/4
explicitly [1] 39/11
explore [1] 70/5
explosion [1] 127/10
explosive [1] 160/17 exposed [2] 31/10 215/1
express [1] 91/8
expressed [7] 90/15
91/4 92/13 93/7 97/9
103/7 127/13
expressions [1] 92/2
extant [1] 199/9

145/18
extent [13] 13/1 20/9
20/11 20/15 20/25
35/12 62/21 67/25
75/25 80/19 98/4
103/13 137/6
extinguish [1] 197/15
extra [2] 42/11 76/16
extreme [5] 28/22
34/23 34/24 45/12
170/4
extremely [4] 80/16
111/16 123/17 133/15
eyes [2] 127/17
200/4

## F

face [15] 13/11 13/11 22/11 26/6 51/1 54/18 55/3 57/5 57/12 97/21
104/8 132/7 141/23
210/12 212/4
facial [1] 51/2
facilities [3] 157/10
160/21 162/19
facility [1] 160/12
fact [37] 8/10 12/11
18/1 18/4 19/15 19/24
21/15 31/4 31/12
34/11 37/1 46/10
49/16 51/18 58/13
59/24 74/23 78/2
85/16 90/25 91/5
114/20 117/11 118/25
125/7 127/9 138/12
155/10 165/24 181/4
182/16 183/19 184/16
187/1 189/15 204/14
215/20
facto [1] 3/16
factors [1] 17/7
facts [5] 1/17 32/16
39/3 60/11 102/9
factual [2] 126/17 133/19
factually [1] 169/22
Faculty [1] 76/18
fail [2] 97/22 99/11
failed [1] 45/15
failing [1] 52/11
fair [7] 17/4 32/22 39/6 47/6 52/17 207/5 209/20
fairest [1] 35/4
fairly [3] 9/13 37/2 211/13
faith [1] 192/12
familiar [4] $1 / 13$
155/7 189/19 206/11
familiarity [2] 186/18
188/16
families [4] 53/18
62/11 62/14 152/25
fan [1] 125/25
far [18] 7/8 8/12 12/7
36/11 50/11 59/21
60/20 94/11 119/13
126/1 141/9 145/23
163/7 170/7 184/25
185/18 198/16 198/16
fast [3] 132/16 144/9
202/20
fast-moving [1] 132/16
fasten [1] 51/14 faster [1] 65/7
fatality [4] 115/6
138/23 150/8 182/24
fault [2] 164/1 192/17
favour [1] 27/12
fear [1] 36/23
feasible [1] 212/4
features [3] 30/4
157/8 157/9
Feb [1] 95/23
Feb-May [1] 95/23
February [57] 6/23
7/11 23/1 25/21 29/21 31/5 32/13 34/18
36/18 37/6 39/2 39/19
39/23 40/3 54/2
111/14 114/21 117/12
121/5 122/19 127/2
127/8 128/25 129/19
129/22 131/22 132/1
132/15 133/6 133/12
133/22 153/2 153/4
153/16 154/2 154/9
155/5 155/9 155/25
159/21 172/6 172/7
176/5 181/12 183/23
188/8 192/2 192/6
192/24 194/23 197/23 findings [3] 126/15
197/23 197/25 199/14 190/20 207/10
199/21 200/9 201/15 fine [1] 133/7
February 2020 [2]
7/11 153/2
February 2021 [1]
172/7
fed [1] 167/21
Federation [2] 73/9
171/7
feed [1] 83/22
feel [6] 20/5 24/3
43/6 174/14 194/14
210/12
feels [1] 83/19
FEHMO [2] 73/8
171/6
FEHMO's [1] 73/10
fell [1] 6/25
fellow [1] 93/24
felt [15] $4 / 74 / 1324 / 6$
24/15 35/10 83/8 99/1
99/2 123/3 123/7

184/7 193/16 194/14
195/20 195/24
female [1] 52/12
Fenton [2] 171/18 205/3
fever [1] 179/13
few [18] 10/15 13/18
29/22 40/3 41/11 78/7
110/4 110/13 110/23
111/10 117/18 117/21
119/2 127/1 139/10
154/12 173/19 181/17
few weeks [3] 78/7
110/4 110/13
fewer [3] 12/7 155/9 159/16
FFP3 [7] 56/16 61/9 61/11 162/6 210/25 214/19 214/23
field [3] 175/20 178/2
178/15
fifths [1] 40/4
figure [1] 38/12
figures [3] 32/16
74/9 140/19
figuring [1] 10/1
final [4] 2/1 53/17 170/21 173/1
finalise [1] 133/16
finally [8] 48/4 52/2
61/15 76/2 134/14
164/14 177/17 190/18
finance [1] 81/14
financial [5] 17/6
17/23 18/3 18/8 18/22
find [14] $4 / 19$ 10/6
27/12 28/10 52/13
60/11 88/8 88/14
90/12 165/3 165/7
168/10 199/8 204/3
finding [1] $13 / 22$
fingers [1] 174/21
finish [2] 69/6 89/16
finished [1] 122/15
fire [1] 197/7
first [72] $1 / 42 / 205 / 6$
5/19 11/2 11/12 11/18
16/12 17/8 22/14
22/22 23/16 24/11
29/9 33/7 36/5 39/1
39/19 42/6 47/7 49/12
50/16 54/1 54/17
57/15 57/18 57/25
58/17 62/17 73/17
75/19 87/25 98/7
102/3 102/4 102/12
102/19 106/6 106/24
112/25 117/6 117/21
119/2 119/16 130/2
152/11 153/11 164/22
165/16 166/17 175/5
first... [21] 177/3
177/25 180/25 182/19
182/23 183/21 186/6
192/21 197/3 197/13
197/23 202/2 202/9
203/8 204/1 204/18
204/24 205/18 208/18 211/5 211/8
firstly [4] 84/12 134/1 145/4 171/10
fit [17] 49/21 51/13 51/16 52/14 54/23
56/15 57/12 57/16
57/20 57/22 58/10 58/19 59/15 60/4 60/6 61/16 173/11
fit testing [10] 49/21
52/14 57/12 57/16
57/22 58/19 59/15 60/4 60/6 61/16
fit-testing [1] 57/20
fitting [4] 49/9 53/21
54/18 61/17
five [12] 19/16 23/24 47/4 196/6 200/10 200/17 200/17 200/19 200/19 200/25 201/1 201/11

## five minutes [1]

 196/6five years [1] 23/24
flag [1] 132/9
flagged [1] 61/19 flash [1] 28/3
flowed [3] 12/5 41/16 191/2
flows [1] 3/23
flu [27] 58/24 59/3 59/12 59/22 104/5 104/20 105/23 107/9 107/12 107/15 107/19 107/22 108/2 108/7 108/9 108/11 108/15 116/11 117/25 118/2 118/8 118/11 122/9 122/10 132/4 132/11 138/6
focal [1] 208/25
focus [14] 4/21 26/1
60/2 78/6 94/19 102/7 106/2 106/16 106/16 119/18 125/17 165/19 166/9 170/15
focused [3] 78/14 81/12 96/17
focuses [1] 78/17 focusing [8] 5/1 41/11 60/24 80/15 96/17 121/10 142/8 172/9
folks [1] 8/24
follow [8] 4/20 53/8

78/24 158/12 158/19 160/19 197/7 205/12 follow-on [1] 205/12 followed [7] 76/9 82/21 183/19 188/7 193/4 203/9 206/8 following [10] 9/2 29/17 66/17 108/10 115/18 121/25 124/1 130/25 138/6 181/12 following weeks [1] 181/12
follows [1] 25/10 fomite [1] 211/19 food [2] 105/10 180/5 footed [1] 166/5 footnote [1] 45/25 footnote 9 [1] 45/25 fora [1] 63/4
force [2] 83/18 198/8 forced [1] 45/12 forefront [1] 106/14 foremost [2] 5/19 182/24
forgive [5] 108/12 118/21 126/23 137/20 140/15
form [5] 3/7 71/23 116/1 130/3 215/18 formal [4] 56/14 57/6 134/16 135/10
formally [4] 134/5
134/18 135/7 146/13
format [1] 190/3
former [1] 88/18 forth [8] 3/4 7/14 13/7 14/6 18/11 38/2 42/12 102/11
fortnight [2] 187/20 188/9
Fortunately [1] 34/4
forum [2] 7/2 9/12
forums [4] 9/25 10/6 105/5 115/24
forward [1] 70/20 found [8] 12/23 15/6 27/25 28/22 68/23 69/15 196/1 202/9 four [22] 40/4 73/16 77/24 99/18 100/11 109/17 163/5 169/15 177/7 183/6 183/7 183/16 184/9 209/6 209/9 209/14 209/15 209/17 209/19 209/24 212/9 213/16
four hours [1] 163/5 four-country [4]
183/7 209/14 209/15 213/16
fourth [5] 96/15
197/18 201/2 210/16 210/21
fragmented [2] 2/24

9/23
frameworks [1] 76/15
France [1] 42/4 frank [1] 26/24 frankly [9] 3/5 4/7 4/13 13/1 15/2 17/20 18/15 58/24 59/22
free [5] 63/5 64/21 68/18 82/11 83/9 freed [2] 44/21 47/2 frenzy [1] 23/11
frequency [1] 12/20
frequent [5] 12/2
14/9 14/12 195/14 195/17
frequently [2] 12/6 12/10
friends [2] 93/2 93/6 front [3] 1/12 95/15 166/5
front-line [1] 95/15 frontline [1] 172/8 fruitful [1] 27/23
frustrating [1] 45/11
fulfil [1] 80/13
full [10] 1/8 3/7 7/23
44/11 46/16 77/15 78/9 104/4 125/23 175/1
fuller [1] 170/10
fully [4] 58/7 74/14 96/20 150/14 function [4] 20/11 82/7 178/19 182/2 functioning [1] 182/11 functions [2] 80/13 177/7
fundamental [2]
33/21 196/13
funded [2] 65/4
198/24
funding [4] 2/20 3/23 47/10 209/21
furlough [1] 18/11 further [27] 16/20
18/8 18/22 32/12 44/22 54/19 88/13 96/6 96/7 96/14 106/4 139/25 140/13 145/10 146/7 146/7 164/7 170/9 174/3 176/20 176/21 181/11 191/18 191/25 193/19 207/22 215/12
fuss [1] 194/22
future [10] 16/18
56/12 89/2 135/6
156/11 156/24 157/4
160/1 161/15 162/2

## G

galvanise [1] 87/9
game [1] 94/14 gap [2] 24/4 166/19 gathered [1] 85/24 gave [10] 16/23 36/4 48/10 48/24 51/7 77/20 78/21 120/9 150/9 207/2

## general [14] 5/11

 19/5 24/2 81/21 94/22 106/5 120/12 138/13 165/21 172/16 177/3 185/22 192/13 206/17 generalists [1] 21/22 generally [3] 144/21 196/24 202/2generating [3] 59/20 211/1 212/2
generation [3]
197/18 201/2 201/3
generations [1] 201/5
genesis [1] 131/20
genetic [1] 200/23
genomic [2] 181/24
209/21
genomics [1] 209/19 gentler [1] 26/17
Germany [4] 42/4
120/5 120/21 182/11
get [39] 10/4 15/24
23/10 23/11 38/24
43/11 47/5 51/24 56/8
57/15 58/14 60/11
65/2 88/25 96/24 97/1
99/4 99/9 99/12
111/25 117/5 132/23
140/12 141/13 141/21
161/6 164/2 169/7
174/11 174/13 177/2
180/16 182/11 182/25
184/14 201/4 204/4
205/4 205/23
gets [1] 105/25
getting [11] 22/22
30/12 47/11 47/20
55/2 75/18 119/16
120/7 140/25 185/25
192/15
GISAID [1] 182/9
give [24] 1/8 2/14
12/1 $13 / 5$ 14/1 15/3
16/17 27/20 35/24
41/2 58/12 77/15
108/19 127/3 151/19
154/19 163/16 167/17
167/18 175/1 177/2
178/10 179/19 189/1
given [30] 6/7 10/24
13/13 14/9 18/23 29/5 32/16 38/9 50/18
52/15 52/19 55/13
71/3 84/10 100/12
117/4 120/24 125/1
135/12 136/4 139/22

142/4 145/5 157/17 159/9 181/23 184/7 195/15 209/3 210/20 giving [4] 77/10 89/13 130/22 161/14 global [5] 121/17 127/7 129/9 129/14 160/21
gloves [2] 162/22 163/1
go [53] 1/14 7/8 7/12
8/22 14/22 19/7 21/11 22/23 22/25 23/7
23/15 32/8 43/22 44/9
45/8 45/24 48/11 52/8 57/8 65/17 78/11
78/12 79/21 80/2 81/7 83/13 102/15 107/1
125/21 125/23 126/25
127/1 128/7 131/9
153/18 154/14 161/25
162/22 163/15 164/19
167/11 168/21 171/2
183/15 184/11 184/11
184/12 187/15 193/14
199/12 204/13 206/24
207/12
goal [1] 43/15
goes [3] 50/20
109/11 151/18
going [87] 7/5 8/12
9/4 11/12 11/13 13/7
16/18 19/4 25/24 26/6 26/25 27/8 29/7 29/16 31/11 36/10 39/8 39/21 40/19 40/21 41/3 43/2 44/2 44/15 50/13 50/14 53/16 56/11 57/14 62/20 65/14 65/20 66/4 66/20 66/24 67/9 75/4 77/4 78/11 79/6 88/7 88/12 88/25 91/20 99/5 102/6 104/13 105/24 107/7 108/8 121/9 121/22 126/7 126/21 128/17 134/8 134/24 136/3 138/16 138/25 143/14 147/3 150/17 150/21 152/6 153/4 154/10 155/4 157/11 160/5 163/8 164/21 165/17 169/16 170/9 170/25 174/19 174/19 181/12 185/3 185/7 190/4 206/1 206/10 208/18 212/19 215/11
golden [1] 123/23
gone [1] 65/5
good [19] 15/3 62/7
62/8 62/9 62/10 87/12
100/6 119/5 123/1
123/4 123/7 128/1
good... [7] 151/24
192/12 194/13 195/22 196/5 205/3 212/18
goodness [1] 30/13 got [21] 12/17 27/9 42/8 57/9 79/19 100/14 110/10 112/14 123/4 131/7 143/15 144/1 144/10 144/14 144/16 149/11 169/3 185/12 186/4 201/9 209/20

## government [73]

4/10 5/22 6/25 8/1 10/11 10/12 15/14 17/6 18/18 30/7 40/23 43/9 65/4 70/23 71/4 72/23 75/25 78/16 78/19 78/21 78/22 78/22 80/19 80/22 84/15 85/8 89/10 92/8 92/22 93/3 94/20 98/19 100/10 101/3 105/4 107/7 107/13 122/4 123/12 123/25 124/5 130/4 134/17 135/13 137/25 138/8 138/14 139/11 139/12 142/11 143/20 145/8 148/14 149/13 149/19 150/5 150/6 150/11 166/15 166/16 166/19 167/1 167/12 167/16 170/7 185/5 188/2 191/16 192/14 205/9 206/4 206/5 207/2
government's [5] 93/23 97/8 123/10 124/24 142/3
gowns [2] 51/14 163/3
graduated [1] 42/16 granular [3] 20/6 21/19 61/14
granularity [1] 79/6
great [8] 54/15 59/23 67/21 97/19 159/25 162/1 179/14 214/21
greater [4] 21/21
40/7 170/15 172/23
greatest [2] 35/12 66/18
greatly [1] 38/13
grim [1] 156/1
grind [1] 41/4
grip [2] 45/15 97/11
group [23] 35/25
36/5 37/22 60/20 65/19 74/11 74/24 81/14 132/2 157/12 183/8 186/6 200/24 207/19 208/1 208/12

209/6 209/9 209/19 212/11 212/17 213/17 213/23
groups [8] 9/23
69/24 115/3 164/10
204/19 207/16 207/21 208/10
growing [1] 210/22
growth [1] 38/18
guess [2] 68/16 90/20
guessing [3] 20/16 20/20 90/19
guidance [28] 62/24 64/3 64/6 64/19 65/13 68/21 128/5 153/9 154/3 159/1 159/7 159/10 164/22 192/16 198/4 198/6 212/1 212/8 212/9 212/12 212/15 213/6 213/12 213/19 213/24 213/25 214/5 215/2
guideline [1] 161/25

## H

had [211] 1/20 3/1
4/8 4/9 5/14 5/15 7/23
8/8 8/20 10/15 11/1 11/9 12/11 13/16 13/16 14/9 15/8 17/19 19/10 19/21 21/8 21/18 23/20 23/20 24/5 27/7 27/18 30/11 31/10 34/7 34/8 34/9 34/10 35/25 36/5 37/11 37/22 41/16 42/9 42/12 45/2 45/14 47/12 49/4 49/18 51/13 52/15 56/2 56/3 56/13 60/5 60/15 60/18 61/15 63/19 65/7 67/1 67/10 67/17 68/2 74/23 78/9 79/23 83/19 84/18 85/11 87/4 87/19 88/1 88/3 88/9 88/9 88/11 89/22 90/21 94/9 95/14 95/15 96/17 98/16 98/24 99/20 99/21 99/21 99/23 99/23 100/1 100/3 100/5 100/6 105/5 105/18 106/20 111/15 113/24 113/24 114/7 114/8 114/12 114/25 115/1 120/4 120/5 120/11 122/14 122/14 123/4 123/6 124/7 125/10 125/11 126/2 126/19 127/10 127/11 128/13 129/14 131/20 133/14 133/18 133/21 134/5 134/7 134/17 135/16

135/19 135/24 135/25 $165 / 14188 / 17$ 189/24 |  | $90 / 2$ | $90 / 3$ | $90 / 3$ | $90 / 9$ |
| :--- | :--- | :--- | :--- | :--- | :--- | 137/16 140/15 142/19 197/22

90/10 90/12 90/14 90/15 90/20 90/23 91/3 91/3 91/14 91/21 91/21 92/20 95/18 95/18 95/21 97/13 99/20 99/20 100/3 100/4 100/7 101/25 103/7 103/7 110/9 111/7 111/8 111/10 111/18 112/13 112/15 131/25 141/17 141/17 142/22 143/18 144/13 144/15 158/4 158/4 160/11 160/15 169/4 181/5 185/10 194/1 194/3 194/6 212/8 he'd [3] 45/21 86/16 133/5
he's [4] 81/3 88/25 166/25 167/16
head [6] 2/11 28/18 28/18 30/13 49/19 167/23
heading [2] 57/3 158/7
209/23 209/23 211/16 $86 / 6$ 91/15 92/12 93/4 211/25 212/8 212/11 94/6 94/12 103/18 212/18 212/21 213/1 213/6 214/17
hadn't [8] 15/8 90/25 99/24 99/25 167/8 198/23 199/1 212/22 hair [1] 51/2
half [5] 2/2 29/3 32/15 65/8 65/9
halfway [1] 48/18 halt [1] 41/4
Hancock [34] 4/4 8/5 22/2 22/3 22/18 23/4 23/13 23/18 23/20 25/8 25/15 26/2 26/4 26/11 27/22 27/25 28/10 28/12 31/19 33/25 34/18 35/18 63/23 86/15 86/23 87/10 89/8 90/20 92/21 93/21 94/19 96/3 195/7 204/14
Hancock's [1] 93/2
hand [4] 51/4 54/22 109/13 162/5
handful [1] 29/2
handled [1] 193/18
handling [1] 97/5 handover [2] 77/6 174/20
hands [4] 107/1 107/20 108/18 116/13 happen [7] 30/19 40/21 84/23 111/1 111/3 157/5 205/25
happened [12] 11/1 34/9 68/21 88/1 106/9 135/15 159/17 159/18

110/17 112/13 116/8 131/15 132/9 135/6 137/15 139/12 159/8 161/12 181/15 190/22 191/18 194/9 199/21 200/2 206/15 208/24 215/10
hasn't [1] 164/25 have [272]
haven't [10] 23/8 30/16 31/16 50/11 71/19 104/25 144/1 144/20 161/17 166/9 having [23] 5/22 8/24 9/22 9/25 12/18 13/8 14/17 30/10 40/13 45/21 47/14 74/8 75/25 76/8 89/23 118/9 129/4 150/13 163/21 172/22 174/2 179/9 185/11
HCID [2] 182/13 182/17
he [101] $4 / 54 / 5$
22/21 25/1 25/13 25/14 26/3 26/3 26/5 28/18 28/22 31/14 34/1 34/8 34/10 34/11 34/17 44/16 45/10 45/16 45/17 45/17 45/22 46/19 53/4 67/2 67/4 67/5 80/21 80/22 80/25 84/20 84/25 85/18 86/16 86/17 87/2 87/6 87/7 87/16 88/3 88/5 88/9 88/14 88/19 89/5 90/2 90/2
heads [3] 104/7 107/21 108/1
health [117] 2/21
2/23 3/1 3/3 4/3 9/6 9/6 10/3 17/13 20/11 28/19 30/10 31/6 34/25 35/22 45/1 47/10 50/17 50/19 50/21 51/12 52/5 52/25 53/6 54/4 54/5 54/6 55/17 56/14 57/7 58/4 58/5 60/9 60/20 63/23 66/15 70/16 72/15 72/20 74/13 74/20 75/16 75/24 75/24 77/18 78/15 78/16 81/1 81/11 82/24 95/10 96/18 96/19 98/8 98/15 98/18 99/19 101/15 101/24 106/22 107/2 107/6 120/12 127/18 129/3 153/7 153/13 165/9 169/16 170/14 175/20 175/23 176/2 176/3 176/12 177/12 177/18 178/6 178/10 178/13 178/15 178/19 178/22 178/23 178/25 179/22 179/23 187/3 187/6 187/19 187/23 188/6 189/2 189/3 193/4 194/19 194/19 194/25 198/1 198/9 198/15 199/7 201/10 202/16 202/25 203/14 208/23 209/1 209/4 209/9 210/2 211/2
health... [5] 211/7 213/13 213/14 213/23 213/25
healthcare [22] 18/5 18/6 43/12 61/17 61/18 71/25 72/7 73/9 73/14 171/7 171/13 172/5 173/12 183/1 203/11 210/24 212/20 212/20 212/23 212/24 212/24 214/25
hear [4] 21/14 85/15 85/17 114/12
heard [19] 6/17 7/4
13/18 15/1 18/2 18/25 27/24 30/2 34/16
36/25 82/19 90/25
94/12 99/24 131/15
199/21 203/6 204/11 206/15
hearing [5] 15/7 123/4 142/10 158/22 216/9
heart [7] 78/18 84/14 85/8 89/10 101/2 108/2 204/22
heavy [2] 138/7
138/16
heightened [1] 127/25
held [10] 6/18 75/5 79/5 84/14 90/14 93/10 97/21 100/10 175/19 178/25
Helen [14] 19/8 19/14 21/1 48/10 48/11 49/12 49/22 50/4 90/21 91/1 93/9 93/10 96/4 99/20
Helen MacNamara
[6] 19/8 19/14 48/10 90/21 93/9 96/4
Helen MacNamara's
[1] 48/11
Helen's [2] 20/8 99/24
help [14] $2 / 8$ 6/3 14/4
14/18 21/17 57/23
77/1 95/25 184/8
185/22 188/24 190/10 202/18 213/11
helped [2] 21/7 79/19
helpful [4] 51/6 60/12
63/12 191/14
helpfully [1] 189/16 helping [6] 6/8 13/4 14/2 26/23 127/20 127/20
helps [1] 174/13 her [7] 19/14 19/17 21/2 49/5 83/13 100/1 174/21
herd [9] 136/17 136/25 141/2 141/5 141/13 141/15 141/18 141/23 142/25

## herd immunity [8]

136/17 136/25 141/2 141/5 141/13 141/15 141/23 142/25
here [32] 25/2 54/1 61/12 64/12 91/24 103/10 107/5 111/4 111/19 123/16 125/24 126/1 126/14 128/14 130/10 131/2 131/6 134/11 141/6 142/13 154/23 156/24 159/13 160/2 167/1 179/11 183/21 187/17 192/5 192/22 198/21 208/9 heroics [1] 95/15 Hideous [1] 26/10 high [19] 45/5 46/17 68/15 103/22 115/3 127/15 130/11 157/5 157/9 157/9 163/14 180/14 182/14 182/22 182/24 183/24 184/22 190/2 211/3
High Court [1] 68/15 high-consequence [4] 180/14 182/14 182/22 183/24
high-level [1] 190/2 high-risk [2] 115/3 211/3
higher [3] 20/23 66/3 76/7
highest [1] 213/5 highlighted [1] 62/18 highly [3] 34/22 38/8 43/10
him [36] 14/3 14/4 14/15 14/17 14/18 22/23 23/14 26/9 28/1 28/21 34/20 63/21 86/3 87/2 89/8 89/18 89/24 90/8 90/11 90/12 90/15 91/8 91/25 92/15 92/23 94/1 99/24 111/5 111/20 112/9 143/22 144/17 194/6 194/11 194/14 195/8
hindsight [12] 38/25 39/10 129/24 130/10 130/14 130/15 130/16 130/20 136/8 149/7 149/24 150/2
his [38] 13/17 15/6 22/23 23/6 24/25 25/15 26/2 26/17 46/14 83/13 86/17 89/4 89/5 91/5 91/14 93/6 93/24 93/25

94/19 95/20 97/10 100/4 100/9 111/21 112/2 112/25 120/9 120/10 131/18 142/22 143/24 158/4 158/9 185/12 185/13 194/4 202/19 215/9
history [1] 137/16 hit [2] 87/9 89/5 hm [6] 2/7 11/21 23/19 48/23 63/6 196/18
HMG [1] 128/15
hoc [2] 10/15 210/1 holding [2] 51/7 163/17
holds [2] 80/7 164/24 home [16] 46/13 65/3 65/6 65/15 65/17 65/18 68/22 69/10 147/13 153/22 154/6 154/18 156/3 157/8 157/9 208/4
homes [29] 4/23 27/2 43/18 62/20 64/13 65/6 65/19 65/20 65/24 66/1 66/4 66/8 66/12 67/4 67/9 67/22 119/2
68/21 69/2 69/15 88/7 hundreds [2] 66/19 153/21 153/21 153/23 78/1
153/24 153/24 154/10 Hunt [2] 34/7 34/16 157/18 160/16 161/10 Hygiene [2] 38/5 honest [4] 106/11 138/21
130/14 130/23 143/23 hypothetical [1] 33/1 hope [8] 19/11 47/23 hypothetically [1]
100/16 136/11 136/19 32/15
149/21 151/11 197/14
hoped [1] 100/7
hopefully [2] 57/1 171/8
horrible [2] 34/4 35/6
hospital [27] 42/22
43/3 44/8 44/20 46/12 46/16 46/21 46/22 62/17 63/5 64/5 64/6 64/8 64/9 64/21 64/22 65/14 65/18 66/5 66/8 66/19 66/21 66/22 68/18 69/11 88/7 115/2
hospitalisation [2] 138/23 169/24
hospitals [6] 33/23
41/22 42/9 43/17 60/9 65/23
hot [1] 180/20
hour [3] 133/11
133/11 162/20
hours [6] 31/10
162/9 162/14 162/24 163/2 163/5
how [55] 12/2 20/11
20/19 23/8 35/3 35/9
35/16 37/25 40/20
42/25 43/1 54/24 66/25 67/18 70/4 72/13 72/18 72/24 75/11 82/5 88/11 90/13 91/14 92/14 108/19 109/6 110/11 111/18 114/3 114/6 116/14 119/5 119/9 120/8 122/21 131/5 133/3 135/25 146/5 151/17 151/23 157/22 166/20 168/13 172/3 181/11 181/17 181/23 185/19 205/10 213/11
however [7] 46/14 57/16 92/4 113/5 133/6 183/15 185/19 huge [11] 2/14 30/5 55/19 98/24 99/2 99/2 99/9 100/5 143/18 173/14 184/8
human [8] 111/25 111/25 112/12 112/14
112/14 127/14 127/14 137/16
hundre
d [2] 117/21

96/2 96/3 98/12 98/15 74/12 134/15 146/13

I chaired [2] 101/19 209/18
I clearly [1] 143/21
I commissioned [1] 76/12
I completely [2] 98/9 206/22
I complied [1] 195/12
I continued [1] 194/22
I could [3] 65/25
126/1 191/14
I couldn't [12] 85/12
87/4 88/3 88/8 88/11
88/22 89/22 92/24
92/24 163/24 165/7 168/4
I defer [1] 8/25
I did [17] 9/11 10/7 14/4 26/19 84/19 85/15 105/22 138/2 138/12 148/8 186/24 193/15 193/23 194/3 194/12 194/13 195/2 I didn't [17] 27/5 27/12 59/9 85/14 88/9 88/14 92/11 93/10 105/21 105/21 124/20 124/21 124/22 129/21 136/25 194/22 204/2 I do [13] 11/15 19/20 25/23 44/11 58/12 96/19 98/2 98/20 143/19 152/2 171/15 205/1 207/2
I don't [64] 14/4
19/10 28/14 29/4
31/14 31/14 43/22
46/25 47/5 51/21

I don't... [54] 52/24 60/10 63/11 64/2 64/24 66/3 68/3 73/22 76/1 90/9 90/11 98/6 98/21 99/6 111/12 113/17 117/2 117/4 123/18 129/4 129/13 134/11 137/12 138/2 138/11 138/12 138/13 140/23 141/6 143/24 144/6 144/15 144/17 144/17 152/3 152/5 157/5 159/12 164/19 166/1 166/8 167/4
167/23 168/10 168/19 169/22 170/5 170/7 170/17 170/18 179/14 201/18 202/20 210/3
I dropped [1] 144/9
I emphasise [2]
148/1 149/2
I envisaged [1] 23/23
I eventually [1]
201/25
I feel [1] 174/14
I felt [3] 4/13 35/10 193/16
I fully [1] 58/7
I get [1] 161/6
I got [3] 143/15
144/10 144/16
I had [13] 4/8 5/15
12/11 17/19 27/18
74/23 85/11 99/21
99/23 186/20 193/5
194/14 194/15
I hadn't [2] 90/25 99/24
I have [26] 24/12 25/16 73/16 84/19 100/5 105/21 108/14 108/24 124/13 125/1 130/8 143/17 143/18 148/9 149/21 152/17 154/19 160/24 164/6 164/6 166/9 171/8 187/9 210/14 211/5 215/9
I haven't [7] 23/8
71/19 104/25 144/1 144/20 161/17 166/9
I hope [6] 19/11
47/23 100/16 136/11
149/21 151/11
I indicated [1] 207/15 I just [10] 8/13 24/20 25/11 26/18 44/25 50/12 106/21 154/22 193/21 194/25
I knew [2] 94/2 94/8 I know [22] 6/21 11/8 28/11 30/2 63/22

66/14 69/8 72/16 74/6 I respect [1] 74/24 78/6 106/7 119/13 I said [10] 16/1 23/22 137/13 143/23 167/23 168/1 170/7 186/18 188/16 189/2 189/19 206/11
I known [1] 94/9 I largely [1] 99/20
I leave [1] 30/24
I let [1] 79/24
I looked [2] 88/2 88/8
I made [1] 136/11
I make [1] 40/22
I may [9] 5/10 48/5
62/16 79/14 117/5 144/7 147/14 147/19 161/20
I mean [40] 7/12 13/6 15/11 15/15 21/1 31/2 34/17 37/4 41/20 46/3 47/1 56/1 57/25 59/20 63/19 71/5 71/18 71/19 86/6 86/14 90/13 98/11 98/23 100/9 104/12 105/24 110/22 111/20 112/16 122/13 123/14 129/12 134/9 156/12 161/6 165/18 166/1 167/3 167/12 191/13
I meant [2] 14/8 14/19
I mention [1] 6/24
I mentioned [1] 116/16
I might [3] 26/22 31/2 70/18
I must [2] 4/7 108/3
I need [1] 167/11 I note [1] 69/5
I now [2] 94/21 100/24
I obviously [1] 4/9 I particularly [1] 138/11
I perhaps [1] 9/10 I personally [2] 12/23 42/19
I pretty [1] 75/3
I put [3] 85/2 120/3 125/1
I raised [3] 87/2 124/7 126/9
I really [2] 38/24 195/24
I really am [1] 194/9 I recall [1] 18/13
I received [1] 99/22
I recognise [3] 94/18
98/21 99/7
I recognised [1]
99/23
I remember [2] 89/23 194/8 24/22 24/25 25/10 25/11 25/12 26/4 29/1 29/11 29/20 30/9 31/18 31/19 32/4 34/8 50/4 50/7 51/3 52/17

53/1 53/4 53/25 54/3 55/5 56/1 56/2 56/6

43/5 132/9 I was [41] 6/22 7/7 56/13 58/4 59/15 60/8 17/12 17/18 17/25 60/23 61/11 61/13 18/25 24/17 24/18 63/8 63/15 64/24 65/8 66/14 66/23 67/1 67/15 68/2 68/5 68/14 69/5 69/6 69/13 69/17 70/17 71/6 72/15 73/22 74/5 74/21 75/13 75/22 76/12 76/18 79/23 84/24 88/19 90/11 90/14 90/15 90/22 90/23 98/14 101/19 101/23 101/24 103/9 112/15 115/13 116/4 116/9 120/2 120/18 122/15 124/7 124/15 126/3 128/17 129/24 129/25 I went [4] 7/7 9/9 130/10 130/11 130/17 69/18 101/20 130/23 134/10 135/16 I will [2] 147/6 161/14 138/10 138/13 139/20 I wish [3] 62/22 70/5 144/1 144/2 146/17 171/9
146/19 147/2 148/9 I won't [3] 97/6 148/14 149/21 150/16 172/18 191/25 153/2 156/11 156/13 I would [26] 15/13 156/23 159/3 159/7 26/18 26/21 28/13 161/12 163/15 163/17 $30 / 21$ 31/1 42/18 163/18 165/13 166/23 $\quad 56 / 21$ 62/14 63/1 82/3 166/24 166/24 166/25 $89 / 24$ 100/1 100/7 167/3 167/10 167/16 167/24 168/18 169/2 169/23 169/25 171/25 172/17 173/15 173/17 173/17 173/19 174/7 176/9 177/19 181/13 I'd [11] 7/12 10/19 182/12 184/15 185/10 18/25 19/7 43/25 187/16 188/23 189/15 $56 / 19$ 70/17 79/14 189/22 193/12 195/6 120/2 169/6 210/13 196/4 196/14 200/3 I'II [24] 6/5 22/7 22/24 203/15 203/17 206/2 57/7 69/6 106/4 208/18 209/11 211/14 137/10 151/19 154/22 213/1
I thought [12] 13/1 26/25 34/22 84/20 99/18 100/5 100/6 123/16 123/25 129/12 144/6 150/12

I took [1] 23/23 | $19 / 920 / 8 ~ 20 / 14 ~ 20 / 25$ | I tried [1] 87/25 |
| :--- | :--- |
| $21 / 121 / 1$ | $21 / 7$ 21/21 |
| I understand [10] |  | 21/22 24/5 24/21 15/1 60/17 67/12 35/1 35/20 35/20 36/1 112/8 138/5 195/12 37/20 38/16 39/11 I want [14] 21/25 39/15 39/23 40/3 40/6 33/6 36/14 39/10 45/5 40/11 40/16 40/22 $\quad 48 / 4$ 74/17 84/12 42/6 43/13 46/9 46/16 $102 / 3$ 152/25 160/8 47/7 47/15 47/20 48/5 186/15 196/11 202/23

I understood [3] 152/3 152/5 156/9 186/5 190/16 191/24 200/16 I wanted [3] 3/25

163/15 165/21 167/5 167/17 168/10 168/21 168/25 169/13 170/13 172/11 172/12 185/7 210/9 210/16 215/19 I'm [123] 1/12 7/8 8/9 8/11 9/4 14/14 16/3 16/18 19/4 20/2 25/5 25/24 28/7 28/16 29/1 29/7 29/16 31/14 37/5 44/15 45/5 47/20 47/20 50/11 53/5 56/21 57/8 57/14 57/25 59/20 64/19 67/20 69/5 72/12 73/22 77/4 77/4 77/9 77/17 77/17 79/22 79/25 86/15 87/10 87/17 88/21 89/8 91/25 98/11 98/17 99/5 99/25 100/14

I'm... [70] 102/6
103/22 103/23 104/2
106/11 106/22 109/2
111/20 112/16 112/16 112/18 112/20 115/11 116/22 117/1 117/9 119/4 121/9 124/19 126/21 129/16 130/22 135/23 137/1 137/4 141/9 143/24 147/5 147/5 148/4 148/22 154/22 155/4 156/21 159/25 160/5 160/18 161/14 161/20 162/17 164/2 165/18 166/7 167/3 168/3 168/22 169/2 169/16 170/9 170/13 170/18 170/22 170/25 170/25 172/11 174/9 174/11 174/19 185/7 185/18 189/1 189/1 190/16 192/17
192/21 193/14 196/3 206/10 208/8 208/20
I'm afraid [5] 79/22 147/5 169/2 189/1 190/16
I've [30] 4/11 28/14 34/16 39/15 64/24 67/13 69/17 87/15 111/5 113/14 119/23 119/23 122/23 123/18 123/22 136/24 137/11 137/15 138/3 138/10 139/20 142/13 143/17 148/8 149/6 151/11 158/21 158/22 161/21 165/14
idea [6] 2/15 18/22 33/4 35/7 81/19 151/24
ideally [1] $27 / 8$ identical [1] 141/7 identified [7] 67/17 76/8 112/12 150/24 169/14 207/18 207/21
identify [6] 76/14 88/3 88/15 171/12 197/2 198/12
identifying [1] 204/1
ie [2] $41 / 2$ 134/21
ie give [1] 41/2
if [161] $2 / 82 / 154 / 8$
5/8 5/10 6/2 8/20 11/10 14/5 16/6 16/10 17/5 19/7 19/10 20/19 20/20 21/22 22/12 22/23 22/25 23/14 23/14 23/15 26/25 27/8 30/3 32/2 32/8 32/24 35/2 36/21 37/20 38/17 41/1

41/20 41/23 42/23 43/7 43/14 44/9 45/8 45/20 46/14 46/15 46/18 46/19 47/1 48/11 50/6 50/13 52/8 54/8 54/22 54/23 54/23 55/2 55/6 55/25 56/7 57/8 61/22 61/23 62/16 63/12 65/2
65/16 65/25 66/18 66/24 69/18 70/17 72/13 79/14 79/2 79/24 81/5 82/16 83/2 83/18 83/18 89/16 91/15 91/21 93/12 93/20 96/4 97/13 100/1 100/3 102/15 102/25 102/25 103/3 103/14 103/15 104/8 106/11 109/16 110/17 111/8 111/21 116/2 116/4 117/18 118/13 122/7 127/4 127/6 127/17 128/7 128/13 132/19 133/21 137/23 146/9 147/14 147/19 149/11 149/13 152/6 153/5 153/11 157/16 158/10 158/17 158/23 161/20 162/22 165/13 167/6 169/3 169/3 169/6 171/11 173/20 174/12 174/12 174/13 174/13 176/24 179/19 184/22 187/1 187/18 190/1 191/14 191/20 193/21 194/9 196/5 197/3 198/20 199/11 201/12 204/6 204/12 204/24 206/22 207/12 207/16 215/18 ill [7] 5/16 20/16 36/8 42/21 43/3 43/11 154/11
ill-informed [1] 20/16 illness [1] 212/23 illnesses [1] 115/4 image [1] 90/9 imagine [3] 13/4 32/12 146/21 imagined [1] 32/10 immediately [2] 63/12 75/3
immense [1] 180/6 immensely [1] 74/24 imminently [1] 44/7 imminently' [1] 64/23 immunity [9] 136/17 136/25 141/2 141/5 141/13 141/15 141/18 141/23 142/25
impact [15] 30/6
57/19 62/25 64/19
67/9 74/10 75/18

75/21 92/6 128/6 132/6 203/7 203/8 203/10 206/9
impacted [4] 102/22 103/3 103/16 103/18 impacts [2] 42/17 96/18
Imperial [2] 38/5 138/20
Imperial College [1] 138/20
implement [5]
123/20 140/1 140/8 191/17 207/4
implementation [5] 104/5 151/5 177/11 191/9 206/19
implemented [5] 29/17 151/9 166/21 167/8 190/21
implications [3]
167/12 169/15 181/7
implicit [1] 31/18
impolite [2] 73/24
113/17
importance [4] 101/1
130/5 211/18 212/3
important [34] 25/8 27/22 28/17 28/22 54/19 56/12 56/17 74/23 81/24 90/4 98/4 100/18 100/25 101/5 101/6 111/4 111/7 139/2 150/25 156/23 165/17 166/10 168/1 170/6 172/19 172/22 178/17 182/7 184/7 196/22 197/17 201/13 202/6 212/25 importantly [1] 204/20
imported [1] 159/6
impose [1] 214/5
imposed [9] 122/10 145/1 145/1 147/21 149/1 149/14 149/15 149/25 150/3
impossible [1]
197/12
impression [5] 10/13
26/12 89/14 120/14 166/4
improve [2] 26/23 27/1
improved [1] 10/10 improvement [1] 177/12
improving [1] 172/7 Imran [1] 10/24
Imran Shafi [1] 10/24
inadequacies [1] 48/20
inasmuch [1] 72/9
inbuilt [1] 96/25
incandescent [2]
143/15 144/13 incident [6] 101/14 180/7 181/5 194/21 194/25 195/9 incidentally [1] 199/1 incidents [3] 88/2 104/15 179/23 include [3] 67/3 121/3 204/20
included [6] 11/3
39/3 64/10 172/7
207/19 208/9
includes [4] 63/7
82/1 175/22 208/25
including [18] 18/4
64/12 78/8 93/15 96/7 102/13 121/7 126/16 165/10 165/23 171/23 inevitable [2] 28/4 173/12 173/17 177/8 139/15
182/10 185/1 190/8 211/9
inconsistency [1] 159/13
inconsistent [1]
130/8
incorrect [1] 161/18 increase [3] 42/17 43/1 212/23
increased [3] 12/9
27/3 200/12
increasing [1]
192/13
increasingly [3] 37/6
128/4 129/8
incredible [1] 79/18
incredibly [3] 98/25
99/2 99/8
incubation [2] 110/3 118/8
indeed [24] 46/19
61/5 65/22 71/10
76/25 80/9 94/17
111/15 130/1 130/18
133/18 141/12 153/13
156/8 162/2 162/13
175/19 181/20 188/8
194/18 195/4 199/24
210/5 215/25
independent [1]
82/13
independently [1] 68/15
index [3] 117/22
119/2 216/11
Indian [1] 74/25
indicate [1] $9 / 3$
indicated [5] 56/12
155/9 155/12 196/15
207/15
indicating [1] 175/7
indication [1] 13/5
indications [2] 96/7 203/7
indirectly [7] 79/16 143/15 144/2 144/7 144/10 144/14 144/16 indiscriminate [1] 164/15
individual [7] 10/12
35/8 56/3 85/11 85/13 87/3 88/2
individualised [1] 171/22
individuals [6] 64/11 65/14 97/17 114/25 160/3 206/23
industry [1] 120/6 inefficiency [1] 97/11 inequalities [1]
177/15
inequality [1] 204/19
inevitably [1] 139/18 infected [9] 30/4 43/1 70/5 136/21 154/7 154/10 154/18 155/19
157/15
infecting [1] 109/23
infection [39] 32/20
56/17 66/13 67/17
70/6 70/11 71/6 71/9
121/20 136/22 138/22
138/23 150/8 155/14
156/4 156/7 157/14
162/15 162/17 165/12
165/25 177/10 178/14
178/21 182/2 186/8
193/9 199/5 209/15
212/10 212/14 213/3
213/11 213/15 213/16
213/19 213/21 213/22
214/4
infections [2] 69/2 168/8
infectious [13] 3/3
177/6 177/20 177/24
180/14 182/14 182/22
183/7 183/24 196/14
196/20 209/6 209/14
infectiousness [2]
67/9 68/1
inference [1] 8/11
influenza [5] 57/4
58/24 105/6 160/11 160/14
influx [1] 184/8
inform [1] 192/12
informally [1] 39/25
information [16]
35/24 45/2 75/15 82/9
83/3 83/16 102/8
110/15 110/18 113/11
165/22 168/20 183/15
190/17 192/11 208/5
informed [5] 20/16
21/13 167/17 180/25
(72) I'm... - informed
informed... [1] 181/4 infrastructure [1] 118/6
ing [3] 96/11 112/16 112/17
inherent [1] 37/8
initial [2] 23/6 101/22
initially [1] 205/17
initiate [1] 68/12
initiatives [1] 48/15
inpatients [1] 164/22
input [3] 176/6
204/18 209/7
INQ0000222737 [1] 57/2
INQ000051209 [1] 153/5
INQ000052098 [1] 199/12
INQ000056215 [1] 114/21
INQ000056216 [1] 127/2
INQ000056226 [2] 102/5 186/20
INQ000061266 [1] 166/11
INQ000088643 [1] 50/8
INQ000097872 [1] 204/13
INQ000097875 [2]
52/3 210/15
INQ000101218 [1] 207/13
INQ000106107 [2] 131/14 131/24
INQ000106319 [1]
161/22
INQ000129176 [1] 22/14
INQ000129185 [1] 22/25
INQ000146557 [1] 109/9
INQ000146558 [1] 112/22
INQ000146569 [1] 129/6
INQ000146616 [1] 10/21
INQ000250229 [1] 94/25
INQ000273841 [3] 19/9 48/12 96/5
INQ000273901 [2]
97/13 97/16
INQ000273915 [1] 189/14
INQ000279883 [1] 132/20
INQ000279901 [1]

140/17
INQ000279915 [1] 125/4 INQ000279918 [1] 173/4
INQ00047541 [1] 158/1
INQ00052022 [1] 32/3
INQ00056227 [1] 121/5
inquiry [43] $1 / 71 / 11$ 1/22 4/20 6/21 10/25 27/24 30/2 34/12 43/22 56/11 67/20 67/22 68/7 77/14 77/15 77/19 77/24 78/4 79/5 80/16 81/9 84/9 92/13 93/4 94/12 120/22 126/20 126/24 131/15 174/25 175/4 176/20 186/16 188/4 190/22 199/21 206/15 215/12 215/13 217/5 217/17 218/2
inside [1] 188/9
insights [1] 25/16 insofar [2] 79/7 160/19
instance [3] 2/20 183/24 207/4
instances [11] 36/3
85/11 85/11 85/24 86/24 87/1 87/15 87/18 87/24 88/14 88/17
instead [2] 8/7 66/20
instigation [1] 177/9
instructed [1] 189/10 instruction [1] 188/7 insufficient [3] 54/17
165/10 165/22
insult [1] 74/2
integral [1] 80/21
intended [4] 154/3
186/20 196/4 205/23
intends [1] 78/6
intensely [1] 37/23
intensified [1] 69/11
intensive [6] 38/1
58/20 162/4 162/8 162/19 162/25
inter [1] 57/21
inter-pandemic [1]
57/21
interaction [3] 162/7 162/23 163/4
interactions [5]
27/19 71/15 162/13
162/13 163/10
interest [4] 1/22 4/24 167/25 213/4
interested [4] 20/2
43/14 207/1 208/3
interestingly [1] 180/15
interests [1] 22/23 interface [2] 15/19 176/24
interim [1] 210/18 internal [3] 11/8 48/25 194/24
internalised [1] 140/24
internally [3] 190/20 202/2 206/3
international [6] 55/18 105/5 127/19 182/5 182/6 209/1
internationally [3] 155/13 156/1 159/17 interplay [1] 13/14 interrupt [3] 50/9 129/16 164/3 interruption [1] 147/7
intervals [1] 110/1 intervention [1] 76/3 interventions [17]
5/23 38/11 38/14 38/15 107/3 108/4 108/5 108/12 108/21 108/22 108/23 108/25 109/2 109/7 160/4 168/14 171/11
interview [2] 193/5 193/15
interviews [2] 193/16 193/24
into [64] 12/18 17/7 21/9 24/14 26/7 41/13 43/18 43/18 43/22 44/8 45/21 48/22 49/22 51/9 56/11 60/14 62/20 64/12 64/22 65/15 66/8 67/4 67/9 68/5 68/6 68/11 68/13 69/15 70/17 72/17 79/6 88/7 96/10 104/10 110/6 119/16 119/22 126/25 131/10 134/13 145/9 145/20 146/16 150/21 167/21 168/19 169/4 169/11 169/20 176/7 177/2 181/12 184/8 184/14 186/2 188/5 201/9 202/21 203/16 205/4 205/8 205/24 206/6 209/7
introduce [1] 63/1 introduced [4] 69/11 132/17 147/25 148/12 introductions [4]
200/18 200/18 200/20 201/1
invented [2] 117/7 118/22
investigate [2] 50/22 74/14
investigative [1] 181/2
investigatory [1] 74/15
investment [1] 120/12
invite [1] 114/1
invited [1] 7/10
involve [3] 37/16
139/18 182/5
involved [17] 4/17
6/12 15/22 21/18
30/12 36/21 39/3
59/14 61/6 82/4
180/17 182/6 188/9
189/3 203/24 204/1 204/4
involvement [4] 4/19
4/19 10/2 176/17
involving [2] 67/14 139/16
IPC [1] 212/14
Iraq [1] 126/16
Iraq War [1] 126/16
Ireland [2] 152/25
209/25
is [447]
is: [1] $85 / 16$
is: regularly [1]
85/16
isn't [12] 41/12 54/19
56/18 69/7 103/8
155/7 155/23 156/19
174/15 175/15 196/19
203/14
isolate [2] 17/24
196/12
isolating [2] 18/23 68/22
isolation [2] 160/3 200/11
isolations [1] 200/13 issue [29] 18/2 19/5 35/15 36/14 43/16 43/23 47/18 49/1 49/6 49/13 49/20 51/18 58/21 59/8 67/8 75/8 75/11 91/6 105/5 107/7 113/19 115/8 124/15 124/16 126/19 item 4 [1] 115/13 130/25 164/25 165/1 item 5 [1] 166/12 166/10
issued [4] 164/21 172/6 198/1 213/1 issues [34] 5/6 9/24 38/20 42/3 43/19 48/8 48/17 48/19 49/8 49/22 54/1 81/22 91/10 100/3 123/21 124/3 124/20 124/23 151/12 163/14 163/19 167/15 171/19 172/19 188/3 190/3 199/9
its... [3] 204/7 207/24 211/16
itself [13] 3/21 4/16 4/22 20/14 20/18 42/21 43/13 50/5 50/8 59/16 64/3 80/5 144/19

## J

January [32] 12/10
12/12 22/16 25/21
29/18 39/25 52/6
52/22 54/2 79/13
101/11 101/12 101/19 102/4 117/13 117/15 118/25 153/1 155/21
158/5 158/16 181/1
181/9 181/12 181/22
181/25 182/18 183/10 192/2 192/6 192/24 193/5
January 2020 [3] 12/10 22/16 79/13
January 2021 [2] 52/6 52/22
January 20th [1] 101/19
January/February [1] 192/2
January/February
2020 [2] 25/21 192/6
Jenny [1] 198/3
Jenny Harries [1] 198/3
Jeremy [2] 34/7 34/16
Jeremy Hunt [2] 34/7 34/16
jigsaw [1] 3/6
job [5] 3/16 25/8
27/15 35/14 194/23
jobs [3] 31/9 31/23
31/23
jog [1] 57/1
Johnson [6] 25/8
26/13 27/14 44/5 45/20 46/9
Johnson's [5] 43/24 44/2 44/15 45/9 46/8
join [1] 209/25
joined [1] 179/9
Jonathan [2] 158/3 159/12
Jonathan Van-Tam
[2] 158/3 159/12
Jones [1] 49/2
judgement [1] 135/24
judgment [1] 68/16
July [8] 1/24 12/8 24/17 70/9 70/12 164/11 164/24 176/5

July 2020 [2] 70/12 176/5
July 2021 [2] 1/24 24/17
June [9] 12/8 164/21 166/17 168/9 169/1 169/13 176/1 204/6 204/15
June 2019 [1] 176/1 June 2021 [2] 166/17 168/9
junior [3] 8/7 31/21 82/3
just [111] 2/14 3/3 5/25 7/15 8/13 9/2 11/25 13/4 13/5 14/8 14/8 16/19 21/14 22/12 23/1 24/20 25/11 25/25 26/18 27/1 27/5 29/22 33/6 34/5 37/8 37/13 40/16 41/10 42/14 43/1 44/10 44/14 44/25 46/15 48/9 50/12 52/2 52/18 53/20 57/16 58/16 59/11 60/2 60/12 62/15 63/1 64/15 65/21 65/25 66/5 67/23 68/10 78/11 78/12 80/15 87/19 89/16 91/9 95/19 99/10 106/8 106/10 106/21 107/24 114/19 114/20 117/6 122/11 125/13 127/4 127/17 128/7 128/22 130/14 132/5 136/12 136/12 137/4 141/8 144/20 146/9 147/23 148/21 149/5 153/11 154/19 154/22 157/23 158/22 170/3 171/23 174/7 177/22 179/19 180/21 183/9 188/9 190/5 190/18 191/14 193/2 193/21 194/25 199/16 200/4 204/17 207/12 209/11 210/16 213/14 214/22
Justice [2] 53/18 62/12
Justice Cymru [1] 62/12

## K

Kamlesh [1] 76/13
KC [10] 53/14 69/21 152/22 164/5 208/19 217/7 217/11 217/19 217/21 218/4
keen [1] 167/25
keep [4] 6/2 174/19 174/20 207/9
Keith [3] 95/1 100/23

147/11
kept [2] 193/22 210/1
Kevin [1] 205/3
key [6] 36/22 126/15
126/19 136/9 158/23 192/15
Khunti [3] 76/13
206/16 207/3
kill [1] 79/23
kind [7] 12/20 12/24
30/12 42/15 96/24
185/23 205/19
kindly [1] 1/10
kinds [4] 9/25 35/12 104/19 161/5
Kingdom [22] 24/1 30/6 81/5 103/18 104/24 106/19 116/3 118/15 118/21 121/21 125/11 127/16 128/14
129/17 131/5 133/25 134/6 134/19 135/9 142/21 143/1 155/1 Kingdom's [1] 135/18
knew [13] 42/8 55/25 90/16 94/2 94/8 118/11 156/17 156/18 159/17 159/17 168/18 168/18 183/10
knocking [1] 215/9
know [125] 2/5 4/21
5/1 6/21 7/25 8/4 11/8 15/16 15/23 18/9 19/10 21/11 21/23 28/11 30/2 30/19 35/2 35/5 35/5 36/17 36/18 36/21 37/5 39/24 40/19 40/22 41/4 41/24 43/19 51/17 51/21 54/8 54/24 55/6 55/11 59/7 61/5 63/11 63/22 66/14 66/16 68/3 69/8 71/6 72/16 74/6 75/23 76/1 78/3 78/6 80/1 82/19 85/21 86/10 87/5 89/23 89/25 90/7 93/10 96/2 97/6 97/8 99/22 103/22 105/22 106/7 106/25 107/7 119/13 135/24 136/5 137/13 138/5 143/23 144/17 144/18 148/4 148/5 148/12 148/22 148/22 149/5 151/14 151/16 151/17 151/17 152/1 157/12 162/18 163/7 164/19 165/2 167/4 167/20 167/23 167/23 168/1 168/3 168/6 168/10 168/15 169/17 170/7 174/10 181/14 183/13 184/8 186/18

188/7 188/16 189/2 189/19 197/25 198/16 192/6
201/14 201/18 202/19 latent [1] 118/7
205/21 206/11 206/15 later [29] 23/1 25/24 207/6 208/15 211/20 26/12 29/21 35/22 214/25 215/18
knowing [2] 168/23 208/5
knowledge [8] 57/23 83/14 91/21 91/22 110/16 151/12 186/25 190/11
known [13] 24/5
45/16 67/18 70/19
72/10 77/19 94/9
101/23 128/18 138/9
197/20 201/7 212/2
knows [1] 91/20
Korea [2] 118/22
120/11
L
lab [2] 183/25 184/1
laboratories [11]
177/11 178/1 178/15 184/5 184/23 184/25 185/11 185/14 185/23 186/5 186/7
laboratory [3] 184/9 185/15 185/22
lack [10] 53/21 73/12 93/24 97/11 150/8 151/12 162/5 162/6 166/9 166/10
Lady [31] 1/4 47/22 53/10 62/7 69/22 73/4 73/7 76/21 76/23 77/8 95/3 100/13 147/1 152/19 152/23 164/6 169/9 169/12 170/23 171/5 174/6 196/3 208/15 208/20 210/3 210/8 215/7 215/20 215/23 216/1 216/6 laid [1] 198/11
large [9] 7/19 33/5
42/23 116/14 129/24
146/21 180/21 197/10 198/25
largely [3] 99/19 99/20 159/6
larger [2] 184/25 198/17
Lassa [1] 179/13
last [18] 1/15 13/18 13/19 15/1 19/16 32/17 52/2 52/9 78/7 78/9 85/6 96/16 154/16 169/10 174/15 175/6 175/6 187/16 Lastly [1] 192/2
lasts [1] 33/3
late [9] 12/10 37/14 78/8 78/11 96/20

36/17 40/3 41/12
41/17 52/22 79/5
106/23 111/10 118/16 119/10 120/24 131/11 133/6 136/22 141/8 160/15 161/13 166/13 193/8 198/18 199/2 199/17 199/25 212/6
latterly [1] 1/21
launched [2] 132/24 164/14
Laurence [1] $1 / 9$
laying [1] 119/15
lead [11] 3/17 20/16 77/14 78/15 80/5 105/14 111/11 112/12 201/1 201/3 217/17
leaders [1] 209/10
leadership [3] 24/4 86/18 95/7
leading [3] 33/7 107/5 143/1
leads [1] 80/25
leaked [4] 24/23
112/6 112/10 112/13
leaks [4] 103/4 103/13 103/15 113/13
learned [1] 171/16
learning [5] 153/24
181/20 183/22 207/23
208/6
learnings [1] 190/25
least [23] 3/8 10/15
23/16 32/6 33/20
35/17 37/18 39/25
50/12 135/1 148/25
149/7 149/11 156/3
157/20 159/20 160/22
186/16 186/18 187/25 188/16 191/18 214/10
leave [10] 20/21
24/18 26/2 30/24
40/15 61/13 64/22
120/14 165/5 170/22
leaves [3] 110/17
111/3 155/22
leaving [3] 23/18
26/4 26/11
led [2] 192/8 205/17
Lee [1] 96/6
Lee Cain [1] 96/6
left [8] 24/10 66/21
102/14 105/18 106/20
110/17 110/20 111/15
legacy [2] 3/12 95/17
legal [4] 3/8 80/7
138/9 138/17
legislation [2] 121/23 128/1
legislative [3] 107/17 108/17 121/23
Leicester [1] 76/14
length [1] 65/9
lengths [1] 44/24
lengthy [1] $1 / 20$
lens [3] 42/20 42/22 70/2
less [8] 12/4 19/25
30/9 71/7 93/6 124/9 154/11 198/7
less-developed [1] 198/7
lesson [1] 202/16
let [18] 5/10 19/13
22/14 23/14 25/5
25/25 41/9 43/16
56/24 60/2 79/24
89/16 137/18 194/10
194/11 194/14 194/17 215/18
let's [15] 16/6 22/10 22/12 29/9 32/1 46/6 52/2 60/10 97/24 99/17 99/17 127/1 154/12 157/7 199/11
letter [15] 52/4 52/24 53/2 53/5 74/23
112/22 113/2 114/14 204/14 210/13 210/14 210/17 210/19 212/7 212/9
level [15] 4/18 13/20 20/22 20/23 35/19 45/5 80/24 88/24
99/15 122/22 122/25 123/2 190/2 198/18 213/5
levers [1] 98/15
liar [1] 26/5
life [5] 2/5 13/7 37/9 40/19 41/4
light [5] 8/14 11/23
97/6 113/10 164/7
like [46] 5/8 10/19
12/2 12/12 15/16
16/10 19/7 26/25
33/12 35/15 38/21 43/7 43/25 45/20
62/15 63/2 72/21 75/1 75/16 77/5 79/14 82/12 83/8 95/23
100/12 102/22 103/2
103/16 104/17 117/11 120/14 132/23 141/12 151/19 169/6 173/6 176/24 184/22 190/13 191/6 203/4 204/23 207/16 209/3 210/13 213/18
likelihood [3] 41/3 160/22 200/23
likely [16] 8/20 37/2 37/2 38/8 40/20 60/8 111/9 114/6 114/11 129/8 130/1 130/18 158/11 158/18 169/25 173/6
likewise [3] 12/7 81/8 100/3
limit [3] 35/3 70/25 164/7
limited [5] 66/25
102/21 103/1 153/7 184/2
limits [1] 184/5
line [14] 11/2 11/18
16/12 33/1 33/1 33/3
34/20 46/8 95/15
96/16 138/15 150/14 159/8 161/18
liners [1] 173/7
lines [2] 19/16 95/5
link [2] 115/23 197/20
Linked [1] 70/5
list [4] 11/7 153/19 163/14 200/4
listed [1] 179/11
listened [2] 137/15 174/2
listeria [2] 179/11 180/3
listeria outbreak [1] 180/3
literally [1] 7/12
litigation [1] 43/21
little [10] 2/8 11/25 16/19 80/9 103/9 113/9 113/18 150/9 181/11 183/15
live [3] 18/3 34/3 61/5 Liverpool [1] 17/13 lives [1] 43/14
living [1] 65/17
local [8] 17/15 18/14 83/7 83/9 105/5 115/24 175/23 179/25
locations [1] 51/25
lock [2] 45/12 145/12 lockdown [22] 14/6 36/21 45/22 125/23 127/11 138/10 146/24 147/12 147/14 147/20 148/3 148/7 149/4 151/8 151/9 151/9 151/15 151/25 152/6 152/11 169/23 170/4
lockdowns [11] 5/22 6/13 41/13 43/8 47/14 148/16 150/25 151/24 152/4 160/4 169/21
lodge [1] 13/2
logistically [1]
197/11
London [3] 38/5

138/20 138/20
long [50] 20/3 20/15
46/10 69/24 70/6
70/13 70/16 70/20
70/24 71/9 71/14
71/21 71/25 72/18
96/19 100/10 119/6
147/4 148/6 152/15
160/11 160/21 164/10 164/13 164/15 164/18 164/20 164/24 165/4
165/11 165/12 165/15 165/24 165/25 166/5 166/14 166/20 166/22 166/24 167/21 167/22
168/1 168/8 168/16 168/19 168/24 169/19
170/2 170/5 170/12
Long Covid [36]
69/24 70/13 70/16
70/20 70/24 71/9 71/14 71/25 72/18
164/10 164/15 164/18 Lord Armstrong [1] 164/20 164/24 165/4 88/19
165/11 165/12 165/15 Lord Bethell [1]
165/24 165/25 166/5 167/25
166/14 166/20 166/22 Lord Darzi [2] 24/21 166/24 167/21 167/22 24/24
168/1 168/8 168/16 168/19 168/24 169/19
170/2 170/5 170/12
long-standing [1]
46/10
long-term [6] 70/6 71/21 96/19 160/11 160/21 164/13
longer [8] 64/8 72/4
101/4 131/11 158/14
163/9 169/14 184/17
look [53] 5/16 6/15
7/13 11/9 11/25 16/6 19/11 22/10 22/12 26/17 26/25 28/5 28/6 29/9 29/25 32/1 32/24 33/13 33/23 41/20 47/8 52/2 59/17 60/14 67/21 68/8 72/21 96/11 105/2 109/16 116/4 120/10 127/6 132/19 153/5 153/11 154/12 157/7 175/6 179/5 186/19 187/1 187/18 189/13 190/1 191/21 192/3 198/20 199/11 204/6 207/13 212/15 212/18 looked [16] 46/13 48/25 52/16 52/18 56/2 68/15 88/2 88/8 127/23 150/13 151/23 179/24 187/14 200/21 200/22 204/17
looking [18] 16/19
19/12 19/17 31/16

Lord Mark Sedwill [1] 173/2

## Lord Sedwill [5]

94/25 95/4 140/16
140/22 173/5
Lord Stevens [38]
1/5 1/10 1/20 2/8 4/16
5/25 8/3 9/2 10/14 majority [6] 69/1 83/2
10/22 19/10 22/1 25/4 83/5 83/12 86/7
28/17 28/25 29/23 136/20
32/2 33/17 36/15 41/9 make [29] 8/2 14/3
44/14 46/3 47/23 48/4 $14 / 4$ 14/18 24/7 30/8
48/13 51/20 52/23
53/9 53/16 59/2 62/9
69/23 73/3 73/8 74/1
76/20 76/24 76/25
lose [1] 207/11
lost [3] 23/11 31/8 31/23
lot [33] 14/25 18/15
31/5 42/9 42/9 47/8
47/10 84/21 84/24
85/15 86/9 97/24
97/24 148/18 151/16
151/16 157/10 164/20
165/3 165/15 166/23
167/13 168/2 168/4
171/16 180/3 180/6
180/11 182/24 207/4
207/8 212/19 215/2
lots [6] 7/19 42/24
54/23 93/15 100/17
114/9
low [2] 156/8 197/5
lower [1] 76/9
lunch [2] 100/14

30/14 40/22 42/7 42/7
42/18 48/21 49/21
50/24 58/14 68/19
76/7 78/13 79/1 86/17
91/19 141/20 152/15
154/19 169/10 194/4
194/22 198/21 205/21
maker [1] 151/4
makers [5] 10/17
41/18 72/14 72/25
170/8
makes [7] 7/19 19/14
38/23 84/1 84/2
114/16 121/14
making [26] 5/2 5/6
5/7 5/12 13/20 14/14
14/24 15/10 15/19
20/23 33/10 35/12
35/19 72/9 72/10
78/18 79/9 80/8 91/12
94/18 123/19 152/10
161/7 167/1 167/16 177/1
manage [3] 116/14
manage... [2] 161/10 179/1
managed [1] 195/23 management [5]
56/10 128/5 128/9
177/25 194/24
managing [2] 71/21 107/20
Manchester [1]
17/20
mandatory [1] 147/12
manifesto [1] 113/3 manoeuvre [1] 150/10
manual [1] 213/15
many [19] 4/8 37/25 52/12 69/16 69/18 78/1 81/17 92/14 95/12 95/13 110/12 120/8 132/11 157/8 162/12 176/18 179/25 180/18 198/12
March [86] 6/24 7/12 12/5 36/18 37/3 37/14 37/24 38/3 38/4 38/7
38/17 39/19 39/23
41/12 43/18 44/5 44/13 44/16 45/2 45/4 48/7 49/1 62/24 63/8 63/10 63/14 63/18 63/22 64/2 64/4 66/16 67/2 76/6 119/19 123/20 125/7 125/10 125/20 125/21 125/23 128/20 131/21 133/7 133/13 133/21 133/22 133/25 134/15 135/4 135/16 137/8 137/9 138/4 138/4 138/5 138/19 139/6 139/11 140/15 140/15 142/15 144/8 145/2 145/13 146/14 146/15 147/13 147/16 147/19 148/5 148/11 148/12 148/19 148/23 149/1 149/15 151/12 152/11 161/24 162/3 173/3 184/15 186/12 195/3 198/4 199/10
March 2020 [5] 12/5 41/12 43/18 62/24 198/4
March 3rd [1] 119/19 marginal [1] 116/21 margins [1] 23/5
Maria [1] 200/6
Maria Zambon [1] 200/6
mark [9] 58/25 98/7
98/13 124/14 125/5

141/6 141/9 142/9 173/2
Mark Sedwill [1] 124/14
Mark Sedwill's [1] 98/7
Mark's [2] 99/18 142/7
Mary [1] 49/2
Mary Jones [1] 49/2 mask [2] 55/3 61/8 masks [9] 51/24 52/14 54/18 56/16 57/5 61/11 61/11 214/19 214/23 massive [2] 128/2 138/25
massively [1] 118/13 match [1] 43/2 material [3] 82/9 191/19 191/21 materially [2] 130/6 130/7
materials [1] 67/13 maths [1] 46/25 Matt [8] 8/5 23/4 23/13 25/8 25/15 28/12 63/23 204/14
Matt Hancock [8] 8/5 23/4 23/13 25/8 25/15 28/12 63/23 204/14 matter [19] 8/10 34/8 49/4 63/4 63/16 68/13 69/1 74/21 77/25 81/2 86/15 87/13 87/13 89/3 92/14 114/4 114/20 125/15 129/18 matters [13] 5/8 6/8 17/11 20/1 68/11 78/23 79/3 81/4 82/24 86/1 106/14 113/3 215/10
may [56] 5/10 8/1 11/5 11/13 12/8 22/13 23/25 31/23 32/19 35/23 38/22 44/25 48/5 57/17 58/12 62/16 78/9 79/14 82/6 82/9 87/16 87/22 88/19 95/23 99/10 100/13 117/5 143/25 144/3 144/7 144/14 144/15 147/14 147/19 148/2 149/4 149/17 153/5 157/1 157/19 161/20 162/19 171/21 179/15 184/4 187/21 193/14 195/4 199/17 200/16 201/17 202/4 203/17 208/10 210/19 215/20
May 2020 [1] 171/21 maybe [11] 6/20 30/4 46/21 75/1 75/13

109/25 110/2 115/13 $\quad 68 / 25$ 74/8 74/12 137/23 174/12 183/18 $\quad 80 / 17$ 80/18 81/7 me [49] 5/10 19/13 20/8 22/14 23/14 23/24 24/22 25/1 25/5 25/25 27/20 41/9 43/16 51/4 56/24 60/2 61/16 74/21 79/24 88/23 89/6 89/16 93/11 96/2 100/8 100/12 104/8 108/12 111/19 118/21 126/23 135/23 137/15 137/20 139/22 140/15 150/3 151/1 152/17 154/19 156/13 169/7 180/19 185/17 192/21 194/6 200/7 210/12 215/18 mean [53] 7/12 13/6 14/5 15/11 15/15 21/1 28/25 31/2 34/17 37/4 41/20 46/3 47/1 56/1 57/25 59/20 63/19 65/5 71/5 71/18 71/19 72/24 80/8 86/6 86/14 90/13 98/11 98/23 98/23 100/9 104/12 105/24 110/3 110/22 111/20 112/10 112/16 122/13 123/14 129/12 134/9 156/12 161/6 162/12 163/13 165/18 166/1 167/3 167/12 170/2 189/8 191/12 191/13
meaning [1] 136/4 means [6] 47/11 110/20 118/14 150/9 182/20 184/1
meant [5] 14/8 14/19 41/19 46/11 182/2 measure [3] 121/3 136/9 170/4
measures [33] 17/4 45/12 63/5 103/17 103/23 103/25 104/3 104/4 104/9 104/19 105/19 106/18 107/16 108/13 109/3 117/10 117/12 122/8 128/11 140/3 143/4 143/13 144/24 145/1 145/6 145/10 146/5 147/16 148/16 149/1 149/14 149/18 214/5
mechanism [1] 6/25 mechanisms [1] 17/21
media [5] 148/18
193/5 193/19 193/20 195/3
medical [30] 34/2
35/11 49/18 49/19
52/12 60/24 68/24
101/13 110/8 110/23
113/12 120/9 133/18

176/1 178/9 178/22 198/3 210/10
Medicine [3] 38/6 76/19 138/21
Medley [1] 37/4
meet [5] 52/11 72/2
174/16 193/25 194/3
meeting [73] 7/7
10/25 11/3 11/12
11/14 11/16 11/19
15/7 16/16 23/6 29/18

63/9 63/10 63/12 63/14 63/17 64/2 75/3 75/6 83/16 104/21 105/1 105/22 105/25 106/11 106/12 109/11 110/16 113/1 113/5 113/10 113/14 113/15 114/3 114/5 114/8 74/1

201/22 202/1
meetings [45] 6/17
6/17 7/4 7/10 7/16 7/18 8/5 8/19 8/23

101/5 101/11 101/12
101/18 101/19 101/21

209/17
member [1] 83/15
members [2] 78/3
189/3
memory [7] 31/12 57/1 105/22 107/6 116/4 133/15 159/5
Menon [5] 171/1
174/1 174/5 174/8 215/9
mention [3] 6/24 26/3 124/3
mentioned [8] 7/15

MERS [1] 181/20 134/11 150/19 153/14 Merseyside [2] 17/13 159/11 170/15 175/16 17/19

29/18 39/24 44/6 methods [1] 206/19
44/11 49/17 50/4 50/7 metric [1] 70/7
50/16 51/5 51/10 52/7 Metzer [12] 69/20 113/20 113/22 114/1 microphones [1]

114/15 114/21 128/18 mid [5] 49/1 144/8 132/19 141/8 141/20 194/23 199/10 200/9 142/12 143/2 144/19 mid-April [1] 49/1 144/21 145/14 145/15 mid-February [2] 145/23 145/24 166/17 194/23 200/9
187/8 187/10 187/17 mid-March [2] 144/8 190/16 199/14 201/16 199/10

10/16 10/20 12/2 12/3 might [36] 2/24 15/7 12/12 12/19 13/6 13/9 26/22 31/2 32/18 36/6
13/10 13/16 14/9 $\quad 37 / 25$ 38/1 40/17
63/19 75/10 100/25 $\quad 41 / 2345 / 2063 / 12$

101/22 101/24 101/25 104/9 105/19 106/18
102/12 103/21 124/10 110/12 110/24 111/1
125/19 142/17 142/22 $111 / 2$ 111/11 $121 / 24$
163/18 186/22 186/22 $148 / 2$ 149/15 157/5
186/24 187/6 201/24 157/5 191/7 204/21
middle [2] 102/14
118/25
MIG [4] 9/6 9/6 9/19 10/3
mess [1] 97/11 message [2] 25/23 52/15
messages [6] 22/12
22/15 23/16 38/24
114/5 173/2
messaging [6] 70/16
70/18 71/3 71/12
167/22 168/7
met [3] 78/22 112/24
209/16

69/21 164/4 164/5
169/2 169/10 170/22
174/10 174/13 215/15
217/11 217/21
Michael [1] 210/18
Michael Brodie [1]
210/18

70/18 70/19 79/23

214/6 214/7 214/19
MIGs [1] 9/21
military [2] 20/1 95/9
mind [7] 5/8 24/6
33/20 37/17 107/4 114/10 148/21
minds [2] 103/24 103/25
minimise [1] 150/23
minimising [1] 140/24
minister [53] 7/23
8/16 8/20 10/16 11/3
minister... [48] 12/3
12/13 12/19 13/3
13/17 13/22 14/10
15/21 19/6 20/12 21/12 22/2 24/2 24/12
26/20 27/20 31/13
45/3 47/13 49/6 49/8 49/25 51/7 52/16 63/11 63/17 63/20
75/10 81/3 81/6 81/8 83/19 88/6 97/4 102/1 112/24 113/16 113/22 113/23 114/11 114/16
124/17 125/17 126/7
140/23 142/18 142/21 205/7
Minister's [1] 20/10 ministerial [10] 9/23
10/2 15/19 31/8 31/22 91/17 101/21 122/22 187/20 190/15
Ministerial Code [1] 91/17
ministerially [1] $7 / 21$ ministers [25] 8/7
14/22 27/7 31/5 31/9 49/8 66/16 68/17 68/19 72/17 81/25 82/3 82/14 84/4 86/9 93/25 95/7 102/13
163/7 163/11 163/17
167/24 190/8 192/25 194/13
minority [13] 50/25
53/22 61/18 73/9
73/14 73/19 76/5
76/17 171/7 171/13
172/4 173/12 203/10
minute [4] 112/4
121/14 147/2 193/2
minutes [30] 6/22
7/13 29/19 38/23
39/24 41/11 50/6
50/15 51/10 52/17
102/6 109/10 132/19
139/24 166/17 186/20
187/14 189/9 196/6
199/11 199/14 199/16
199/22 200/3 201/12
201/23 201/25 202/8
202/11 202/15
miscommunication
[2] 144/1 144/3
misdirected [1]
121/12
misfitting [1] 51/18
misinformation [1]
25/1
misjudgements [1] 59/23
misleading [2] $88 / 5$ 88/12
misremembering [1] 86/10
misreported [1] 49/9
missed [1] 202/5
misses [1] 42/15
misstep [1] 201/19 mistake [1] 26/5 mistaken [2] 130/6 130/7
mistakenly [1] 96/15 mistakes [1] 201/14 misunderstanding
[1] 109/5
misunderstood [1] 104/2
Mitchell [3] 208/18 208/19 218/4
mitigate [2] 129/18 133/4
mitigation [8] 36/19 37/16 136/5 136/16 137/2 137/7 141/23 142/25
mix [1] 13/12 mixing [1] 126/16
Mm [6] 2/7 11/21 23/19 48/23 63/6 196/18
Mm-hm [6] 2/7 11/21 23/19 48/23 63/6 196/18
modellers [1] 37/24 modelling [5] 64/25 150/7 151/17 200/11 200/21
module [27] 4/21 4/21 4/22 4/23 5/1 16/3 16/5 34/12 43/21 43/24 48/9 56/12 61/14 62/21 62/22 77/20 78/1 78/14 78/17 79/15 98/17 120/10 161/15 162/2 173/16 173/21 190/22 Module 1 [6] 34/12 77/20 79/15 98/17 120/10 190/22
Module 2 [3] 78/1 78/14 78/17
modules [5] 5/9 79/5 160/1 162/2 176/21 moment [19] 5/25 12/1 17/9 24/4 26/18 46/15 100/13 106/3 122/5 128/17 131/1 139/13 156/5 156/7 156/25 159/24 161/12 161/16 185/4
moments [1] 28/3 Monday [2] 216/4 216/10
monkeypox [2]
179/12 180/10
month [3] 28/5 32/14

36/17
monthly [1] 12/4 months [15] 14/2 32/12 48/16 51/19 52/22 76/3 164/17 166/13 179/8 183/18 193/11 198/17 199/17 211/14 211/25 moral [2] 35/1 35/25 morbidity [1] 70/6 more [67] 4/11 8/18 10/6 18/19 21/9 21/14 25/23 30/10 41/11 41/16 41/16 42/9 47/10 64/14 74/6 74/14 74/16 79/22 85/25 86/24 87/9 89/1 89/6 92/24 94/7 94/7 103/9 105/14 106/8 106/10 111/18 116/21 123/3 125/21 132/12 137/17 144/22 144/22 144/23 146/7 150/17 150/17 151/24 152/4 152/18 161/20 165/21 166/7 167/7 167/7 169/7 170/18 171/22 173/18 174/10 177/5 179/16 179/17 179/21 179/25 184/7 184/25 196/4 196/6 201/13 204/19 214/1
morning [9] 1/4 62/7 62/8 62/9 62/10 62/19 64/17 79/23 156/22 Morris [1] 215/6 mortality [4] 109/25 110/11 140/25 208/1 most [31] 6/6 9/11 15/22 28/21 28/24 28/25 32/17 34/23 34/24 35/5 35/8 43/13 46/17 80/23 82/3 86/19 100/25 101/5 101/6 115/3 140/25 142/8 143/23 158/11 158/18 174/8 191/15 192/10 213/7 214/24 215/1
motivating [1] $86 / 19$ move [15] 19/4 21/25 22/24 29/7 36/14 41/6 41/9 134/9 138/14 144/9 160/8 186/15 196/3 196/11 202/23 moved [4] 18/18 133/14 172/21 202/17 moving [7] 4/16 21/23 80/15 132/16 134/13 146/25 160/23
Mpox [4] 179/13 180/10 182/12 196/15
Mr [98] 1/3 4/4 22/2
22/3 22/18 23/18

23/18 23/20 26/1 26/2 $62 / 18$ 196/10 215/10 26/11 27/22 27/22 $215 / 22$ 216/4 27/25 28/7 28/10 Mr O'Connor's [1] 31/19 33/25 34/18 75/9
35/18 43/24 44/2 44/5 Mr Stanton [2] 210/6 44/15 45/9 45/20 46/8 215/5
48/3 53/13 53/14
53/20 56/11 62/4 62/18 69/20 69/21 73/5 73/6 74/3 75/9 76/22 86/15 86/23 87/10 89/8 90/14 90/20 92/20 92/21 93/2 93/13 93/21 94/19 95/1 95/20 96/3 100/9 100/23 131/18 142/18 142/18 143/7 143/8 143/10 147/11 164/4 164/5 169/2 169/10 170/22 170/25 171/1 171/3 171/4 173/22 174/1 174/5 174/8 174/10 174/13 195/7 196/10 210/6 210/7 212/7 213/1 215/5 215/9 215/10 215/15 215/22 216/4 217/7 217/11 217/13 217/21 217/23 218/6 Mr Brodie [2] 212/7 213/1
Mr Cummings [9] 23/18 26/1 90/14 92/20 93/13 95/20 100/9 142/18 143/7 Mr Cummings' [1] 143/10
Mr Dayle [6] 73/5 74/3 76/22 170/25 171/3 173/22
Mr Hancock [23] 4/4
22/2 22/3 22/18 23/18
23/20 26/11 27/22
27/25 28/10 31/19
33/25 34/18 35/18
86/15 86/23 87/10
89/8 90/20 92/21
93/21 94/19 195/7
Mr Hancock's [1] 93/2
Mr Johnson [2] 44/5
45/20
Mr Johnson's [5] 43/24 44/2 44/15 45/9 46/8
Mr Keith [3] 95/1
100/23 147/11
Mr Menon [4] 171/1 174/5 174/8 215/9
Mr Metzer [5] 69/20
169/2 169/10 174/13 215/15
Mr O'Connor [9] 1/3
48/3 53/20 56/11

Mr Stevens [2] 27/22

## 28/7

Mr Warner [3] 131/18
142/18 143/8
Mr Weatherby [2]
53/13 62/4
Ms [14] 48/14 62/5
62/6 69/19 142/19
152/21 152/22 164/1
208/18 208/19 215/6
217/9 217/19 218/4
Ms Campbell [2]
152/21 164/1
Ms Harris [2] 62/5
69/19
Ms MacNamara [1]
142/19
Ms MacNamara's [1] 48/14
Ms Mitchell [1] 208/18
Ms Morris [1] 215/6
much [57] 31/12 32/9
39/17 40/7 41/16 45/6
53/9 53/15 56/9 58/21
61/19 73/3 76/25
79/21 89/1 89/6 94/7
94/7 94/15 96/2 96/3 97/18 106/16 113/2 115/10 118/16 119/21 120/4 120/17 120/24
125/21 136/8 136/15
140/13 141/7 142/10
151/24 152/7 154/10
169/7 169/12 170/15
170/17 171/21 172/21
172/22 174/14 176/19
179/24 199/19 203/6
206/4 207/10 208/13
210/5 215/4 215/25
multi [1] 64/6
multi-agency [1] 64/6
multiple [7] 86/1 97/9
124/14 142/17 163/9
181/21 201/5
municipalities [1] 127/12
must [10] 4/7 23/10
26/4 89/19 92/9
105/13 108/3 143/12 143/13 143/13
mustn't [1] 123/11 my [139] 1/4 5/4 7/14 7/18 7/25 9/10 10/7 10/12 12/17 17/15 18/24 19/1 22/11 24/6 27/19 28/7 28/16

| M | 202 | 72/7 126/4 132/16 | $\mathrm{Ni}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| my... [122] 30/13 | national [19] 20/1 | 3 200/10 | nig | nor [2] 42/3 95/10 |
| 33/20 36/9 39/15 | 27/9 40/24 41/5 49/18 | 200/12 2 | Nimbus [15] | normal [3] 191/5 |
| 39/16 40/22 47/22 | 50/21 56/1 56/2 56/4 | New Year [1] 24/7 | 32/1 35/14 36/15 | 201/23 214/18 |
| 50/3 53/10 60/2 62 | 60/24 74/7 147/14 | New Year's Eve [1] | 36/17 37/8 39/2 3 | normally [5] 64/15 |
| 62/7 63/1 69/6 69/17 | 14 |  | 186/17 188/8 188/10 | 82/3 83/10 125/25 |
| 69/22 73/4 73/7 73/17 | 178/21 186/8 208/25 | newly [1] 66/4 | 188/20 189/21 215/8 | 135/12 |
| 73/23 76/21 76/23 | 213 | next [17] 15/7 16/20 | 215/16 | 66/20 |
| 77/8 78/13 85/21 | nationals [2] |  | ni |  |
| 86/21 87/10 89/16 |  |  | no [92] | hern |
| 90/20 91/12 91/19 | nature [4] 2/9 98/8 | 110/13 121/22 132/24 | 25/16 25/19 25/22 | 152/25 |
| 91/21 94/11 95/3 | 167/1 183/5 | 141/13 145/19 153/17 | 27/18 27/21 31/1 | northwest [1] |
| 98/12 100/13 104/17 | near [1] | 174/20 202/1 | 456 |  |
| 107/3 109/8 112/19 | nearly [1] 69/5 | next week [3] 21/15 | 56/10 57/19 59/17 | note [12] 11/15 29/16 |
| 113/14 114/10 114/18 | necessarily [7] 7/23 | 23/10 132/24 | 61/22 64/8 66/3 77/9 | 34/5 44/6 69/5 69/8 |
| 117/5 120/3 122/23 | 82/21 87/8 89/20 92/9 | NHS [136] 1/21 1/21 | 77/21 85/16 85/19 | 69/10 71/21 83/17 |
| 123/16 123/18 123/21 | 198/5 201/21 | 1/23 2/10 2/17 2/18 | 88/13 91/3 91/11 | 189/21 189/23 199/13 |
| 125/24 125/25 126/8 | necessary [2] 20/22 | 2/18 2/25 3/2 3/9 3/11 | 92/11 93/10 98/6 | notes [6] 18/25 30/23 |
| 130/13 130/14 130/23 | 173/4 | 3/14 3/17 3/18 3/21 | 104/8 105/17 107/24 | 44/5 97/10 115/9 |
| 136/24 138/3 138/3 | need [50] 1/14 4/1 | 3/24 4/2 4/6 4/7 4/8 | 107/25 110/20 110/22 | 143/10 |
| 138/10 139/20 142/6 | 5/7 20/18 28/13 30/7 | 4/14 4/17 4/20 4/22 | 112/8 114/16 114/18 | nothing [4] 15/9 |
| 145/14 145/16 147/1 | 30/14 38/1 41/24 | 4/24 5/5 5/16 5/20 6/8 | 114/19 114/20 117/7 | 27/18 151/18 161/11 |
| 147/23 148/8 148/13 | 56/19 56/21 64/9 | 7/10 11/20 12/7 14/22 | 117/20 117/22 117/24 | notice [1] 107/8 |
| 148/21 149/6 151/ | 66/19 71/23 77/24 | 14/23 15/15 16/8 | 118/5 118/9 119/1 | noting [2] 64/19 |
| 152/2 152/8 152/8 | 80/2 93/13 97/4 | 16/11 16/13 16/19 | 120/18 120/19 120/23 | 132/5 |
| 152/19 152/23 161/7 | 103/17 104/14 104/20 | 17/10 18/10 19/22 | 121/2 124/25 125/13 | notwithstanding [2] |
| 161/21 163/25 164/6 | 113/6 115/19 118/1 | 20/7 20/17 21/19 24/4 | 130/19 131/11 133/13 | 140/17 140/19 |
| 164/7 166/1 166/3 | 118/12 121/24 122/12 | 26/8 26/14 26/22 | 135/21 136/24 137/4 | novel [9] 101/10 |
| 167/12 167/23 167/23 | 126/25 127/24 139/3 | 28/18 33/11 36/16 | 137/4 141/6 144/20 | 106/7 115/1 132/16 |
| 168/21 169/9 169/12 | 140/21 142/24 143/3 | 36/23 37/3 37/7 37/12 | 144/20 145/12 145/14 | 136/22 177/20 181/23 |
| 170/23 171/5 172/20 | 148/2 149/4 155/1 | 37/17 37/21 38/12 | 146/10 148/2 149/4 | 183/4 189/21 |
| 173/1 173/9 174/6 | 156/5 167/11 175/5 | 38/19 39/3 39/8 41/10 | 149/18 152/17 154/4 | November [5] 1/1 |
| 175/2 178/12 178/21 | 184/14 191/21 193/20 | 41/15 41/18 42/1 | 154/25 155/1 156/5 | 151/9 151/21 152/9 |
| 178/23 186/24 188/14 | 198/4 206/3 207/9 | 42/14 42/17 42/20 | 158/13 160/1 162/12 | 216/10 |
| 193/15 194/8 194/22 | 210/12 210/24 214/10 | 43/7 45/13 45/14 | 165/5 166/1 174/3 | November 2020 [1] |
| 195/1 196/3 204/2 | 214/22 215/12 | 49/18 50/20 54/2 | 184/17 185/12 188/2 | 151/9 |
| 205/3 207/9 208/14 | needed [29] 5/18 | 54/12 56/15 56/23 | 188/11 191/18 191/ | now [63] 1/12 6/20 |
| 208/15 208/20 209/10 | 15/14 15/24 18/22 | 57/20 58/9 58/11 59/5 | 191/19 194/3 195/22 | 7/15 7/25 15/12 22/23 |
| 209/19 210/3 210/4 | 27/1 27/10 29/19 | 61/16 63/16 63/17 | 196/6 214/9 214/16 | 23/10 24/9 38/3 39/14 |
| 210/8 215/7 215/8 | 36/11 47/4 55/20 | 70/3 70/8 70/12 70/15 | 215/23 | 43/19 47/21 54/8 |
| 215/20 215/23 216/1 | 55/25 56/8 60/1 75/5 | 71/3 71/11 71/20 72/1 | no one [2] 117/7 | 55/11 58/16 89/3 89/8 |
| 216/6 | 88/16 95/24 139/13 | 72/3 72/5 72/11 72/21 | 120/19 | 90/19 93/17 94/21 |
|  | 146/6 156/18 166/7 | 74/7 75/14 75/20 76/6 | Noakes [2] 211/17 | 98/6 98/17 100/24 |
| $47 / 2253 / 1062 / 7$ | 180/11 185/23 186/4 | 76/7 79/18 95/4 96/25 | 211/22 | 103/17 105/16 105/24 |
| $69 / 2273 / 473 / 77$ | 205/21 205/25 206/2 | 97/2 101/16 113/3 | nobody [2] 26/5 | 106/4 111/17 114/18 |
| 76/23 95/3 100/13 | 212/12 213/5 214/24 | 126/3 139/18 140/6 | 119/12 | 116/17 120/2 126/19 |
| 147/1 152/19 152/23 | needing [3] 18/7 | 140/11 140/19 140/20 | non [17] 5/17 5/23 | 128/12 128/16 136/11 |
| 164/6 169/9 170/23 | 60/20 144/9 | 147/15 148/3 164/21 | 33/24 44/21 61/17 | 139/9 142/6 144/18 |
| $171 / 5174 / 6196 / 3$ | needs [7] 40/7 52/11 | 166/5 167/3 167/14 | 108/4 108/5 108/12 | 146/8 146/19 146/24 |
| $208 / 15210 / 3210 / 8$ | 164/22 171/13 177/20 | 168/3 168/18 170/14 | 108/21 108/22 108/23 | 147/3 150/15 151/11 |
| 215/7 215/20 215/ | 183/3 200/14 | 176/13 177/14 177/16 | 108/24 109/1 109/7 | 152/2 155/4 157/16 |
| 216/1 216/6 | negative [1] 42/16 | 180/4 186/1 186/7 | 160/2 160/4 168/13 | 159/1 161/13 163/24 |
|  | neither [1] 95/10 | 189/2 191/16 206/6 | non-COVID [2] 5/17 | 170/1 174/19 175/5 |
|  | NERVTAG [5] 56/13 | 208/3 212/10 213/24 | 33/24 | 178/8 178/20 179/11 |
|  | 56/19 57/3 212/18 | 21 | non-damaging [1] | 179/12 186/5 196/5 |
| N | 213/18 | NHS Digital [1] 3/2 | 160/2 | 197/25 203/6 212/6 |
| Nagpaul [1] 75/2 | never [7] 34/4 36/ | NHS England [20] | non-fitting [1] 61/17 | 214/22 |
| Nagpul [1] 53/1 | 93/11 123/19 148/4 | 10 2/18 | non-pharmaceutical | NPI [5] 116/1 123/20 |
| name [5] 1/8 | 148/12 192/9 | 2/18 2/25 3/9 3/18 | [12] 5/23 108/4 | 140/9 149/8 150/21 |
| $77 / 15175 / 1175 / 2$ | nevertheless [1] | 3/21 4/2 4/6 4/7 4/8 | 108/5 108/12 108/21 | NPIs [14] 6/13 16/22 |
|  | 15/16 | 4/20 5/5 7/10 54/12 | 108/22 108/23 108/24 | 16/23 16/25 20/23 |
| names [1] 189/ | new [18] 12/11 2 | 70/8 71/20 101/16 | 109/1 109/7 160/4 | 96/12 122/8 123/25 |
| narrative [2] 20 | 31/9 42/1 42/12 48/22 | NHS trusts [1] 57/20 | 168/13 | 124/22 139/7 139/13 |
| narrative [2] 201 | 65/19 66/1 71/25 72/2 | Nick [1] 187/3 | non-urgent [1] 44/21 | 147/19 147/24 150/25 |

N
nuanced [2] 103/9 111/18
number [73] $2 / 22$
6/23 10/9 11/8 12/17 19/19 20/10 20/13
31/8 33/5 33/22 36/25 43/2 43/3 44/10 64/11 65/23 66/3 67/1 71/22 72/8 72/25 77/23 78/8 84/8 84/9 84/17 84/25 85/3 86/10 89/9 93/1 94/4 94/4 97/3 99/14 101/11 105/7 111/5 122/17 124/5 125/8 127/12 127/15 131/1 131/6 131/7 131/16 137/12 137/14 138/24 142/22 148/15 150/4 150/6 152/19 156/12 156/15 156/15 182/10 182/23 184/5 184/11 184/12 184/21 184/25 187/14 192/20 197/12 205/17 210/9 211/22 213/17
Number 10 [15] 10/9 11/8 12/17 19/19 20/10 20/13 72/8 72/25 84/9 94/4 94/4 97/3 99/14 122/17 125/8
numbers [16] 12/6 43/1 45/7 70/4 87/20 110/1 111/16 116/15 128/3 156/7 157/2 159/3 197/5 197/10 197/14 201/6
Nurses [1] 173/7
nursing [5] 49/17 49/19 60/23 153/21 153/22

## 0

O'Connor [9] 1/3
48/3 53/20 56/11
62/18 196/10 215/10 215/22 216/4
O'Connor's [1] 75/9 objective [2] 136/25 137/1
objectively [1] 91/9
objectives [4] 113/3
114/8 190/3 194/18
obligation [3] 4/13
146/2 146/11
obliged [1] 208/20
observation [2] 7/18 7/25
observations [2]
19/13 39/16
observed [1] 8/13
observing[1] 8/15
obvious [6] 4/17 37/2 37/15 37/16 97/17 150/4
obviously [39] 3/3 4/9 11/10 13/5 15/11 15/12 15/24 17/15 18/10 30/5 39/22 40/23 42/8 56/7 58/20 58/21 60/13 65/16 67/19 68/7 71/5 75/14 75/20 93/12 98/11 98/24 100/17 101/9 122/17 133/20 141/15 151/4 156/12 161/13 168/3 187/7 188/3 202/6 213/4
occasion [4] 17/12
188/19 196/17 202/9
occasional [1] 28/3 occasionally [1] 90/16
occasions [6] 10/15 29/2 86/1 97/10 111/5 187/11
occupancy [1]
157/10
occupation [1] 157/9 Occupational [1] 76/18
occupied [1] 44/23
occur [3] 125/10 193/10 211/14
occurred [3] 29/20
137/10 138/11
occurring [2] 159/2 192/15
occurs [3] 158/10 158/17 158/24
October [9] 10/23 11/16 11/17 11/24 12/8 16/14 164/14 175/9 176/10
October 2021 [1] 176/10
odd [2] 106/9 188/22
off [15] 14/22 23/3
83/13 133/18 143/15
143/20 144/10 144/14
144/16 156/12 157/23
159/10 161/1 167/23
215/9
offended [1] 192/10
offer [3] 8/14 185/14
185/24
offered [1] 185/11
offering [2] 185/25 192/8
office [42] 5/4 5/13 10/9 16/22 20/9 20/10 21/4 22/5 30/21 49/2 49/15 51/11 55/18 56/2 72/8 73/1 83/22 84/9 94/3 94/4 95/25 96/10 99/15 122/18

123/1 124/11 159/11 167/21 168/5 168/7 170/12 170/16 189/5 189/6 190/17 190/20 191/13 191/22 205/8 205/9 207/1 215/13
Office's [2] 50/15 51/3
officer [20] 3/23 4/12 49/17 60/23 74/13 80/11 80/18 81/7 101/13 110/8 110/23 113/12 120/9 133/18 134/11 150/19 153/14 159/11 176/6 198/3
Officer's [1] 68/25
officers [1] 131/3
official [6] 49/3 82/15 122/22 122/25 125/17 131/17
officials [8] 16/23 19/18 63/24 101/12 102/13 114/22 121/7 131/4
often [9] 7/19 17/16 46/11 51/23 64/17 86/24 191/15 202/3 213/25
Oh [4] 104/2 119/23 125/14 141/17
okay [17] 54/1 56/20 57/23 58/15 60/2 60/12 61/10 154/8 155/3 155/12 155/19 157/15 165/5 167/6
168/11 173/20 215/21 old [1] 45/15
older [1] 157/12 on [416] on-call [1] 181/5 once [14] 103/18 105/18 110/16 110/20 111/3 111/4 112/6 112/14 113/12 155/22 156/16 156/17 168/25 184/23
one [97] 2/17 2/25 4/9 10/19 13/23 13/24 14/17 16/22 18/1 18/17 19/13 20/19 21/9 25/23 26/17 32/17 34/17 34/25 36/4 36/21 38/4 38/5 38/20 39/16 40/6 40/11 43/23 44/25 47/2 48/18 52/2 54/22 55/4 59/23 62/22 65/25 69/23 70/22 73/10 80/22 84/1 84/4 88/18 92/18 92/21 92/25 92/25 94/10 94/10 97/7 99/23 102/3 104/13 109/23
112/11 117/7 120/13

120/19 124/9 124/15 optimal [1] 214/18 126/11 126/14 126/16 optimally [2] 7/17 131/16 136/4 137/2 38/11
137/12 137/17 137/21 optimistic [3] 90/4 143/22 153/3 154/19 $\quad 92 / 4$ 193/12
161/20 162/7 162/9 option [1] 214/10
162/22 162/23 163/3 options [1] 160/2
163/4 164/14 165/9 or [186] 5/23 6/22 7/1
165/13 169/10 169/15 $7 / 9$ 10/5 13/6 13/9
170/5 174/7 180/10 $13 / 19$ 15/8 18/17
181/15 186/16 186/24 19/16 19/20 19/23
195/4 196/4 197/7
203/1 204/21 207/8
214/20
ones [5] 108/24
139/8 139/9 152/12 189/9
ongoing [9] 32/14 50/22 53/24 60/4 60/13 60/15 60/18 61/5 71/24
only [22] 37/15 43/15 56/6 62/1 69/23 79/7 92/17 92/17 92/18 106/4 109/18 117/18 120/2 148/1 159/23 160/24 164/13 164/15 181/25 184/2 184/21 201/10
onto [1] 192/18
onward [2] 121/16 200/23
onwards [1] 138/19
open [3] 27/8 55/21
149/18
openly [1] 138/22
operate [1] 159/19
operated [2] 19/22 178/25
operation [18] 5/19
29/8 29/12 32/1 32/6 35/14 36/15 36/17 39/2 81/15 182/5
182/6 182/10 186/17 188/8 188/10 188/20 215/8

## Operation Nimbus

[11] 29/8 32/1 35/14 36/15 36/17 39/2
186/17 188/8 188/10
188/20 215/8
operational [9] 2/11 5/8 6/8 9/12 9/16 20/21 21/6 97/11 214/7
operations [2] 44/21 93/23
opinion [5] 89/4 89/5 92/2 135/22 214/12
opportunity [1] 16/4
opposed [6] 78/23
89/2 89/7 93/3 106/17
167/2
opposite [1] 109/19

22/5 22/7 23/1 26/6 26/13 26/14 26/20 28/2 28/10 30/16 30/19 30/24 31/23 32/6 33/3 34/2 34/6 34/21 36/18 37/2 37/2 37/14 37/17 37/18 39/13 42/11 42/14 42/20 44/23 45/7 45/7 46/22 46/23 51/1 52/6 53/2 53/3 54/23 55/3 59/7 61/18 61/20 62/24 65/6 66/4 66/11 67/7 69/11 70/2 75/12 75/24 78/21 78/22 79/8 79/16 80/20 82/8 82/9 82/9 82/9 82/21 82/25 83/1 83/13 83/15 83/17 83/19 83/22 84/1 84/19 86/1 86/5 87/12 87/21
87/21 88/1 89/12 89/13 91/8 91/9 92/2 92/3 92/3 95/5 96/8 96/9 96/12 96/25 97/2 98/5 98/5 99/15
103/24 104/10 104/11 105/10 105/17 105/19 107/19 107/24 111/18 113/2 114/19 115/25 115/25 116/1 117/21 119/8 119/13 119/14 120/23 121/10 122/9 124/15 124/25 127/11 128/12 129/17 129/18 131/16 133/6 135/1 135/19 135/20 136/4 136/20 136/20 136/22 142/25 151/24 154/6 154/11 154/18 156/3 157/8 157/17 158/14 161/18 162/6 166/10 168/9 171/10 176/3 177/21 179/8 179/22 182/4 183/11 185/15 186/2 186/22 188/1 189/10 191/4 191/16 193/15 193/15 193/25 194/17 195/7 198/24 201/16 203/17 203/24 204/15 205/5 205/11 206/19 206/23 209/1 209/5 213/13 214/7
orally [1] 48/24
order [6] 9/13 102/4 147/13 148/3 163/8 163/10
ordered [1] 147/15
orders [1] 41/25
ordinate [1] 166/15
ordination [1] 96/13
organisation [10]
2/11 2/13 4/12 52/6
176/2 176/6 176/10
178/12 198/1 202/13
organisations [5]
73/10 153/19 171/8 202/14 206/23
organised [1] 98/15 organising [1]
188/10
orientated [1] 207/6
orientation [1] 187/8
Origin [1] 74/25
original [3] 64/25
81/18 114/1
Oscillating [1] 13/23
other [79] 5/17 5/23 6/9 6/13 8/5 8/21 10/16 19/1 25/16 27/25 31/6 31/21 33/24 34/22 35/8 41/14 42/3 42/11 43/20 51/17 61/4
74/22 75/4 81/13
81/14 82/8 82/12
82/14 84/14 85/15
87/5 90/22 92/22
93/25 94/20 101/14
102/24 103/2 108/6 108/13 108/22 109/1 109/19 109/23 110/1 114/9 116/1 117/21
119/20 119/21 124/5 124/12 127/20 128/16 137/24 149/18 153/23 154/13 160/14 162/1 165/15 166/1 166/14 176/16 179/10 179/15 181/14 183/14 183/23 184/8 191/13 194/18 197/19 201/24 202/14 204/19 210/3 210/4 211/3
other PPE [1] 61/4 others [18] 7/25 8/25
11/5 12/13 13/3 21/12 22/2 22/4 25/9 63/21 75/16 101/18 126/7 142/19 150/19 171/19 195/7 208/4
otherwise [4] 22/5 65/20 195/19 214/6 ought [2] 34/14 207/19
our [45] $1 / 41 / 11$ 3/16 $\quad 183 / 18$ 187/1 211/14 5/18 30/15 36/9 37/22 214/3
72/16 77/5 79/17
79/22 98/17 106/22
109/20 111/23 114/8 116/19 121/2 127/17 129/25 135/25 150/21 156/24 156/25 157/3 161/18 163/14 166/4 168/23 171/16 172/17 175/3 181/4 181/7 181/8 182/2 186/8 191/7 192/17 194/12 194/12 198/10 200/3 201/18 210/1
ourselves [1] 109/6 out [67] 6/25 10/1 12/14 15/20 17/16 24/16 25/25 30/3 41/23 46/7 56/4 60/11 65/21 66/10 69/14 90/12 94/6 99/14 103/10 106/3 106/3 110/11 111/19 114/5 115/7 115/17 116/25 118/10 119/15 119/18 121/18 121/22 121/25 124/17 127/17 128/20 128/22 130/2 135/15 138/3 138/10 139/6 142/9 148/13 148/17 150/22 154/22 156/11 156/14 159/1 161/18 165/3 165/7 168/10 172/17 174/12 175/13 185/8 186/1 192/16 197/7 197/20 198/11 201/4 205/4 215/3 215/19
outbreak [2] 180/3 197/8
outbreaks [9] 69/10 111/22 178/3 179/10 179/15 179/16 179/22 180/2 180/22
outcome [4] 76/8 125/18 191/5 194/13 Outcomes [1] 203/22 outline [1] 177/3 outlined [1] 32/9 output [1] 191/6 outset [1] 198/14 outside [2] 112/15 210/25
over [34] 1/23 3/4 12/15 15/1 32/20 32/24 44/6 44/9 44/24 57/14 64/21 66/17 69/18 71/24 72/17 78/7 81/18 105/12 127/19 128/7 132/25 145/12 146/20 148/17 153/18 162/9 162/20 164/17 165/9 175/18
overall [4] 2/23 51/23
98/22 165/22
overarching [2]
69/12 146/5
overexaggerate [1] 123/12
overly [2] 92/3 120/21
overnight [1] 155/17 overoptimistic [1] 84/22
overpromised [1] 84/23
overpromising [4] 89/1 89/7 89/25 90/8
overrun [1] 161/21
oversee [2] 2/20
178/24
overseeing [1] 54/7 oversight [4] 166/14 167/21 177/11 177/25
overview [3] 13/14
14/1 68/4
overwhelm [6] 16/19 41/10 41/19 45/14 142/21 143/14
overwhelmed [22]
16/13 16/15 33/23
36/16 36/23 37/3 37/7 37/12 37/17 37/22 38/19 39/4 39/8 41/15 42/14 42/15 43/7 95/22 96/8 97/2 140/6 147/16
own [9] 38/25 46/7 50/15 51/3 83/14 97/8 141/25 153/23 202/6 owned [1] 206/4 owner [1] 22/17

PAC [1] 172/14
pace [1] 111/1
package [6] 145/18
145/20 145/25 148/5 148/11 148/23
page [80] 1/12 1/15 6/16 9/2 19/9 29/10 32/8 32/24 33/14 33/16 44/5 44/9 45/25 48/12 50/8 52/8 57/8 57/9 57/14 94/25 96/5 96/14 96/22 96/23 97/13 102/4 102/12 102/13 102/14 102/15 105/2 105/12 109/16 114/22 114/22 114/23 121/7 121/8 121/22 121/25 122/16 125/20 127/4 127/6 127/18 127/19 127/21 132/25 132/25 153/12 153/18

153/18 153/19 154/1 $\quad 107 / 15$ 110/7 111/8 154/14 154/15 154/19 111/9 111/24 112/3
154/23 158/7 162/1
166/11 166/12 175/5
175/6 175/7 179/6
187/1 187/1 187/16
187/16 190/1 190/4
192/4 198/21 200/3
200/4 204/7 207/13 207/14 217/2
page 1 [3] 57/9 102/4 114/22
page 12 [3] 45/25 154/19 154/23
page 2 [12] 57/8
114/22 121/7 127/4 132/25 153/18 153/19 panel [1] 35/2 154/1 162/1 166/11 190/1 200/3
page 3 [5] 158/7
166/12 179/6 190/4 207/13
page 30 [1] 96/5
page 33 [1] 192/4
page 39 [2] 19/9

## 94/25

page 5 [5] 6/16
102/15 114/23 121/8 127/6
page 53 [1] 48/12
page 594 [1] 97/13
page 6 [4] 105/2
127/21 154/14 154/15
page 7 [4] 29/10 32/8
33/14 50/8
page 8 [1] 187/16
page 88 [1] 96/22
page 9 [1] 198/21
page of [1] $1 / 12$
pages [4] 78/1 109/9 127/3 128/7
pages 1 [2] 109/9 127/3
pages 8 [1] 128/7
painted [1] 45/21
pair [1] 163/1
pan [2] 117/25 132/11
pan flu [1] 132/11
pandemic [88] 2/3
4/16 4/18 5/3 5/13
5/18 7/2 12/16 20/5 20/14 21/4 22/6 22/16 paragraph 181 [1] 25/9 25/13 28/5 32/10 96/22
40/24 41/17 41/23 paragraph 2 [2]
45/17 48/16 54/8 57/4 57/12 57/18 57/21
58/24 59/3 59/12
61/21 61/24 70/7
73/11 73/16 78/19
79/20 81/10 84/13
94/14 94/16 102/22
103/2 103/16 104/5
105/4 105/6 105/9

116/8 116/11 121/17 122/25 129/9 129/14 132/3 132/8 132/16 135/17 135/19 160/11 161/14 171/14 176/7 176/18 177/1 180/16 180/17 181/1 187/9 190/24 195/16 198/14 198/16 199/2 203/4 203/16 207/21 209/18 211/7 213/9 214/3 214/9
pandemics [2] 57/5 137/16
paper [10] 71/22
99/22 129/1 129/4
129/13 161/23 192/23
200/20 200/21 200/24
papers [3] 38/3 38/4 56/19
paragraph [44] 6/15
8/3 16/7 16/20 16/24
19/9 19/16 29/10
33/14 45/8 48/12
48/18 52/9 64/20 95/4
95/21 96/5 96/16
96/22 99/18 102/15
105/2 114/23 115/7
115/9 115/11 116/5
121/15 121/19 121/19
127/6 127/21 129/7
154/2 154/15 158/8
158/23 179/5 179/8
192/3 198/20 200/8
210/16 210/21
paragraph 1 [2]
127/6 129/7
paragraph 104 [1]
48/12
paragraph 11 [1] 127/21
paragraph 12 [1] 105/2
paragraph 120 [1] 95/21
paragraph 13 [1] 6/15
Paragraph 148 [1]
95/4

14/23 121/15
paragraph 21 [2]
29/10 33/14
paragraph 26 [1]
198/20
paragraph 3 [1]
102/15
paragraph 32 [1]
64/20
paragraph 4 [2] 115/7 121/19
Paragraph 5 [1] 121/19
Paragraph 6 [1] 115/9
paragraph 7 [2] 115/11 200/8
paragraph 71 [1] 19/9
paragraph 8 [1] 179/5
paragraph 9 [1]
116/5
paragraph 98 [1] 192/3
paragraph of [1] 154/15
paragraph on [1] 8/3
paragraph we're [1] 19/16
paragraph where [1] 16/24
paragraphs [2] 44/4 63/3
paragraphs 31 [1] 63/3
paragraphs 330 [1] 44/4
parameters [1] 37/25
pardon [2] 201/1 210/17
parents [2] 165/11 165/23
parks [1] 66/21
Parliament [7] 2/19
2/22 3/12 3/22 4/11 80/12 86/9
Parliamentarians [1] 82/13
part [40] 2/21 6/18 15/22 17/15 17/22 19/12 19/21 23/11 28/24 28/25 32/7 37/11 39/19 43/13 45/22 46/3 48/14 56/6 56/17 65/12 70/21 76/6 80/19 80/21 80/24 81/24 102/7 108/14 120/13 125/20 134/16 136/16 139/15 140/10 159/12 178/18 182/2 206/20 209/4 211/22
participants [6] 32/6 32/11 53/11 145/24 190/7 208/16
particular [30] 1/21
8/2 9/6 11/20 13/23 22/4 52/12 62/22 63/9 63/13 74/17 77/25 78/5 78/7 79/12 86/17

98/16 100/4 104/21 107/1 127/8 130/21 131/16 161/12 161/16 176/21 177/23 193/24 208/12 215/14
particularly [29] 3/16 20/4 20/9 29/5 81/1 98/7 107/4 117/16 120/5 126/2 130/12 138/11 166/3 167/24 172/9 177/10 177/15 178/4 183/1 192/25 196/22 197/5 203/3 203/11 208/1 208/2 211/15 211/16 214/25 parties [3] 192/10 208/3 214/14 partners [2] 186/6 209/13
parts [8] 21/23 60/9 70/17 80/15 94/20 97/15 136/18 137/24
party [3] 27/10 66/11 67/7
pass [4] 40/2 40/5 52/14 139/17
passed [1] 86/6
past [2] 85/6 106/1 pathogens [1] 160/15
patient [8] 38/1 47/3 162/7 162/13 162/22 163/4 163/9 186/4 patients [26] 4/13 5/17 5/17 33/22 33/24 35/11 36/8 42/21 43/11 43/17 44/7 44/23 46/12 46/21 46/22 46/24 47/4 48/7 64/8 64/21 69/3 70/10 162/20 163/23 180/4 196/20
Patrick [11] 97/8 100/3 100/6 139/6 141/7 143/7 143/10 143/12 143/18 143/22 185/6
Patrick Vallance [3] 139/6 141/7 185/6 patronise [1] 194/6 pattern [1] 12/15 pause [9] 14/8 77/7 77/11 79/21 95/19 144/20 154/21 183/9 193/2
pausing [1] 5/25
Peacock [1] 200/6
peak [3] 122/6 136/4 137/12
peer [1] 2/5
people [111] 7/19 8/18 17/3 17/13 17/17 17/19 17/24 18/15 18/23 19/1 20/17 21/8

21/17 27/2 27/25 28/6 $192 / 8$ 192/19 195/8 28/11 30/4 31/22 195/21 214/3 40/19 42/24 42/24 43/2 45/22 46/17
53/22 64/14 65/3 65/5 65/16 65/16 65/19 65/23 66/4 66/7 66/18 67/3 68/2 68/22 70/4 70/18 70/25 71/13 71/14 75/16 75/18 84/14 84/17 84/21 84/25 85/17 88/6 89/9 89/25 90/7 90/10 93/2 93/15 95/14 95/23 98/24 99/3 99/8 104/3 107/1 109/24 110/12 116/15 124/12 137/21 138/24 140/25 141/12 143/23 144/22 148/15 148/19 152/4 153/22 153/24 154/17 155/10 155/18 156/25 157/10 157/14 164/16 165/10 165/23 174/8 174/9 180/12 182/25 184/2 184/3 188/22 190/8 190/9 197/2 199/3 200/5 200/24 202/9 203/9 205/24 207/7 207/17 207/20 207/23 208/7 214/24
people's [2] 104/7 171/22
per [6] 162/7 162/22
162/23 163/2 163/3 163/4
perceives [1] 73/11 perception [2] 86/15 87/13
perch [1] 215/9
perfect [1] 99/6
perfectly [1] 214/17
perform [1] 97/22 performance [2]
113/1 113/4
performed [1] 95/15
perhaps [34] 3/13
6/15 9/10 11/19 16/7 16/25 18/6 20/4 21/19 32/4 32/5 33/13 33/15 39/6 40/17 45/24 51/7 70/21 74/16 85/25 96/9 97/7 153/3 157/11 177/22 184/22 185/15 188/12 190/11 191/22 195/13 201/13 201/23 204/20
period [26] 5/12 20/4 22/5 24/16 25/9 36/2 60/7 65/24 81/18 110/3 118/7 118/8 119/7 123/20 123/20 153/1 162/20 186/23 187/8 188/22 192/2
periods [1] 57/21
permanent [15]
50/16 77/17 79/11 79/12 80/3 80/24 81/10 81/13 81/24 84/2 91/5 92/5 109/12 143/16 144/11
permanent secretary [8] 50/16 77/17 79/11 80/3 80/24 81/10 81/13 144/11 permanent secretary's [1] 81/24 permanent secretary, am [1] 92/5
person [4] 56/9 109/23 144/17 202/19 personal [2] 18/24 19/1
personally [9] 12/23
15/20 15/22 28/23 42/19 136/11 185/17 188/13 201/21
personnel [2] 95/9 97/18
persons [2] 115/12 121/20
perspective [1]
37/14
persuade [3] 22/23
24/22 25/1
pharmaceutical [12]
5/23 108/4 108/5 108/12 108/21 108/22 108/23 108/24 109/1 109/7 160/4 168/13
phase [7] 128/24
129/15 131/10 133/4 134/13 134/14 135/15
PHE [29] 171/18 176/3 176/9 176/25 177/4 177/7 178/9 179/9 179/17 179/20 180/25 181/3 181/13 181/16 181/19 182/7 185/13 185/18 188/3 189/3 189/4 189/6 189/10 189/15 191/18 198/23 200/5 200/10 201/22
PHE's [2] 176/5 176/17
phenomenon [3]
8/15 74/17 74/19
Phin [1] 187/3
phrase [1] 88/18
phrased [1] 148/8
physical [2] 108/16 208/8
physically [1] 208/7
Physicians [1] 74/25
pick [2] 65/25 119/8 picked [2] 201/19 202/20
picking [1] 53/20 picks [1] 48/9 picture [4] 3/7 65/12 98/10 160/22
piece [2] 99/22
205/22
pieces [4] 3/6 100/11 110/18 154/13
place [29] 7/25 10/4
15/10 17/21 18/14
18/17 21/9 31/4 32/13
57/17 58/10 76/3
76/16 94/1 104/10
105/9 117/21 119/17
136/8 137/7 145/9
145/20 150/11 166/6 188/8 190/24 191/1
199/14 214/7
placed [2] 106/17 136/14
places [2] 107/1 214/23
plain [5] 78/13 79/1 84/1 84/2 121/14 plan [42] 39/14 104/5 104/20 105/14 105/23 107/9 107/12 107/22 108/2 108/7 108/9 108/11 108/15 113/7 113/7 119/18 119/20 122/4 122/12 128/20 128/25 129/18 131/14 131/15 131/17 131/19 131/20 132/15 132/23 133/2 133/16 133/19 133/19 133/24 135/1 135/5 138/6 146/3 146/5 146/12 146/16 146/19
planned [1] 164/12 planning [12] 58/24 102/17 105/3 105/6 115/17 116/6 116/10 122/1 127/22 127/23 179/3 191/7
plans [6] 30/15 66/13 105/4 105/9 109/20 157/20
plant [1] 135/2
platform [3] 70/9
70/9 181/21
platforms [1] 195/2
plausible [3] 113/12
158/14 214/17
play [1] 26/22
played [1] 5/11
please [65] 1/8 10/21
19/7 22/25 29/9 32/3
32/8 43/16 44/1 45/8
45/25 47/18 48/12
52/8 57/2 77/16 79/10
please... [48] 79/22 81/20 94/24 95/2 100/19 102/7 105/2 110/5 113/17 114/19 115/7 121/18 125/13 127/4 131/14 132/19 132/25 136/12 137/18 144/20 147/23 153/1 153/18 154/2 154/14 158/1 158/6 158/9 161/22 161/25 162/22 165/8 166/11 174/6 174/6 175/1 179/6 182/19 186/19 187/15 189/13 190/4 198/20 199/12 204/7 204/13 210/12 215/18
pledge [1] 86/20
plus [3] 28/5 107/22 108/1
pm [10] 16/8 100/20 100/22 142/15 143/2 147/8 147/10 196/7 196/9 216/8
point [107] 3/25 8/2 9/22 24/8 24/17 32/17 36/4 38/23 39/6 39/15 40/12 40/17 40/22 41/4 42/6 42/7 42/15 42/18 43/4 44/25 45/5 45/18 46/2 46/9 53/1 54/18 54/19 55/21 56/12 57/14 57/15 58/7 59/6 65/25 67/18 75/7 88/22 89/22 90/17 94/18 97/2 98/14 108/8 109/8 111/16 112/2 117/2 117/4 117/6 118/5 118/9 118/18 119/3 119/6 119/11 120/19 121/10 126/23 128/21 129/12 129/14 130/1 130/11 130/18 131/7 131/11 133/11 133/20 134/9 134/24 135/14 138/7 140/8 141/11 141/20 146/18 151/15 151/21 152/2 156/20 157/2 157/17 158/12 159/1 159/5 159/15 161/6 163/17 166/21 166/24 166/25 167/3 167/9 167/16 167/24 168/20 171/17 172/2 173/9 187/18 193/10 196/24 197/13 197/15 198/21 199/6 208/25 point 7 [1] 187/18 points [12] 27/12 28/4 33/6 55/1 57/11 97/24 97/25 98/6

105/7 115/18 149/8 153/21
policy [14] 19/25
20/13 36/19 36/22
36/23 44/12 62/24
66/2 76/1 83/20 96/12
119/13 120/23 166/16
policymakers [1] 40/9
political [10] 5/1 5/12
10/2 24/1 78/17 79/8 95/6 123/2 126/17 176/25
politicians [3] 12/25 19/18 20/4
pooled [1] 200/21 popular [3] 174/8 201/9 202/21
population [10]
71/23 109/24 136/19 138/24 177/8 177/13 195/25 198/18 199/5 204/9
portray [1] 90/9
ports [1] 181/7
pose [1] 72/5
position [21] 16/10
16/17 34/1 45/10
55/22 56/1 81/10 87/16 91/13 107/12 117/10 133/8 135/18 138/14 141/19 142/13 149/19 154/3 161/15 164/7 172/21
positioning [1] 210/11
positive [1] 87/7 possibilities [1] 121/17
possibility [13] 24/14 39/12 41/7 67/16 107/19 108/15 116/13 117/4 121/20 146/7 149/2 149/6 160/10 possible [14] 35/12 38/10 65/2 67/8 90/3 97/1 148/1 148/1 148/25 150/23 158/14 184/24 198/12 210/20 possibly [11] 34/6 61/13 71/18 71/19 83/15 105/10 163/18 187/10 189/4 189/16 193/11
post [5] 2/16 23/23 26/4 176/9 190/25 postponing [2] 44/21 65/1
potentially [5] 44/22 68/2 160/16 162/14 180/25
potentials [1] 40/9 PowerPoint [1] 32/5 powers [2] 80/8

107/17
Powis [2] 74/8 74/22 pox [1] 141/12 PPE [51] 3/4 4/23 47/19 48/5 48/8 48/20 49/9 50/18 50/20 50/23 51/13 51/18 51/22 52/11 52/20 53/4 53/21 54/3 54/7 54/19 55/3 55/7 55/12 55/19 55/24 56/8 58/25 59/3 59/13 59/21 60/1 60/5 60/10 60/21 61/4 61/17 61/24 79/4 83/1 105/9 161/25 162/3 162/6 162/6 163/7 163/18 172/5 173/3 173/10 173/17 176/22
PPE guideline [1] 161/25
practical [16] 106/18 109/3 110/20 116/1 118/14 119/15 119/22 120/23 120/25 124/8 128/11 143/13 145/9 149/18 150/8 184/20 practice [4] 105/19
109/18 114/3 199/22
pre [1] 115/4
pre-existing [1]
115/4
precaution [1] 212/3
precautionary [4]
181/9 183/11 183/13 183/16
preceded [1] 62/23
precise [3] 74/6 74/6 139/13
4 precisely [1] 18/2
predicament [1]
150/5
prediction [2] 156/10 157/3
predictions [1] 156/24
predominantly [2]
81/14 197/22
preferably [1] 206/23
preparation [2] 78/4
189/22
prepare [2] 40/16 157/20
prepared [7] 1/10
30/15 129/1 188/20
189/23 190/25 193/9
preparedness [6]
11/20 11/22 96/11
128/15 129/6 130/5
preparing [3] 40/14
106/7 128/19
presence [1] 190/15
present [4] 14/23
15/3 38/9 155/2
presentation [3] 16/23 169/16 193/15 presented [7] 39/11 45/3 93/4 142/11 192/12 202/3 208/2 preserve [1] 148/3 press [3] 107/7 165/6 193/24
pressured [1] 202/4 pressures [4] 12/7 12/14 42/17 52/19
presumably [4] 82/1 101/17 125/16 141/12 presumption [1] 108/10
presymptomatic [3]
119/8 196/21 197/3
pretty [8] 18/13 21/23 26/24 75/3 141/7 142/10 186/8 186/11
prevailing [1] 132/6
prevalence [1] 70/13
prevent [5] 116/2
121/1 136/21 136/22
163/8
preventing [1]
118/14
prevention [10]
209/15 212/11 212/14 213/12 213/15 213/16 213/19 213/22 213/23 214/4
previous [4] 34/6
34/7 79/2 160/25
previously [3] 24/22 184/21 186/21
primarily [3] 68/12 81/12 82/2
primary [4] 26/1 84/4 104/23 211/4
Prime [50] 8/16 8/20
10/16 11/3 12/3 12/13 12/19 13/3 13/17
13/22 14/10 15/19
15/21 19/6 20/10
20/12 21/12 22/2 24/2 24/12 26/20 27/20
31/13 45/3 47/13 49/6 49/8 49/25 51/7 52/16 63/11 63/17 63/20 75/10 81/3 81/8 88/6 97/4 102/1 112/24 113/16 113/22 113/23 114/11 114/16 124/17 126/7 140/23 142/18 142/21
Prime Minister [35]
8/16 8/20 10/16 11/3
12/3 12/19 13/3 15/21
19/6 21/12 22/2 24/2
24/12 26/20 27/20 31/13 45/3 47/13 49/6 51/7 63/17 75/10 81/3 81/8 88/6 97/4 102/1

112/24 113/16 113/22 113/23 124/17 126/7 140/23 142/21
Prime Minister's [1] 20/10
Prime Ministerial [1] 15/19
Princess [4] 155/18 157/7 157/13 159/18 principal [1] 80/18 prior [1] 61/20 priorities [2] 115/17 116/10

## prioritisation [2]

 33/10 68/19prioritised [1] 67/3
prisons [1] 105/9
private [4] 27/6 83/21
83/22 112/22
private office [1]
83/22
privy [2] 15/13 82/9
probability [7] 39/20
39/22 40/1 40/4 40/8 40/15 41/2
probably [23] 6/21
7/11 10/3 11/17 28/4
35/23 55/4 75/1 75/23
86/20 90/16 147/2
169/17 170/10 171/25
172/1 173/17 173/20
193/21 197/11 201/18
203/8 203/17
problem [20] 17/3
17/23 20/18 20/19 45/15 47/12 47/14 49/10 51/8 51/19
51/22 52/19 52/22
54/25 55/6 61/25 62/2
71/5 98/20 162/5
problems [10] 46/10
47/9 55/5 61/17 94/15
98/22 99/4 99/12
108/16 181/6
procedures [5] 59/21
211/1 212/2 212/13 213/3
proceed [1] 185/20 proceeding [1] 107/13
process [16] 13/20
15/10 27/6 27/8 80/2
83/16 104/14 124/1
125/15 126/12 129/18 134/17 184/14 184/16 202/13 209/7
processing [1] 128/10
procured [1] 51/13 procurement [3] 124/16 162/3 173/16
produced [8] 30/22
38/2 76/17 161/23
212/9 212/11 213/6

## produced... [1]

213/12
producing [2] 146/12 204/4
profession [2] 34/2
35/11
professional [6]
88/18 91/17 92/9 95/7 99/13 192/11
professionals [1] 92/22
professor [58] 37/4 40/12 74/8 76/13 109/17 158/3 159/8 160/9 171/18 174/24 175/3 175/10 175/13
176/16 177/3 178/8 179/6 179/15 184/15
186/14 186/20 188/10
188/25 189/20 190/22
192/1 192/5 194/11
196/11 198/22 199/11
199/13 200/15 202/6
202/18 202/23 204/16
205/3 205/13 206/10
206/16 207/3 207/12
207/18 208/13 208/2
210/9 211/5 211/17
211/22 213/10 213/11
214/2 214/3 215/4
215/11 215/25 217/25
Professor Doyle [2]
175/3 215/11
Professor Fenton [1] 171/18
Professor Kamlesh
Khunti [1] 76/13
Professor Kevin
Fenton [1] 205/3
Professor Khunti [2]
206/16 207/3
Professor Medley [1] 37/4
Professor Noakes [2]
211/17 211/22
Professor Sir [1] 109/17
Professor Stephen
Powis [1] 74/8
Professor Vallance [1] 202/18
Professor Van-Tam
[2] 159/8 160/9
Professor
Woolhouse [1]
40/12
PROFESSOR
YVONNE DOYLE [2]
174/24 217/25
programmatic [1] 73/13
programme [9] 15/21

56/15 57/20 58/10 59/4 60/6 61/15 198/19 206/18 programmes [2] 95/16 177/12
progress [2] 7/1 128/1 progressed [1] 198/17
projected [1] 33/2 prolonged [1] 70/10 promise [1] 92/24 promised [1] 88/24 promote [1] 194/18 promulgated [1] 36/13
proper [3] 107/16 124/1 136/4
properly [3] 21/12 49/21 173/11
proportion [2] 30/5 136/20
proposal [1] 23/7 proposals [2] 108/17 163/20
proposed [3] 57/16 133/25 162/23
proposing [1] 162/4 proposition [7] 85/2 98/3 119/15 119/22 120/25 150/2 201/4 propriety [1] 60/5 prospect [1] 26/10 protect [6] 45/13 45/13 157/20 168/16 173/8 173/11
protecting [1] 142/8 protection [12] 176/2 177/8 178/10 178/13 178/16 178/19 178/22 178/23 179/1 179/22 179/24 209/9
protective [1] 212/12 proud [1] 98/11 proved [4] 147/16 147/20 150/20 161/13 proven [1] 26/5 provide [5] 80/8 80/9 96/9 158/4 185/15 provided [9] 18/4 35/10 44/17 77/23 165/22 173/10 175/3 189/16 211/25
provides [3] 78/5 135/5 160/13 providing [3] 81/25 107/16 146/2
provision [1] 214/19 provoked [1] 33/9 public [82] $3 / 24 / 13$ 27/7 34/2 52/5 52/25 53/6 54/4 54/5 58/4 70/15 70/18 72/9 74/13 75/16 75/24

## 78/3 81/1 83/20 83/25 Q

 86/5 88/10 95/10 QCovid [1] 171/20 96/11 96/19 100/10 101/15 106/5 106/22 106/24 107/2 107/6 108/19 109/2 109/6 120/12 128/1 131/2 132/23 153/7 164/12 165/9 168/7 168/13 168/15 168/19 168/24 172/6 175/20 175/23 176/3 176/12 177/18 187/3 187/6 187/19 187/23 188/6 189/3 192/12 192/16 194/19 194/25 195/24 198/9 198/15 199/6 201/10 202/16 202/25 203/14 205/4 206/7 208/23 209/4 210/2 211/2 211/7 213/13 213/14 213/23 213/25publication [3] 128/19 134/16 204/15 publish [3] 133/5 199/22 199/25 published [18] 64/4 71/20 129/1 129/19 133/13 133/19 133/21 133/22 133/24 153/17 155/6 172/15 199/17 201/16 204/6 204/12 205/14 207/24
publishing [2] 135/5 164/17
pull [2] 50/6 50/13 pulled [1] 95/14 pure [1] 126/13
purely [1] 41/6
purity [1] 126/6
purpose [9] 9/25
11/19 14/17 29/25
51/13 64/7 204/22 207/25 209/19
pursue [3] 35/18
138/1 198/10
pursued [2] 171/12 198/9
push [1] 23/8
put [39] 56/24 57/17 58/1 76/3 79/2 82/19 85/2 86/8 88/16 95/20 100/11 110/18 120/3 125/1 139/19 145/9 145/20 150/3 155/4 157/16 157/22 158/1 158/2 159/1 160/20 161/22 166/6 166/11 168/5 168/19 169/4 169/11 182/13 192/18 192/22 197/7 202/17 213/21 215/3
putting [3] 4/4 25/18 104/10

150/22 161/25 186/8 186/11 201/6
quiet [2] 174/19 174/20
quite [33] 2/22 18/21 24/3 28/11 28/16 31/8 45/5 52/6 73/22 84/24 86/2 86/9 90/21 97/21 103/22 113/14 118/19 119/4 119/6 136/24 138/7 141/21 147/22 172/14 192/17 192/24 195/10 195/14 196/16 197/6 198/11 200/16 207/8
quote [1] 98/1
quoted [2] 64/20 64/24
quoting [2] 156/21 160/7

## R

Race [1] 206/25
radiation [3] 178/5 178/16 179/2
radical [2] 140/5 140/21
radically [2] 133/14 140/11
raise [10] 4/1 49/12 49/25 52/10 91/18 116/17 124/21 164/12 172/20 207/25
raised [25] 35/15 43/23 48/25 49/5 49/6 49/15 53/23 60/3 74/10 74/21 84/16 85/12 85/14 87/2 87/4 88/23 89/6 92/5 96/6 100/2 100/7 124/7 126/9 142/19 166/18
raising [3] 53/1 91/22 164/18
ramped [1] 171/16 range [8] 30/11 31/5 51/24 112/1 135/11 175/18 187/21 207/16
ranked [1] 80/23
rapid [3] 160/14
181/23 201/6
rapidly [5] 133/9
155/15 158/12 183/2 201/4
rate [10] 109/22
110/10 110/11 115/6 138/23 138/23 150/8 169/24 169/25 182/24
rates [3] 73/21 76/4 114/17
rather [12] 22/3 34/1 61/4 65/7 69/3 96/18 111/17 123/3 136/22 145/18 151/20 193/12 ration [1] 35/3
rational [3] 149/23
150/12 151/2
rationale [2] 18/16 36/22
rationing [1] 36/6
re [1] 136/3
re-debate [1] 136/3
reach [1] 110/19
reaching [2] 106/19 118/15
read [15] 25/25 46/6
50/12 58/1 116/23
129/5 131/4 137/15
154/22 156/11 156/14
174/12 185/8 210/16 215/19
reading [2] 16/16 46/2
reads [1] 210/21
ready [1] 65/17
real [6] 40/19 49/13
110/21 117/22 131/18
155/22
realisation [3]
110/19 140/5 149/17
realisations [1]
101/6
realise [2] 138/21
139/14
realistic [1] 121/17
realities [1] 21/6
reality [4] 39/7 89/14
121/12 128/5
really [33] 4/17 9/24
15/2 15/9 21/7 38/24 39/7 44/14 45/9 46/1
56/7 58/16 71/2 84/24
96/21 165/19 169/4
174/9 180/7 181/22
181/24 183/21 186/11
190/5 191/6 192/23
194/9 195/24 197/7
198/7 202/17 205/11 214/21
reason [7] 7/6 25/5 53/6 87/7 103/20 106/21 165/5 reasonable [31] 30/1 32/21 37/20 38/13 39/18 39/20 40/1 40/13 40/25 68/17 68/18 102/18 105/3 106/1 109/20 115/14 116/7 121/8 121/11 122/1 127/22 127/23 128/3 139/15 139/16 156/19 157/4 157/19 187/22 188/20 197/6 reasons [7] 34/25 47/15 148/13 148/21 187/15 197/12 214/6 reassure [1] 131/2
reassured [1] 49/7 recall [12] 18/13 23/25 31/12 49/11 63/2 63/12 63/13 77/21 143/24 169/19 200/9 207/14
receipt [1] 83/16
receive [4] 82/6
82/10 82/23 84/5
received [12] 78/11 83/3 83/11 99/22 102/8 134/23 139/21 140/9 150/15 159/24 204/19 212/8
receives [1] 127/14 receiving [8] 119/4 121/2 123/24 154/6 154/17 157/25 158/16 161/9
recent [1] 132/12 recently [1] 189/17 recipe [2] 181/24 182/8
recognise [6] 94/18 98/10 98/21 98/21 99/6 99/7
recognised [4] 67/23 99/23 147/18 181/15 recognition [2] 117/20 211/12
recollection [8] 7/14 11/11 104/18 123/22 138/4 143/20 145/14 145/17

## recommendation

[10] 56/14 58/9 59/4 59/7 59/9 59/11 139/8 172/13 172/16 207/5 recommendations
[26] 53/3 57/6 57/22 126/24 172/5 172/14 191/1 191/4 191/8 191/15 191/20 204/21 204/22 204/25 205/4 205/7 205/11 205/14 205/15 206/2 206/11 206/16 206/20 206/22 206/24 207/9
recommended [3] 60/15 162/7 213/2 record [10] 16/9 24/24 25/13 25/17 83/23 83/25 86/8 125/1 125/4 150/14 recorded [1] 83/17 recording [1] 10/25 records [4] 10/19 31/15 51/3 83/22 recovered [1] 55/22 recovering [1] 164/23
Recovery [1] 70/8 recruit [1] 199/3 recruited [1] 186/7
recurred [1] 180/15
recurs [1] 24/12 reduce [2] 38/18 170/9
reduced [1] 66/6
reducing [2] 46/20 136/9
reduction [3] 65/9
76/15 177/15
refer [3] 142/1
182/16 197/25
reference [17] 16/11
38/22 46/24 63/15
107/4 114/16 126/14
126/18 128/6 131/12
141/2 141/5 141/15
143/11 154/20 173/3
190/7
referenced [1]
181/14
references [3] 128/2
128/8 137/12
referred [10] 9/16
63/3 63/7 63/10 64/4
68/14 69/9 107/9
116/10 191/12
referring [3] 61/12
143/19 144/18
refers [3] 95/4 97/13
185/10
refine [1] 37/24
reflect [2] 79/8 104/14
reflected [2] 174/3
215/10
reflecting [3] 17/18
114/15 141/10
reflection [2] $4 / 19$
8/7
reflections [1] 94/11
reflective [2] 74/16 122/8
reflects [2] 32/21
190/5
reform [2] 27/9 95/18
regard [1] 215/14
regarded [2] 99/12
99/12
regarding [4] 16/11
53/21 172/5 173/3
regardless [4]
120/21 120/22 129/16 150/7
regards [3] 20/9
62/24 66/11
regimes [1] 150/21
regional [3] 16/12
16/17 175/23
Register [1] 40/24
registers [1] 177/14
regret [1] 79/15
regular [8] 13/8
27/19 47/24 75/9
101/12 101/20 209/16

209/23
129/13 131/23 137/13
regularly [12] 84/11 85/4 85/9 85/11 85/14 reminding [1] 71/13 85/16 85/17 89/12 remit [4] 188/4 93/21 172/15 179/17 208/24 208/25 209/3 209/16
regulations [2] 65/4 209/1
rehabilitation [1] 71/24
reinfection [1]
136/21
reiterated [1] 154/15
relate [3] 77/25 113/6
179/25
related [11] 48/19
55/1 57/5 59/2 59/3 59/3 66/23 166/2 214/11 214/12 214/13 reply [2] 142/6 194/7 relates [5] 11/16 15/2 report [28] 30/16
58/9 75/14 75/15 69/8 69/8 69/12 116/5
relating [8] 62/15
81/2 81/4 82/25
176/17 176/21 190/23
192/21
relation [8] 62/17
62/19 63/16 151/7
160/10 163/3 169/20
177/5
relations [3] 94/3
94/20 122/24
relationship [6] 4/2
25/7 27/23 28/21
100/6 122/21
relationships [2]
92/7 123/7
relative [1] 10/12
relatively [8] 6/2 6/3
6/3 16/9 106/17 110/7
113/9 113/19
release [1] 165/6
released [1] 26/21
relevance [1] 54/15
relevant [8] 12/25
25/11 30/22 56/24
83/20 83/24 102/9
106/8
reliable [1] 119/9
reliably [1] 119/8
reluctance [2] 97/1 214/5
remain [2] 81/12 81/20
remained [5] 115/6
121/17 176/9 178/22 213/8
remains [1] 154/17
remarks [1] 50/3
remedy [1] 96/21
remember [19] 6/20
11/12 11/15 18/9
19/20 89/23 92/18
92/18 92/25 108/3
116/18 118/19 129/4

133/12 133/24 155/6
155/6 155/9 172/14
172/15 191/4 191/6
203/20 203/25 204/4
204/7 204/8 204/11
204/16 204/17 204/23
204/25 205/14 206/12
207/12 207/15
reported [3] 52/13
85/14 160/2
reporting [2] 18/7 148/18
reports [4] 51/14
126/15 181/8 205/10
repose [2] 89/20 92/10
representation [1]
7/21
representatives [1] 190/9
represented [1]
19/25
representing [1]
62/14
reproduction [2]
109/21 110/10
Republic [1] 209/25
request [6] 1/11
76/10 113/16 131/21
170/10 175/3
requested [1] 207/22
requests [2] 205/11 206/3
require [3] 167/5 173/14 183/25
required [7] 10/2
27/11 87/22 137/25
187/21 189/6 214/6
requirements [3]
58/22 58/25 59/13
requires [1] 81/6
requiring [2] 72/1
200/11
research [3] 166/6 203/16 205/15

## researching [1]

 203/24reserved [1] 34/14 reshuffle [2] 23/11 31/8
reside [1] 154/10 residential [2] 153/10 157/9
residents [4] 66/12 157/21 160/13 160/21
resign [1] 22/4
resilience [4] 63/16 63/17 105/5 115/24 resist [4] 137/6 137/24 138/2 138/12 resolve [3] 52/19 52/21 195/5
resolved [3] 36/3 47/15 134/24
resolving [1] 9/12
resource [2] 180/3 214/7
resourced [1] 95/10 resources [2] 33/11 80/12
respect [6] 15/14 59/11 74/24 75/20 100/5 143/18
respirators [6] 56/16
57/5 59/18 61/3 162/6 210/25
respiratory [5] 52/13 59/18 60/6 61/3 160/15
respond [5] 18/20 72/14 89/11 123/13 172/3
responded [4] 50/17 72/12 73/1 101/3 responds [1] 101/3 response [25] 3/17 4/18 17/6 24/23 30/10 44/18 46/8 51/8 51/14 60/19 73/11 73/13 74/16 74/16 74/19 75/12 115/22 123/10 124/24 127/19 160/25 176/7 183/3 185/12 186/4
responses [1] 30/7 responsibilities [7] 2/23 5/14 17/16 84/5 95/13 170/17 178/23
responsibility [5] 3/1 50/19 68/12 91/18 99/3
responsible [10]
3/10 3/13 3/14 3/21 33/10 54/6 80/10 81/21 176/6 191/10
rest [4] 77/10 92/8 158/22 174/21
restrictions [13] 14/6 14/6 18/14 113/8 125/22 138/7 138/9 138/16 138/17 139/3 139/25 140/1 150/17
result [10] 33/20
36/12 51/22 51/23 65/1 66/1 79/17 81/9 114/25 163/21
resulted [2] 59/24 203/20
resulting [1] 65/13 retain [1] 190/17 retired [1] 176/14 return [4] 47/24 65/18 147/6 216/4 returned [1] 65/23 returnees [2] 105/15 115/8
returning [2] 66/4 69/3
reverse [1] 61/22
review [4] 7/1 16/10
68/25 207/22
reviewed [1] 123/22
reviews [1] 207/10
revolt [1] 173/7
rhythm [2] 12/18 14/20
rid [1] 47/11
Ridley [2] 16/22 49/1
right [103] 1/18 1/24
2/6 2/10 4/15 6/6 6/11 7/11 9/8 9/20 11/18 16/1 16/2 21/16 24/3 29/1 29/11 30/18 31/17 34/6 34/13 41/12 42/22 42/25 43/8 45/19 46/9 49/12 50/10 51/25 53/24 54/3 56/8 56/9 56/13 56/17 62/13 69/25 70/3 70/11 73/2 74/4 77/12 82/19 82/19 84/6 84/6 85/20 86/2 87/13 88/16 90/24 93/19 93/20 96/24 109/13 112/20 113/23 118/4 119/5 122/7 124/6 125/3 130/9 140/8 141/20 145/16 145/22 145/25 146/23 148/4 150/18 150/22 151/22 152/13 154/8 154/20 155/7 155/23 156/19 162/5 163/12 168/6 168/15 169/11 170/21 175/15 176/9 179/19 180/23 183/17 189/24 191/25 195/3 196/6 196/12 196/19 201/12 203/14 203/18

214/13 215/21 216/5 S right-hand [2] 109/13 162/5
rightly [2] 67/20 74/9 rights [1] 202/18 rise [2] 36/4 77/4 rising [2] 11/23 33/22 risk [29] 40/24 43/6 66/18 66/22 67/11 67/15 67/18 67/24 70/13 76/7 76/9 76/11 76/15 76/16 109/19 115/3 121/16 159/20 160/16 160/20 161/11 162/6 164/15 168/8 168/16 169/19 203/22 211/3 215/8
risks [7] 41/5 66/12 70/24 156/4 171/23 171/23 171/24
robust [1] 145/16 role [26] 2/9 2/15 3/18 3/20 5/5 5/10 25/20 26/3 26/23 79/11 79/12 80/3 80/17 80/22 81/24 91/12 91/19 98/9 176/13 177/5 177/23 178/8 178/11 178/21 210/20 210/23
roles [1] 175/22
roll [3] 12/14 15/20 24/16
roll-out [3] 12/14 15/20 24/16
rolling [6] 56/15 57/20 58/10 59/4 60/6 61/15
room [5] 150/9
151/20 157/11 157/11 174/8
root [2] 55/4 71/5 rose [1] 42/12
rotated [1] 209/11 roundtable [1] 164/24
route [2] 158/14 211/9
routine [3] 7/9 65/1 184/25
routinely [3] 6/12
187/5 201/21
RPE [2] 210/24 211/3
Rule [1] 152/19
Rule 10 [1] 152/19
rules [3] 53/3 53/7 83/18
run [5] 37/10 78/1
114/3 187/19 189/7
running [7] 26/14 101/4 178/1 178/3 180/20 188/15 189/4 runs [2] 41/23 80/25
sadly [1] 180/3
safe [1] 163/22 safer [1] 159/19 SAGE [33] 29/17 37/1 38/3 38/7 38/21 104/19 109/10 125/8 125/16 125/24 125/25 126/2 126/6 126/11 135/14 139/6 139/12 139/21 140/9 142/3 142/11 142/14 171/18 186/22 199/11 201/22 201/25 202/1 202/3 202/8 202/10 202/15 211/16
SAGE's [1] 139/8 said [86] 6/7 6/12 16/1 17/8 19/19 23/22 24/24 25/13 25/15 25/17 26/18 29/1 29/20 31/22 33/15 37/1 37/5 39/1 40/4 40/12 45/13 48/5 50/4 50/6 50/22 51/5 60/13 62/18 63/8 67/2 70/1 70/4 79/15 84/11 84/18 84/18 84/20 84/21 84/24 84/25 85/3 85/4 85/12 86/2 86/16 87/19 88/3 90/23 91/25 92/15 93/11 106/21 114/24 119/23 119/23 122/3 124/4 130/8 130/16 131/18 137/1 137/13 139/20 140/22 142/13 142/22 143/12 143/17 143/21 144/6 144/16 149/6 158/21 158/23 160/11 160/24 165/14 168/12 173/15 177/19 178/8 187/24 193/6 194/9 194/16 195/6 same [21] 2/17 25/15 42/3 48/6 55/2 74/21 76/12 90/17 90/22 90/23 98/17 111/23 118/22 124/11 124/12 124/12 124/15 155/5 160/24 161/7 205/20 sat [1] $37 / 1$ satisfy [1] 88/1 Saturday [1] 144/8 saving [1] 43/14 saw [3] 25/11 52/25 198/18
say [154] 2/24 4/7 6/16 9/10 9/13 10/8 10/14 11/13 12/10 12/17 15/9 15/13 18/11 18/12 21/7 21/24 22/14 24/20

25/11 26/18 28/13 29/11 31/2 31/18 32/20 33/17 34/2 34/16 35/24 38/9 38/12 39/6 39/10 39/25 41/21 43/4 45/21 46/23 49/15 50/16 50/20 52/24 60/10 66/14 69/12 70/11 72/22 72/24 75/4 77/9 83/11 84/19 85/21 86/15 87/1 87/3 88/2 88/14 88/22 89/8 89/18 89/24 90/1 90/19 92/11 92/17 92/19 92/25 93/4 93/10 93/21 98/20 99/5 99/18 103/3 105/21 106/4 106/11 108/1 108/10 111/17 111/20 112/13 114/4 118/5 118/18 123/8 123/17 125/24 126/19 127/20 128/15 129/12 129/13 129/21 130/10 130/13 130/21 131/10 134/23 134/25 135/8 135/16 136/7 136/14 137/10 138/22 139/23 140/2 140/7 142/9 142/10 143/17 143/22 144/2 144/15 145/15 148/11 150/12 150/16 150/23 151/1 151/3 151/6 152/11 153/16 159/3 159/14 160/24 162/15 164/25 165/2 166/7 167/10 167/17 169/13 169/18 173/10 184/15 184/20 187/9 187/11 189/8 190/15 192/7 192/10 192/13 195/20 198/14 200/8 202/10 206/21 208/23 210/17
saying [39] 1/17 7/5 8/9 9/19 16/15 18/5 19/1 22/18 30/3 34/18 37/9 39/4 42/14 47/1 51/8 67/23 68/4 85/9 85/18 89/12 90/2 90/2 92/20 93/2 93/12 93/13 93/16 110/8 110/24 111/7 111/8 111/10 112/4 113/12 119/14 137/1 139/1 201/5 206/16
says [31] 17/1 20/15 22/21 23/2 23/4 23/9 23/13 26/3 38/7 38/7 45/10 45/16 45/17 48/21 53/5 95/18 95/21 103/6 109/17 112/23 122/13 140/13
says... [9] 141/6
141/7 144/1 144/5
144/16 158/4 189/21
190/19 216/4
scale [6] 95/22
109/19 181/23 198/25 199/1 199/4
scaled [2] 117/21 118/13
scaled-up [1] 118/13
scaling [1] 119/1
scattered [1] 95/13
scenario [37] 30/1
32/21 32/25 33/22
35/19 37/21 38/14
39/5 39/12 39/18 40/2 40/13 102/18 102/22 103/3 103/12 103/16 105/3 106/1 109/20 110/25 113/12 115/15 116/7 121/9 121/11 122/1 128/4 139/15 139/17 156/19 157/4 157/19 187/22 188/21 188/21 190/5
scenarios [5] 38/2 40/25 102/19 103/11 109/18
school [4] 38/5 107/20 108/15 138/20 schools [2] 116/14 127/19
science [3] 130/24 130/25 194/9
scientific [28] 61/7 97/9 116/19 119/3 119/14 123/24 134/8 134/12 134/17 134/22 134/23 135/10 135/11 135/13 135/22 136/1 138/15 140/18 141/10 141/24 142/1 149/22 150/14 161/1 161/8 161/18 185/6 214/12
Scientist [4] 139/12 142/4 142/11 143/21
scientists [10] 36/25 121/3 134/25 135/24 138/20 139/1 168/23
185/12 185/15 211/22
scope [3] 2/15 5/4 178/11
Scotland [5] 209/4 209/5 209/7 209/12 210/2
Scottish [1] 208/22
scramble [1] 55/12
scratch [1] 146/20
screen [16] 1/12 8/3 25/25 32/2 44/3 48/13 56/24 94/25 106/9 144/2 144/6 154/23

155/4 175/5 185/7 203/21
screening [3] 115/9 117/11 117/15 scroll [4] 127/4 127/17 128/7 158/6 Scrolling [4] 115/7 121/18 121/22 121/25 scrutiny [1] 47/16 Scully [2] 166/18 166/25 second [34] 20/16 20/20 36/14 42/7 47/8 47/13 51/4 52/8 68/16 70/21 71/1 75/21 81/10 81/13 86/14 93/17 102/13 102/20 103/12 104/1 112/5 126/1 136/22 151/7 151/8 151/15 152/12 154/19 158/8 169/21 172/3 183/9 187/1 197/18
second-guess [1] 68/16
second-guessing [2] 20/16 20/20
second-hand [1] 51/4
secondary [1] 211/4 secondly [5] 38/9 105/19 134/2 145/8 204/24
seconds [1] 173/19 secretariat [8] 30/22 115/16 122/2 123/5 129/2 129/7 191/23 202/20
Secretariat's [1] 130/3
secretaries [5] 8/6 8/19 8/21 82/11 82/16 secretary [70] 4/4 4/10 33/25 34/6 34/7 35/8 50/16 66/24 67/1 77/17 79/11 79/12 80/3 80/7 80/24 81/1 81/10 81/13 82/1 82/2 82/4 82/5 82/8 82/20 82/22 83/3 83/6 83/13 83/19 83/21 84/3 84/11 84/18 84/22 85/4 85/9 86/2 87/19 88/24 89/4 90/1 90/16 90/18 91/5 91/13 91/14 91/20 92/1 94/5 101/23 102/2 109/12 112/22 112/24 117/14 131/22 133/1 143/16 144/11 164/23 193/1 193/2 193/4 193/19 193/25 194/3 194/17 195/15 195/20 208/24
Secretary of [1]

193/2
secretary's [1] 81/24 secretary, [1] 92/5 section [2] 128/16 207/17
section that [1] 128/16
sections [1] 204/8 sector [9] 18/5 18/6 79/4 79/18 83/1 96/11 156/3 203/12 208/4
sectors [1] 204/9 secure [4] 55/19 64/7 64/9 117/18
securing [1] 50/19 security [2] 20/1 184/22
Sedwill [8] 94/25
95/4 124/14 125/5 140/16 140/22 173/2 173/5
Sedwill's [1] 98/7
see [85] 6/14 8/2 9/4 11/1 11/7 11/18 15/11 15/12 16/7 16/11 16/12 16/21 20/19 22/16 23/14 24/16 29/19 32/8 32/11 32/24 33/17 38/3 44/5 44/11 44/16 48/14 48/18 49/5 51/17 52/8 56/19 56/21 57/3 78/12 80/3 85/12 87/4 88/11 91/12 101/4 102/12 102/15 104/16 109/12 109/16 121/6 121/15 123/23 124/22 126/1 126/14 127/5 128/8 129/21 132/21 139/23 152/10 153/9 153/12 153/14 153/19 154/23 157/6 159/12 161/24 162/10 163/5 166/16 175/4 179/4 181/14 187/2 187/11 187/18 189/20 190/8 190/18 199/16 199/17 200/1 200/4 204/7 204/12 207/14 207/17 seeing [10] $17 / 14$ 21/5 35/21 57/25 58/17 75/14 93/1 98/11 145/5 148/16 seek [2] 25/1 174/11 seeking [2] 25/14 89/11
seem [2] 23/17 200/5 seemed [1] 151/1 seeming [1] 73/12 seems [2] 20/8 33/8 seen [16] 28/14 30/16 31/16 38/17 66/20 67/13 74/8 148/9 161/17 166/9

166/9 188/19 189/9 190/6 190/22 210/19 self [2] 17/24 18/23 self-isolate [1] 17/24 self-isolating [1] 18/23
sell [1] 27/2
seminar [1] 186/11 senior [17] $8 / 18$ 10/16 12/25 63/24 66/16 67/14 72/16 74/11 74/22 80/23 89/9 93/15 176/5 185/18 189/3 190/14 209/10
seniority [1] 7/21
sense [21] 6/24 9/21 12/1 14/4 25/19 27/21 31/2 35/15 40/14 41/18 41/20 47/12 48/7 70/23 106/10 139/22 148/18 152/16 178/10 179/19 206/8 senses [1] 68/5 sensitive [1] 205/2 sent [4] $8 / 752 / 25$ 78/6 78/8
sentence [7] 129/11 129/20 129/21 130/5 130/7 131/12 154/16 sentences [2] 29/22 181/17
separate [4] 12/12
14/23 38/4 66/23
separately [1] 52/10
Sept [1] 23/7
September [2] 1/16 26/10
sequelae [2] 72/4
169/14
series [6] 63/3
134/12 175/19 175/22 179/9 187/25
serious [6] 114/6
114/11 165/1 181/1
212/23 213/9
seriously [5] 93/7
126/22 154/11 165/2 170/3
servant [1] 82/18
servants [7] 21/17
85/8 89/10 93/15 94/1 95/8 100/10
served [1] 35/10
service [15] 17/13
50/21 60/20 74/20
76/11 178/4 178/14 178/14 178/18 178/21 179/24 182/3 186/3
186/8 195/11
services [15] $2 / 21$
45/14 47/10 60/9
70/21 72/1 72/11 83/8
153/22 177/10 178/2

178/15 178/17 179/3 209/22
serving [1] 23/24
session [3] 14/21 14/23 50/5
sessions [2] 12/24 15/2
set [37] 3/8 17/20
18/14 21/9 31/9 32/4
38/2 39/3 42/16 43/19
48/4 51/11 53/7 58/22
59/12 86/18 103/10
104/15 111/19 113/15
115/17 119/18 128/22
138/3 138/10 145/25
146/21 148/13 172/17
175/13 186/19 187/14
187/17 193/16 199/11
199/13 200/21
sets [3] 73/17 139/6 142/9
setting [7] 44/14 87/5 87/7 87/17 130/2 155/2 160/13
settings [9] 59/22
62/25 65/15 153/10
183/1 197/6 210/24
211/3 212/20
settle [1] 13/22
settled [1] 193/22
seven [5] 1/23 42/2 95/5 115/1 205/5
seven years [1] 1/23
several [11] 6/16
6/20 9/9 15/1 124/10
162/19 162/20 163/17
177/21 177/24 200/22
severely [3] 5/16
36/8 42/21
Shafi [1] 10/24
shall [5] 9/13 21/24
47/24 100/19 174/16
shapes [1] 51/1
share [3] 168/21
182/9 209/20
shared [1] 72/16
sharing [1] 157/10
Sharon [1] 200/6
Sharon Peacock [1] 200/6
shd [1] 26/6
she [20] 19/15 19/17
19/19 19/24 20/15
48/15 48/15 48/19
48/20 48/21 48/21
48/24 48/25 49/2
49/15 50/5 79/23
93/11 100/1 198/6
sheds [1] 27/7
shielding [4] 136/9
136/15 136/15 136/19
Shinner [1] 124/13
ship [1] 157/14
short [14] 6/3 9/13

Simon Ridley [2] 16/22 49/1
Simon Stevens [2] 17/2 22/20
simply [9] 17/10 89/13 120/8 189/8 194/1 198/23 202/4 206/5 214/13
since [3] 13/13 168/9 185/4
single [4] 21/10 125/17 163/1 164/17 Sir [51] 35/21 77/13 77/17 77/19 78/3 80/1 81/20 84/2 87/15 91/8 91/24 97/8 97/17 100/24 102/6 102/23 103/23 107/12 109/17 110/5 113/17 122/7 125/5 126/10 127/9 129/16 130/16 132/5 136/3 137/4 137/20 139/14 141/16 141/22 143/7 143/10 143/12 143/22 147/12 151/7 152/24 153/6 156/16 156/21 160/5 161/20 164/9 171/6 174/3 174/14 217/15
Sir Christopher [39] 77/19 78/3 80/1 81/20 84/2 87/15 91/8 91/24 97/17 100/24 102/6 102/23 103/23 107/12 110/5 113/17 122/7 126/10 127/9 129/16 130/16 132/5 136/3 137/4 137/20 139/14 141/16 141/22 147/12 151/7 152/24 153/6 156/16 156/21 160/5 161/20 164/9 171/6 174/3
Sir Christopher
Wormald [4] 35/21
77/13 77/17 217/15
Sir Mark Sedwill [1] 125/5
Sir Patrick [1] 143/22 Sir Patrick Vallance [3] 97/8 143/7 143/12
Sir Patrick Vallance's [1] 143/10
site [2] 132/22
132/24
situation [23] 17/15 33/11 34/1 35/6 37/11 40/15 40/18 41/21 43/11 61/23 99/6 122/15 127/7 151/22 155/6 155/6 155/13 155/15 155/17 156/1 156/10 192/10 209/24
situational [1] 192/6 situations [2] 91/19 215/1
six [6] 12/12 19/16 95/5 179/8 193/11 205/5
six lines [1] 19/16 six months [2] 179/8 193/11
size [1] 98/19
skimming [1] 58/16
slides [4] 32/4 116/5 188/19 190/6
slightly [12] 17/8
21/25 31/3 38/23
40/17 99/25 104/2 109/5 111/18 112/16 186/15 210/11
slower [1] 65/7
slowly [3] 6/3 79/22 80/2
small [16] 29/2 51/15 84/17 84/25 93/1 111/16 111/22 131/1 131/6 131/7 157/2 161/11 184/21 185/22 197/13 210/9
smaller [1] 199/19 so [340]
so weeks [1] $33 / 3$
so-called [3] 5/22
12/18 42/10
social [42] 4/3 14/6
19/24 26/23 27/1 27/3
27/4 27/9 28/19 35/1
35/22 38/15 44/8 45/1
45/14 46/11 47/11
50/17 50/19 51/12
54/5 55/17 58/5 62/25 63/23 63/25 64/12 64/22 65/3 65/6 66/15 72/15 72/20 77/18
78/15 81/11 82/25 83/7 83/8 153/9 153/13 212/3
social care [14]
26/23 27/1 27/3 27/4 27/9 46/11 47/11
62/25 63/25 64/12
64/22 65/3 65/6 83/7
Social/Community
[1] 153/9
socioeconomic [1]

## 171/24

solely [2] 42/19 70/1
solid [1] 33/1
solving [1] 94/15
sombrero [1] 136/17
some [79] 2/24 9/3
13/2 13/11 13/11 15/11 16/17 20/11
20/15 20/25 21/21
21/22 22/7 23/20 24/7
24/20 29/7 30/22

31/22 34/10 37/3 41/4 $215 / 22$ 48/10 53/10 62/15 sort [39] 12/15 12/18 62/21 63/24 65/21 13/2 15/18 18/19 66/1 67/12 67/14 68/5 69/10 71/23 74/9 79/1 80/15 83/6 90/10 90/22 94/3 94/21 98/1 98/1 99/4 99/5 100/24 $58 / 25$ 71/13 71/14 101/5 108/2 113/14 $72 / 19$ 74/5 74/15 119/24 122/23 123/2 $\quad 87 / 11$ 89/1 89/24 99/5 123/11 124/13 131/21 99/7 103/8 107/6 136/20 137/21 148/10 111/12 150/24 173/19 155/15 164/9 167/5 182/5 184/22
173/7 175/13 186/18 sort of [26] 12/15 188/16 190/24 192/18 $12 / 18$ 13/2 15/18 194/14 199/17 199/25 18/19 19/16 20/20 200/2 205/5 205/12 21/5 21/18 24/7 30/22 206/3 206/8 207/4 208/15 214/14
somebody [5] 83/14 132/1 144/16 169/7 187/9
somehow [1] 25/19 someone [6] 7/9 28/1 28/22 186/21 187/2 187/6
something [40]
12/12 24/5 29/8 34/11 34/15 35/20 35/23
37/17 41/8 45/23
49/24 56/10 56/23
61/13 67/19 68/7
68/15 75/1 84/18
84/20 85/17 86/4 86/5
87/19 88/3 89/2 97/3
99/1 106/9 133/20
140/5 143/19 143/21
168/24 187/24 191/3
191/6 198/5 198/23 203/3
sometimes [8] 7/20 8/6 12/22 15/15 38/23 speak [5] 6/2 15/20 214/11 214/11 214/13 27/17 83/14 190/17 somewhat [3] 2/18 55/1 178/12
soon [1] 204/11
sooner [2] 23/8
201/20
sorry [50] 8/11 19/12 28/7 29/18 33/15
40/24 44/25 45/7 49/1 50/9 57/8 73/22 79/25 86/12 89/17 100/14 103/23 104/2 104/2 106/9 108/23 109/5 115/11 117/13 125/14 129/16 133/22 136/13 137/4 144/6 147/5 147/6 148/4 150/1 150/2 152/15 154/22 163/11 164/3 165/18 167/4 169/2 170/22 172/12 173/23 174/9 194/9 200/25 205/8

19/16 20/20 21/2 21/5 21/18 24/7 27/6 30/22 32/25 33/2 35/2 36/14 40/3 40/18 40/20 42/6 87/11 89/1 89/24 99/5 32/25 35/2 36/14
40/18 58/25 71/13 71/14 74/5 89/1 89/24 99/5 107/6 111/12 150/24 184/22
sorts [6] 40/25 89/6
91/11 91/18 107/2 124/20
SoS [1] 132/9
sough [1] 53/7
sought [2] 132/16 198/15
sounds [2] 3/11 169/3
sources [4] 82/8
83/12 135/11 197/21
South [4] 118/22 119/24 120/11 120/15
South Korea [2] 118/22 120/11
space [1] 185/16
SPADs [2] 125/8 126/8
Spain [1] 42/4 speaking [6] 85/18 86/3 86/22 113/9 113/19 196/24
speaks [1] 74/15
special [1] 180/2
specialist [4] 177/9
177/10 178/1 178/5
specialists [1]
106/23
specially [1] 113/25
specific [26] 9/23 36/3 50/3 51/11 53/1
59/9 67/10 67/11 76/2
76/10 76/15 78/23
82/24 88/21 88/22
89/23 104/17 105/22
124/8 125/25 139/19 161/3 171/10 172/13 172/16 208/24
specifically [19] 10/1
14/21 15/25 18/9
specifically... [15]
26/22 30/9 50/1 51/16 53/5 58/20 60/19 61/12 63/16 64/20 73/20 116/17 171/19 177/5 179/1
spectacles [1] 46/2 spectacular [2] 179/21 180/18 spectre [1] 73/13
speculate [1] 60/10
speedily [1] 169/13
spend [1] 179/14
spending [1] 13/7
spent [4] 14/2 94/15
113/19 115/1
SPI[5] 37/5 37/24
134/5 134/17 135/6
SPI-M [2] 37/5 37/24
SPI-M-O [3] 134/5 134/17 135/6
spoke [5] 34/11 75/9
87/6 92/15 92/21
spoken [1] 194/15
spread [19] 5/24
46/20 70/25 102/20
102/21 102/25 103/19
109/3 109/8 110/13
116/2 121/1 128/12
136/18 158/7 160/14
168/14 169/24 196/14
spreading [2] 118/15
197/9
spreads [3] 102/25
183/1 183/2
spree [1] 55/19
spring [1] $74 / 6$
square [1] 23/14
squashing [1] 136/16
SRO [2] 194/23 204/3
SS [2] 22/19 23/3
stable [1] 55/21
staff [22] 2/14 4/14
18/11 20/12 34/15
51/14 54/23 59/14
60/20 76/7 76/17
79/18 80/5 80/23 95/8
95/15 105/9 157/10
163/23 172/8 173/11 184/4
stage [20] 8/4 8/17 32/15 39/4 39/9 101/9 106/5 106/6 107/13 121/6 122/11 129/18 155/14 157/13 160/10 174/12 182/17 185/16 196/21 197/3
stages [4] 73/16
119/20 172/1 211/7
stakeholders [1] 75/4
stand [2] 47/16 195/2
standard [1] 26/16 standing [3] 46/10 183/7 209/6
stands [1] 182/13
Stanton [4] 210/6
210/7 215/5 218/6
stark [1] 140/5
start [8] 5/10 11/2 23/22 29/1 38/11 79/10 103/17 104/10 started [4] 60/18 111/23 125/10 155/16 starting [2] 44/4 159/21
starts [1] 130/5 state [60] $4 / 44 / 10$ 8/6 8/19 8/21 33/25 34/6 34/7 35/8 66/24 67/1 80/7 81/1 82/1 82/2 82/4 82/5 82/8 82/11 82/16 82/20 82/22 83/3 83/6 83/13 83/19 84/11 84/18 84/22 85/4 85/9 86/2 87/19 88/24 89/4 90/1 91/13 91/14 91/20 92/1 94/5 101/23 102/2 112/24 117/14 131/22 133/1 141/10 164/23 192/5 193/1 193/3 193/4 193/19 193/25 194/3 194/17 195/15 195/20 208/24 stated [1] 88/10 statement [70] 1/11 1/14 1/15 1/16 1/18 6/14 6/15 7/16 8/11 9/11 10/14 12/17 19/8 19/14 25/12 25/15 29/9 33/8 33/14 34/18 39/16 40/23 43/5 43/24 44/3 45/24 46/3 47/6 48/11 48/14 63/2 64/5 69/9 84/1 94/9 94/24 95/20 113/2 120/3 120/10 122/24 123/8 123/18 131/18 136/7 136/14 136/24 138/3 138/10 139/20 143/11 147/18 148/8 148/13 149/7 151/12 153/2 175/4 175/7 175/8 175/10 175/14 178/13 179/6 180/25 181/11 182/16 192/3 198/21 208/23
statements [7] 77/23 77/25 84/1 113/15 137/14 169/18 172/18
states [1] 200/9
stating [1] 154/8
status [2] 39/18 114/2
stay [5] 19/4 24/6

44/24 65/9 147/13 stay-at-home [1] 147/13
stayed [1] 176/13
staying [1] 25/20
stemming [1] 36/14
stenographer [4]
77/5 77/10 79/22 174/21
step [2] 23/22 148/17
Stephen [1] 74/8
stepped [2] 98/12 195/23
stepping [2] $2 / 5$ 17/2 steps [2] 35/17 199/22
Steve [1] 74/22
Steve Powis [1] 74/22
stevens [47] 1/5 1/6
1/9 1/10 1/20 2/8 4/16 5/25 8/3 9/2 10/14 10/22 17/2 19/10 22/1 22/20 25/4 26/9 27/22 28/7 28/17 28/25 29/23 32/2 33/17 36/15 41/9 44/14 45/6 46/3 47/23 48/4 48/13 51/20 52/23 53/9 53/16 59/2 62/9 69/23 73/3 73/8 74/1 76/20 76/24 76/25 217/3 sticking [2] 21/14 41/10
still [27] 20/22 22/1
23/15 26/7 26/8 28/16 35/16 39/5 42/24 47/13 52/21 107/13 122/11 122/13 128/23 129/15 134/13 138/6 141/22 166/21 170/9 180/8 183/22 194/14 199/7 199/9 199/10
stock [1] 56/4
stock-out [1] 56/4
stockpile [5] 54/7
55/15 57/6 57/11 59/23
stockpiles [1] 3/4 stocktake [1] 54/2 stocktaking [1] 54/15
stood [3] 16/11
181/21 204/3
stop [16] 6/5 92/16
103/17 103/25 105/18 106/19 109/3 109/7 112/2 120/7 128/11 140/25 148/20 158/14 168/14 197/8
stopped [2] 7/5 7/5
stopping [2] 110/20 119/16
store [2] 136/8

136/15
Stories [1] 173/6
story [2] 56/6 167/4
straddled [1] 95/12
straight [4] 12/25
86/8 167/14 193/6
straightforward [1] 143/23
strain [3] 98/24 181/13 214/7
strands [1] 37/13
strategic [1] 101/14
strategies [1] 132/11
strategy [39] 9/17
36/20 36/20 37/16
107/15 111/23 115/14 subsequently [1]
115/20 116/11 117/25
122/9 122/10 128/22
131/11 132/4 132/6
132/10 134/1 136/2
136/4 136/17 137/2
137/7 137/12 137/21
137/24 138/12 140/21
142/5 142/24 144/23
146/18 151/23 152/14
166/22 167/9 168/7
198/9 198/10
Street [10] 5/3 13/8
19/25 49/3 112/23
114/14 122/18 124/11
131/17 195/3
strength [1] 74/11
strengthen [1] 72/1
strengthening [1]
213/2
stress [2] 26/4
200/14
stressed [1] 16/13
stretch [1] 31/11
stretched [1] 33/11
strict [1] 171/1
strikes [1] 35/3
striking [1] 32/17
stringent [3] 144/24 145/10 146/7
strong [4] 4/24 28/11
28/13 28/13
stronger [1] 130/13
struck [4] 3/16 25/13
54/8 59/25
structural [2] 96/3
98/14
structurally [2] 97/20
98/3
structure [1] 99/19
structured [1] 95/10
structures [1] 21/20
struggling [2] 18/15
52/13
Stuart [1] 11/4
stuck [2] 46/12 66/5
study [1] 171/18
style [1] 86/18
Sub [1] 57/4

Sub-committee [1] 57/4
subfunctions [1] 177/25
subgroup [1] 211/17 subgroups [1]
213/18
subject [9] 9/23
43/20 77/25 124/12
170/20 176/20 185/4
186/15 202/23
subject-specific [1] 9/23
subsequent [3] 5/9 101/25 206/12 67/13
substance [2] 8/23 126/10
substantial [2] 7/20 67/18
substantially [3]
10/10 47/15 59/13
substantialness [1] 173/18
substantive [1] 52/9 substitute [1] 57/19 succeed [1] 120/6 success [1] 26/25
successes [1]
181/16
such [12] $8 / 23$ 30/19
30/20 67/24 71/12
73/16 88/10 107/16
157/13 191/21 196/19 211/10
suffer [1] 195/25
suffered [2] 79/16
157/13
sufferers [1] 165/18
suffering [1] 70/10
suffice [1] 97/7
sufficiency [3] 54/17
54/22 55/7
sufficient [7] 17/23
18/3 51/24 54/8 54/10
55/15 57/17
suggest [3] 17/9
50/14 161/17
suggested [2] 27/11 39/13
suggesting [4] 14/14
58/19 93/5 200/25
suggestion [4] 24/21
46/14 47/16 198/2
suggests [2] 59/16 200/12
suitability [1] 50/23
suitable [2] 50/24
173/11
summary [12] $3 / 14$
3/20 30/16 37/1 46/6
52/17 107/11 175/15
189/20 191/19 204/16
summary... [1]
206/19
summation [1] 107/11
summer [6] 24/11 24/13 26/20 27/15 72/17 211/15
summing [2] 105/13 106/16
summing-up [2]
105/13 106/16
Sunday [2] 37/24 38/3
Sunday 1 March [1] 37/24
Sunday/2 March [1] 38/3
supplement [3] 82/16 83/6 83/10 supplies [1] 214/11 supply [5] 38/13 48/22 51/22 52/20 61/24
support [21] 13/2
17/6 17/24 18/4 18/8
18/21 18/22 65/3 70/9 71/24 72/19 96/10 96/12 115/21 153/22 171/12 177/14 177/16 194/12 211/2 215/3 supported [4] 82/2 151/5 188/14 209/10 supporting [1] 132/11
suppose [1] 35/14 supposed [1] 18/16 supposedly [2] 17/21 54/7
suppress [3] 143/3
143/4 143/13
suppression [4]
36/20 136/5 137/8
140/22
sure [42] 1/12 6/1 11/6 14/11 14/16 16/3 28/16 28/20 30/14 31/15 37/5 48/21
49/21 50/24 53/5 58/4
58/8 58/14 59/6 67/20 T
72/12 73/22 76/7
86/15 87/10 91/12
91/19 103/22 106/22
111/20 119/4 135/23
154/19 159/25 161/14 161/21 166/7 168/3
174/11 192/17 205/21 208/8
surely [1] 20/20
surface [1] 211/20
surge [3] 42/10 95/9 98/19
surgery [1] 65/2
T
surgical [1] 163/3 surprise [1] 123/16 surprised [11] 90/13 90/21 90/25 99/25 105/16 106/12 116/22 117/1 117/9 137/11 137/15
surprising [2] 29/5 159/9
surveillance [3]
38/10 177/13 178/17
suspect [5] 90/12
90/19 147/3 155/8 174/17
sustainable [1] 111/25
sustained [8] 32/14 38/8 112/14 122/5 127/13 134/6 134/18 135/8
swamp [1] 140/19 swamping [1] 139/18 swift [2] 64/7 64/9 switch [1] 43/7
switched [1] 138/17
switches [1] 138/9 sworn [2] 174/24 217/25
symptom [1] 117/15
symptomatic [1] 119/10
symptoms [4] 70/10 117/11 165/11 165/24 synopsis [3] 32/8 32/18 188/21
system [29] 2/23
9/14 18/19 50/12 65/22 80/10 86/19 87/9 96/18 98/8 98/18 talks [3] 19/24 99/20 116/1 117/3 160/16 207/2
117/8 117/20 117/22 Tam [4] 158/3 159/8 118/2 118/9 118/13 119/1 120/20 120/25 126/12 169/16 178/25 target [2] 87/8 89/5 184/9 185/24 207/8 systemically [1] 97/20
systems [3] 38/10 80/5 95/17
table [4] 26/9 31/6 39/8 187/20
tabletop [2] 29/14 188/25
take [53] 7/1 8/1 9/4 10/19 17/6 20/18 22/7 23/22 33/13 34/20 35/17 39/1 43/9 43/16 45/5 47/21 47/24 50/4 58/7 58/10 65/21 70/25 75/20 76/15 77/5 82/11 83/5 85/6 88/5 88/13 102/3

104/8 104/20 118/9 $\quad 168 / 4$ 195/13 126/22 139/25 147/2 telling [7] 21/13 147/3 151/3 153/1 157/20 165/1 167/6 171/21 181/2 187/5 188/12 191/18 193/11 196/4 206/6 206/10 207/3
takeaways [1] 40/6 taken [33] 14/25 15/8 15/9 15/15 23/24 34/7 34/10 38/18 46/19 48/21 49/22 52/18 52/21 68/5 68/6 68/11 94/13 94/22 103/25 106/18 134/10 134/14 145/12 150/10 169/20 169/20 169/23 170/3 172/24 186/4 188/5 199/23 206/24
taker [1] 152/8
takes [4] 36/15
180/24 207/8 213/19
taking [6] 7/25 42/13
43/6 49/14 68/13 151/13
talk [6] 15/24 16/4 23/5 31/21 70/23 179/18
talked [4] 111/5 116/12 116/13 116/14
talking [17] 17/17 19/17 59/18 59/20
83/7 92/19 106/23 109/3 117/2 117/7 122/11 141/17 167/1 172/12 179/10 179/14 211/10 159/12 160/9
Tamiflu [1] 118/9
targeted [2] 76/2 171/11
targets [1] 87/17
tasked [2] 146/2 203/2
taskforce [4] 10/10 21/7 21/15 21/18 tasking [1] 187/23 team [6] 13/17 80/24 96/10 188/14 191/7 204/4
teams [1] 178/16 technical [1] 126/17 technology [1] 119/12
Telegraph [2] 24/23 173/6
tell [10] 11/11 12/24 46/7 76/2 114/10 148/7 163/24 165/7

71/13 85/1 102/16 156/2 193/17 205/25
ten [7] 22/25 93/15 115/2 147/2 190/8 193/7 204/15
ten days [4] 22/25 115/2 193/7 204/15
tended [1] 14/20 tendency [1] 92/3
tends [1] 104/15
tension [2] 28/3 214/15
tensions [2] 29/4 123/8
tenure [1] $2 / 2$
term [9] 70/6 71/21 72/4 96/19 160/11 160/21 164/13 169/14 198/6
terms [29] 3/8 5/11 21/5 57/23 64/19 66/13 73/20 74/20 75/11 75/19 81/21 86/3 86/14 86/22 87/20 116/12 116/13 116/14 122/24 144/3 144/18 156/23 166/6 177/4 180/5 181/16 192/22 202/6 208/1
terrible [2] 30/14 40/20
terribly [2] 104/2 165/18
test [26] 79/3 82/25
83/23 116/1 117/3
117/8 117/22 118/2
118/9 118/12 118/13 118/22 119/1 119/7 120/20 120/25 163/22 182/11 186/3 196/12 198/2 198/2 198/2 tested [4] 88/7 155/10 155/11 200/14
testing [37] 47/11 49/21 50/24 52/14 56/16 57/12 57/16 57/20 57/22 58/10 58/19 59/15 60/4 60/6 61/16 66/25 67/6 68/19 117/20 118/5 119/11 119/12 120/4 120/7 120/13 120/16 151/16 178/4 185/1 185/3 185/20 186/10 186/13 198/4 198/19 212/19 212/21
tests [13] 67/1 86/20 87/21 88/11 88/24 117/6 118/20 119/6 120/8 159/16 185/24 185/25 186/1

176/21 181/13 181/19 thank you [63] 1/20
text [3] 124/13 126/1 142/7
texting [1] 22/17 than [42] 12/4 19/25 25/16 31/6 34/1 34/22 35/8 36/17 59/16 59/22 64/14 65/7 69/3 92/24 94/8 96/18 103/2 103/9 106/8 106/10 108/13 111/19 116/21 117/21 120/18 130/13 137/17 140/13 151/20 152/4 152/9 155/10 159/16 166/3 167/18 169/7 170/16 170/18 173/18 179/17 194/18 214/1
thank [74] 1/20 3/25 19/3 25/3 38/20 43/4 47/17 53/9 53/10
$53 / 1253 / 1556 / 25$
62/4 64/1 64/3 64/18 65/11 68/9 69/5 69/17 69/18 69/19 69/22
70/15 73/3 73/4 73/7 76/20 76/20 76/21 76/22 76/25 77/1 77/2 77/22 79/14 96/5 128/9 152/23 163/25 167/19 168/11 169/1 169/12 169/21 170/10 170/23 171/5 172/25 173/25 174/5 174/14 174/18 175/3 175/12 186/14 189/19 192/1 203/20 208/13 210/3 210/5 210/8 211/12 213/10 214/2 215/4 215/5 215/7 215/14 215/21 215/25 216/1 216/7

3/25 19/3 25/3 38/20 43/4 47/17 53/10 53/12 56/25 62/4 64/1 64/3 64/18 65/11 68/9 69/5 69/17 69/18 69/19 69/22 70/15 73/4 73/7 76/20 76/20 76/21 76/22 77/1 77/2 77/22 79/14 96/5 128/9 152/23 163/25 167/19 168/11 169/1 169/21 170/10 170/23 171/5 172/25 174/5 174/18 175/3 175/12 186/14 189/19 192/1 203/20 210/3 210/8 211/12 213/10 214/2 215/5 215/7 215/14 215/21 216/1 216/7 thanks [1] 79/17 that [1337]
that's [76] 6/11 7/11
that's... [74] 7/14
9/13 13/24 14/19 25/2 26/17 28/7 33/25
40/13 41/24 42/6 43/4
43/19 45/18 45/23
50/5 50/14 51/6 52/17 54/17 54/24 56/6 56/17 59/23 60/12 60/23 60/25 61/13 68/6 68/23 73/2 73/24 75/23 84/20 85/16 87/12 95/1 95/7 97/15 99/21 103/5 103/5 103/5 104/6 109/23 112/15 112/20 119/3 127/19 137/10 151/23
152/17 167/3 167/6
169/22 171/7 173/20
173/21 179/19 179/21
182/25 184/2 184/19
185/11 185/13 191/24
192/17 197/7 198/14
198/25 199/25 201/12 203/19 215/1
theatre [1] 163/3
their [39] 7/24 12/20
14/24 17/14 17/22
18/19 20/6 20/12 27/2 30/12 31/9 31/23
31/23 56/3 64/9 65/18 68/16 68/16 69/1
71/15 73/15 82/7
82/11 83/22 85/6
97/18 140/10 142/19
153/23 157/20 160/13
171/23 171/23 172/14
185/15 198/13 209/20
209/21 211/23
them [66] 7/6 9/9
9/10 20/22 21/13
25/16 25/20 26/15
28/14 30/5 31/8 33/23
37/2 38/3 41/2 42/2
53/8 56/21 69/4 72/22
75/3 76/1 77/24 78/11 78/12 79/7 79/19 79/19 90/15 97/6 97/7 97/19 98/1 98/2 100/2 100/7 103/7 104/10 104/11 104/11 124/17 125/2 126/9 147/19 147/25 149/23 149/25 150/3 150/22 150/22 152/3 169/4 169/4 170/18 170/19 174/12 174/13 179/25 184/3
199/25 205/6 206/4
206/12 209/2 211/23 215/18
theme [1] 95/19 themes [1] 18/1 themselves [4]

103/14 168/16 173/8 206/11
then [114] 6/5 6/23 8/21 12/6 12/7 12/8 14/22 14/23 16/9 16/16 16/24 17/21 18/18 21/11 21/14 22/25 24/7 24/9 24/16 25/14 30/5 31/7 31/18 32/24 33/2 35/3 35/17 37/15 37/21 38/18 39/1 39/5 40/2 41/3 41/13 41/16 41/24 44/15 47/3 49/3 50/7 50/12 50/20 53/7 54/24 55/4 55/6 56/7 57/6 57/9 57/14 60/2 65/2 65/4 65/8 65/17 75/15 76/11 81/3 88/15 90/8 91/14 95/5 96/14 97/6 100/9 101/25 105/7 105/12 111/9 111/10 111/24 114/3 118/17 119/18 119/19 121/22 125/5 125/22 126/5 127/6 127/21 128/2 128/7 132/25 133/21 134/4 136/21 137/25 138/8 145/4 145/18 149/4 149/14 155/25 164/23 171/1 171/20 176/12 178/5 178/16 179/12 180/15 180/24 185/25 188/12 190/4 190/18 194/21 197/6 202/3 204/3 208/2 215/19 theoretical [1] 41/7 there [351]
there's [19] 8/2 16/20 24/21 33/2 51/25 53/24 54/1 55/3 59/17 75/13 75/15 107/4 111/12 118/5 118/8 120/18 168/20 173/16 207/4
thereabouts [2]
36/18 37/14
thereafter [1] 87/22 therefore [29] $2 / 1$ 24/3 24/15 26/8 27/12 71/11 71/14 78/9 78/20 79/6 84/13 88/13 89/18 91/16 93/18 103/12 110/11 110/12 124/21 126/22 140/21 150/21 154/5 161/5 196/1 205/20 207/8 211/2 212/25
thereinafter [1] 134/1 these [52] 6/17 7/16 12/18 13/8 17/7 18/24 22/14 22/15 23/16 24/20 24/22 25/5

28/21 30/4 34/24 38/23 40/8 41/5 47/9 59/21 61/17 91/10 92/1 92/1 92/1 92/4 93/20 102/5 102/6 102/11 110/1 122/18 125/18 146/5 158/9 163/19 166/17 167/5 171/19 172/22 179/21 180/2 180/18 189/9 192/18 199/16 199/22 200/18 205/18 206/24 207/10 214/15
they [110] 8/4 9/11 9/14 9/15 10/6 12/8 12/21 12/22 17/4 17/5 17/5 17/5 18/16 20/21 21/22 22/7 30/23 32/7 36/1 37/4 38/9 38/12 43/12 46/12 51/15 53/7 62/21 65/18 67/15 68/20 70/20 72/10 72/12 78/1 79/8 81/6 82/6 82/9 82/12 82/17 83/18 83/19 83/20 83/22 84/5 87/3 89/6 93/5 93/6 93/7 93/21 105/24 106/6 108/19 116/11 120/6 120/17 120/17 123/1 123/3 125/11 126/25 131/4 135/14 140/3 141/21 148/1 150/13 150/14 152/4 157/19 159/5 163/12 163/18 163/22 168/16 169/23 180/2 180/18 180/19 184/4 185/23 185/25 186/4 186/7 189/8 192/20 200/19 200/19 201/16 202/2 202/17 205/6 205/25 206/4 206/5 206/12 206/13 206/17 206/17 206/18 206/23 207/18 208/9 209/25 212/16 212/18 213/7 214/7 214/24 they'd [1] 120/11 they're [10] 40/10 41/3 65/17 83/9 144/18 151/22 184/1 197/3 208/8 208/9 thin [1] 180/21 thing [26] 10/9 30/14 41/7 86/17 87/12 90/23 93/3 93/17 104/16 105/25 106/4 106/25 108/6 126/11 128/17 128/21 144/2 145/16 160/24 161/2 165/13 165/17 166/8 168/1 183/17 214/14 things [46] 6/9 10/1 11/10 13/1 24/20 38/7

41/14 43/20 80/14 84/12 84/16 84/20 85/4 85/9 85/13 87/2 87/21 87/21 88/23 89/5 89/12 93/21 98/6 98/21 99/16 104/14 104/17 107/2 114/10 116/16 116/17 123/6 124/5 124/8 137/11 145/25 148/19 149/10 157/6 161/5 165/23 171/17 172/1 193/22 195/11 195/19
think [278]
think's [1] 75/4 thinking [9] 37/25 103/17 104/3 104/11 104/12 114/5 114/7 120/19 122/8 third [8] 16/7 38/11 47/14 152/12 169/21 173/1 197/18 204/7 thirdly [1] 80/11 this [389]
those [132] 5/8 6/12 7/10 8/13 8/19 8/21 8/23 8/24 9/25 10/20 12/23 13/6 13/9 14/2 14/3 14/5 14/5 14/17 15/4 15/16 17/21 24/23 25/18 27/12 30/12 35/12 37/13 41/1 47/2 48/19 50/23 50/25 51/1 52/22 53/7 60/8 60/11 62/3 72/25 74/9 74/22 75/19 75/21 76/3 76/23 78/6 throughout [7] 37/6 78/10 78/20 79/7 $\quad 78 / 19$ 122/25 204/8 80/13 86/7 87/23 87/25 89/6 90/15 91/11 91/18 93/10 93/11 94/8 94/19 98/6 ticking [5] 143/15 98/21 100/1 101/5 103/10 104/9 105/23 106/3 107/2 107/2 tiering [1] 18/19 107/21 107/24 108/13 till [1] 119/10 108/21 108/23 110/18 time [117] 3/5 8/8 110/19 115/4 115/12 123/6 123/7 123/21 124/20 124/21 124/23 126/8 140/1 145/5 146/20 148/15 148/21 148/25 154/9 155/7 155/11 157/5 157/6 161/10 162/8 162/18 162/25 162/25 163/25 169/22 169/25 171/25 172/1 172/9 176/19 177/2 177/22 179/16 179/17 179/20 183/10 184/13 198/17 203/1 203/16 204/3 205/4 205/10 205/14 206/2 206/3 206/21 208/13

210/25 212/1 213/5 214/20
though [7] 15/5 42/7 67/25 72/23 81/18 114/9 205/13
thought [21] 13/1 24/11 26/25 31/1 34/22 39/25 71/18 84/20 90/10 99/18 100/5 100/6 111/13 123/16 123/25 129/12 140/14 144/6 149/1 150/12 204/21
thoughts [1] 103/24 thousands [2] 66/19 201/3
thread [1] 123/23 threat [1] 181/1 three [12] 12/22 38/7 80/4 80/13 109/23 124/16 148/21 153/20 164/17 165/10 170/1 171/8

## three months [1]

 164/17three years [1] 165/10
through [24] 24/6
24/16 42/20 70/2 78/12 79/19 101/17 105/10 122/18 127/4 136/18 164/2 180/8 182/7 182/8 184/11 184/11 184/13 186/1 188/5 206/25 211/10 211/16 211/16 207/21 209/18 213/9
Thursday [2] 1/1 11/17 143/20 144/10 144/14 144/16

10/7 10/7 12/9 15/13 16/16 18/13 24/13 32/21 33/4 35/16 36/10 37/3 38/11 38/25 42/8 47/18 51/25 53/23 55/12 56/9 57/16 57/17 57/25 58/17 60/3 66/21 67/19 69/6 69/18 70/16 74/22 76/12 77/5 84/6 92/21 93/1 93/18 93/23 94/2 94/8 94/9 94/12 97/7 99/2 103/6 103/21 104/4 110/2 110/12 111/13 113/9 113/18 113/21 116/20 117/8
time... [60] 123/9
123/22 124/11 125/2 126/12 128/24 129/4 129/13 130/2 131/9 131/21 133/13 137/13 138/16 139/13 140/1 145/5 145/8 146/24 149/9 149/23 150/13 150/15 150/22 151/1 151/8 153/7 155/5 156/6 156/10 157/1 157/25 158/20 159/15 159/25 161/2 161/9 161/12 161/16 161/19 161/21 168/9 174/15 179/14 180/6 180/10 183/15 187/12 187/13 187/15 190/24 195/8 195/13 196/5 199/25 203/4 205/5 206/6 210/18 213/13
timeframes [1] 206/18
timeline [2] 117/5 118/19
timely [1] 74/18
times [7] 12/22 14/12
28/22 92/14 99/3 100/4 214/18
timing [4] 116/22 149/9 150/18 151/25 timings [3] 133/5 139/3 151/2
tipping [1] 158/12 today [14] 5/5 78/4 112/25 155/20 164/8 167/18 168/12 174/3 176/16 176/23 186/17 189/16 215/24 216/3
together [11] 3/6 3/6 21/8 37/13 95/14 110/18 132/7 157/23 160/20 178/25 213/21 told [17] 17/19 40/10 41/22 46/19 49/3 60/2 77/4 85/9 87/4 88/15 102/25 103/14 155/20 163/7 179/13 194/1 195/6
toll [2] 114/7 114/12
Tom [1] 124/13
Tom Shinner [1] 124/13
tomorrow [1] 23/6 too [13] 31/12 36/11 39/17 40/18 45/6 51/15 95/12 95/13 96/20 136/8 136/14 151/10 206/17
took [26] 5/5 15/10 23/23 29/24 31/4 32/13 33/25 34/17

34/19 48/15 49/24 66/24 67/5 137/7 146/11 150/4 150/6 167/25 180/6 180/7 188/8 189/6 190/24 191/1 199/14 205/5 tool [2] 36/12 171/20 top [10] 23/1 99/4 99/9 99/12 109/13 125/20 154/15 166/12 167/23 187/20
topic [8] 21/25 53/17 69/23 101/1 161/20 172/3 173/1 196/3 topics [1] 171/9 totality [2] 3/10 3/13 touch [2] 43/25 176/19
tough [2] 79/23 99/2 towards [4] 36/20 41/13 160/23 207/6 toxic [2] 94/3 94/7 trace [15] 79/4 82/25 116/1 117/3 117/8 117/22 118/2 118/9 118/13 119/1 120/20 120/25 176/22 196/12 199/3
tracing [11] 131/8 158/13 180/11 196/13 196/16 196/22 196/25 197/4 198/19 198/22 198/25
Trade [1] 55/18 traditional [1] 106/10 tragically [1] 69/2 train [1] 22/22
trained [1] 184/3 training [6] 3/2 29/14 54/19 175/15 178/4 178/4
translated [1] 201/9 transmissibility [1] 201/7
transmission [34]
32/14 38/8 105/10
112/1 112/13 112/15 121/16 122/5 127/14 134/6 134/19 135/8 154/4 154/25 158/8 158/10 158/11 158/17 158/18 158/24 159/2 159/7 159/15 159/21 160/22 161/4 193/10 210/23 211/8 211/9 211/13 211/19 211/20 212/25
transport [1] 105/12 travel [2] 113/8 180/12
travellers [3] 127/15 127/18 128/8
Treasury [1] 47/9
treated [1] 93/6
treatment [1] 166/7 treatments [1] 42/12 trials [1] 163/21
tried [2] 48/21 87/25 trigger [1] 43/8 triggered [3] 41/14 161/6 181/2
Tropical [2] 38/6 138/21
trouble [2] 110/21 155/23
true [10] 1/18 20/25 69/15 86/6 89/2 104/21 121/4 169/22 175/8 175/10
trust [6] 25/7 27/24 28/23 89/19 92/8 93/24
trusted [1] 27/15 trusts [1] 57/20 truth [5] 1/17 20/14
193/16 193/17 194/15 truthful [1] 28/10 truthfulness [1] 92/2 try [8] 3/5 6/2 18/19 48/16 52/19 52/21 55/19 57/7
trying [12] 20/17 45/18 55/22 57/14 65/21 70/24 88/21 140/25 171/21 194/16 200/17 202/10
turn [6] 42/10 73/23
73/25 100/24 110/6 148/11
turned [3] 16/21
119/21 124/16
turns [1] 30/3
twice [1] 107/9
two [34] 8/13 25/16 27/24 29/21 32/12 38/4 54/1 55/1 62/15 70/17 84/16 84/16 85/21 102/18 103/10 109/18 109/23 110/18 115/3 116/17 124/7 124/8 124/15 146/20 157/6 162/9 162/14 162/20 162/24 163/2 165/23 171/17 172/1 200/5
two hours [4] 162/9 162/14 162/24 163/2 two months [1] 32/12
two weeks [1] 29/21
type [13] 7/2 20/1
34/14 36/4 53/4 55/2 59/14 59/15 61/8 67/11 125/16 187/25 198/22
type 2R [1] 61/8
types [2] 55/7 60/5
typical [2] 179/16

180/19

UK [30] 37/7 37/21
38/9 53/18 55/15
57/19 71/23 102/17
102/22 103/3 103/16 111/11 117/2 120/19 122/4 128/24 154/4 155/10 156/15 156/17 157/3 158/8 158/10 158/17 159/4 160/23 163/21 182/7 182/11 209/3
UK impact [1] 57/19 UK's [6] 73/11
115/21 129/6 130/4 130/24 208/25
ultimately [4] 34/3
147/13 153/4 153/17
um [1] 112/16
um-ing [1] 112/16
unable [1] 99/15
uncertainty [4] 67/25
151/14 152/12 211/6
unclear [2] 193/8 193/10
under [12] 29/5 35/5 41/16 57/11 61/7 98/24 108/25 117/25 128/3 162/4 166/12 190/18
undermined [1] 31/4
underneath [2] 1/16 199/16
underpinned [1]
130/24
understand [24] 15/1 18/16 25/6 27/23 40/9 60/17 60/17 67/12
85/23 101/1 137/25
150/5 150/7 152/2
152/3 152/5 156/9
161/24 186/5 190/16 191/24 200/16 202/10 209/4
understanding [18] 19/22 20/6 21/19 71/7 87/11 102/7 110/9 110/10 112/19 112/20 118/12 119/12 151/13 167/13 172/8 172/20 172/22 172/23
understandings [1] 68/3
understands [1] 81/9
understood [13]
21/23 30/25 93/21
96/20 101/7 112/8 118/1 138/5 149/19 195/12 197/21 205/1 205/22
undertake [3] 177/7
189/10 207/22
undertaken [1]
163/22
undertaking [1]
88/10
undertook [2] 179/17 179/20
undesirable [1]
34/22
undoubtedly [1] 128/13
unfortunately [3]
69/13 201/9 201/18
ungovernable [2]
97/15 98/5
unimmunised [1] 109/24
unique [1] 19/23
unit [3] 20/13 42/13
206/25
United [23] 24/1 30/6
81/5 103/18 104/24
106/19 116/3 118/15
118/21 121/21 125/11
127/16 128/14 129/17
131/5 133/25 134/6 134/19 135/9 135/18 142/21 143/1 155/1
United Kingdom [19] 24/1 30/6 81/5 103/18 104/24 106/19 118/15 118/21 121/21 128/14 129/17 131/5 133/25 134/6 134/19 135/9 142/21 143/1 155/1 United Kingdom's [1] 135/18
units [1] 58/20
University [1] 76/14
unless [2] 36/23
140/5
unlikely [6] 115/10
117/16 154/6 154/9
154/17 156/4
unlimited [1] 42/22
unprecedented [2]
97/22 99/1
unresolved [1] 33/21
unsurprisingly [1] 6/7
until [11] 65/8 96/20
101/20 119/2 120/24
133/13 138/5 176/10
176/13 193/22 216/9
untrue [9] $84 / 12$
84/19 84/21 85/5
85/10 88/4 89/12 90/7 93/22
untruth [4] 85/14
87/4 88/15 89/7
untruthful [1] 28/1
untruths [6] 85/1
85/18 85/21 85/25
86/24 87/1
unusual [4] 19/23

173/7 198/6 214/23 useful [1] 12/23 using [4] 50/23 60/9 120/6 181/19
usually [4] 84/3 186/1 187/7 187/9 V
vaccine [4] 12/14 15/21 24/17 193/11 vaccines [3] 4/22 16/4 16/5
vacuum [1] 24/10 vague [1] 192/18 validity [2] 85/12 91/10
Vallance [8] 11/4 97/8 139/6 141/7 143/7 143/12 185/6 202/18
Vallance's [1] 143/10 value [2] 177/16 205/20
Van [4] 158/3 159/8 159/12 160/9
vantage [2] 75/7 173/9
variant [1] 212/22 variation [2] 16/12 200/23
varied [1] 7/22
variegated [1] 18/13
various [10] 28/11 32/16 48/15 126/15 175/23 177/14 194/24 207/7 208/10 212/19
vast [3] 83/5 83/11 86/6
version [2] 132/10 153/16
versus [3] 136/5 211/19 211/19
very [181] 1/13 7/19 7/20 8/20 12/6 12/10 12/23 14/12 15/21 22/15 25/8 31/7 32/9 33/5 34/19 37/2 39/10 43/2 43/3 45/11 49/14 49/20 50/1 51/6 51/23 53/9 53/15 60/12 67/21 68/8 69/6 69/8 73/3 74/23 76/25 79/25 80/9 84/17 84/25 86/18 87/8 90/1 90/4 90/14 91/15 93/1 93/12 93/14 93/22 94/6 94/13 97/18 98/11 98/25 99/3 99/8 100/10 100/19 104/17 106/9 111/4 111/7 111/9 111/21 112/2 112/2 114/11 115/10 119/21 119/24 119/24 120/5 120/12 120/17

120/24 124/8 126/22 | $112 / 9$ | $135 / 25$ |
| :--- | :--- | 129/24 130/1 130/1 viral [1] 132/16 130/11 130/15 130/17 virology [1] 182/1 130/17 130/21 136/5 virtual [3] 11/14 13/6 137/11 137/17 139/2 139/7 139/23 139/23 142/1 142/4 142/6 142/6 150/9 150/25 150/25 152/10 152/10 153/11 154/1 154/2 154/5 154/8 154/9 154/17 156/4 156/8 157/2 157/5 159/20 161/2 161/11 163/14 163/14 163/19 165/1 165/2 166/5 166/8 167/25 168/1 169/12 170/4 170/25 171/8 172/19 172/21 173/14 173/15 173/24 174/14 180/2 180/11 180/16 180/20 180/20 180/21 182/9 182/17 183/3 183/14 184/1 184/1 184/4 184/21 189/16 190/1 190/7 190/14 190/25 193/10 195/17 196/6 197/16 198/1 198/14 201/6 201/6 202/3 202/4 202/19 202/22 203/6 203/9 205/2 205/2 205/22 206/4 207/9 208/13 210/1 210/5 213/20 214/22 215/4 215/15 215/19 215/25 via [5] 81/7 107/3

131/8 139/12 142/3 video [9] 164/15 164/18 164/19 165/3 165/5 165/9 165/13 165/19 166/13
view [41] 7/16 8/1 8/14 16/17 17/22 18/21 18/24 19/2 34/8 34/10 34/17 34/19 34/19 36/9 36/9 38/25 68/11 84/14 92/12 94/22 97/20 98/17 99/23 110/22 111/17 111/21 112/2 129/25 130/3 130/4 130/6 130/17 130/21 130/23 140/18 150/19 151/8 152/8 152/8 166/19 198/10
viewing [2] 42/19 70/1
viewpoint [1] 99/13
views [16] 20/2 67/20
90/15 90/22 92/1
92/19 92/22 93/11
93/11 97/10 99/24
100/1 100/9 103/6

13/11
virus [49] 5/24 42/9 57/18 59/19 70/25 101/10 102/25 103/13 103/18 105/10 105/18 106/19 109/4 109/8 110/16 112/5 113/13 115/10 116/2 116/8 118/11 118/11 118/14 119/16 120/7 121/1 127/10 128/12 136/18 $49 / 24$ 50/5 54/9 54/10 143/4 143/14 150/9 55/24 58/6 61/24 151/13 151/16 155/22 $65 / 19$ 87/17 87/20 156/2 156/16 156/17 $\quad 103 / 8$ 104/22 114/7 158/15 160/14 168/14 117/9 119/9 120/8 181/16 183/5 183/22 196/25 197/15 197/21 201/8 212/17
viruses [3] 181/21 196/19 196/21 vital [2] 80/17 130/5 voice [1] 21/10 voices [1] 205/24 voicing [1] 18/21 voluntary [7] 108/3 108/4 125/22 138/7 138/16 147/19 147/24
volunteers [1] 95/15
voted [1] 80/12
vulnerability [2] 160/12 207/25
vulnerable [7] 42/24 136/19 142/9 204/9
207/16 207/18 207/21

## W

wait [6] 118/10
125/13 136/12 137/5
139/9 147/23
Wales [2] 62/14
209/11
wall [1] 140/18
want [31] 21/25
23/15 25/23 33/6
36/14 38/24 39/10 40/19 43/22 45/5 48/4 58/12 60/10 67/21 73/23 73/25 74/17 78/13 84/12 94/21 100/24 102/3 106/22 106/25 141/12 152/25 160/8 179/14 186/15 196/11 202/23
wanted [11] 3/25
17/5 23/5 35/7 43/5 124/17 126/22 132/9 174/10 185/22 195/19
wanting [1] 31/11
wants [1] 133/1
War [1] 126/16
warn [2] 165/10 165/23
warned [3] 47/23
100/15 100/17
Warner [3] 131/18 142/18 143/8
warrant [1] 183/19 was [781]
wash [1] 107/1 washing [3] 107/20 108/18 116/13 wasn't [37] 7/22 15/2 16/15 17/23 36/10 44/10 44/10 49/10 123/16 127/9 138/16 142/12 151/4 152/8 188/2 188/11 188/14 198/9 200/16 205/18 214/12
wasted [1] 124/18
wasting [1] 126/12
watching [1] 151/20
water [1] 41/16
Watson [1] 49/4
wave [17] 24/11
24/15 32/20 32/24 33/3 36/5 47/7 47/8 136/23 137/2 137/17 137/21 138/25 141/14 148/10 165/16 188/21 way [43] $14 / 2015 / 10$ 15/18 19/22 20/6 21/19 24/20 25/2 26/14 35/4 40/11 42/2 42/15 46/16 47/1 47/7 64/16 69/15 70/24 83/17 86/19 91/21 109/1 111/23 117/10 148/8 157/7 167/15 172/12 180/8 183/5 185/21 191/3 193/15 193/18 194/5 194/14 195/11 195/25 201/13 201/23 203/24 213/8 ways [5] 5/23 99/11 108/2 180/18 196/1 we [398]
We haven't [1] 30/16 we'd [4] 66/20 123/5 132/23 173/15
we'll [14] 11/25 26/8 31/21 61/13 77/5
78/12 78/20 79/7
130/24 169/11 170/22
173/22 179/18 186/13
we're [17] 10/23
19/16 39/14 59/18
78/11 91/24 103/14
109/5 120/21 140/13
(92) unusual... - we're
we're... [7] 151/17
153/4 153/7 155/22 179/10 185/3 185/4
we've [26] 6/17 7/4
18/2 29/20 36/25 37/9 45/13 64/16 66/7 100/14 104/5 110/10 116/12 116/23 123/2 141/8 172/17 174/9 178/8 187/14 188/19 189/9 190/6 203/6 204/11 204/17
weapon [1] 196/13
wear [1] 162/9
wearing [1] 163/1
Weatherby [4] 53/13 53/14 62/4 217/7
web [1] 97/15
wedded [1] 141/22
wedge [1] 180/21
week [19] 11/1 12/23
13/19 21/15 23/10 25/12 32/20 49/17 132/10 132/24 133/6 149/7 149/12 163/18 188/22 200/10 200/13 201/11 204/15
weekend [3] 137/8 142/15 145/13
weekly [1] 12/4
weeks [15] 29/21
33/3 42/1 51/19 78/7 110/4 110/13 139/10 150/4 150/6 180/7 181/12 183/18 185/9 198/17
welcome [2] 185/19 192/7
well [140] 3/13 3/16 4/14 5/14 7/4 7/7 7/12 8/11 8/13 8/22 10/8 11/5 11/5 14/4 15/11 15/12 17/12 19/13 19/25 23/22 24/19 25/3 26/3 26/16 26/18 28/11 29/1 31/16 35/10 35/20 35/24 42/5 42/18 43/10 43/25 45/1 46/9 49/12 51/6 51/10 52/2 52/18 52/24 53/25 57/25
58/12 59/13 60/8
60/12 60/19 61/5
61/13 63/20 65/16 66/14 68/14 71/5 72/9 72/15 74/20 75/13 80/17 82/2 87/1 87/10 88/21 90/11 90/14 93/10 97/24 98/3 99/17 100/9 100/19 101/23 103/14 103/20 104/12 105/23 111/16

113/21 116/4 118/3 118/18 119/2 119/23 119/25 120/17 122/13 129/21 130/21 131/7 133/15 136/5 141/4 143/17 152/17 156/20 where [55] 10/15 157/19 157/22 158/1 $\quad 14 / 23$ 15/21 16/7 159/22 159/23 160/24 $16 / 24$ 21/10 22/19 162/19 163/19 163/25 $41 / 21$ 43/11 46/4 164/25 166/23 167/10 $48 / 15$ 56/8 60/19 171/1 171/24 173/14 173/24 178/12 179/24 190/15 191/5 191/11 191/25 192/20 193/6 193/14 193/14 194/8 196/6 201/12 205/17 207/6 207/20 208/8 208/10 208/12 209/8 209/23 211/12 211/24 213/14 214/21 215/15 well known [1] 101/23
wellbeing [1] 177/12 went [15] 7/7 9/9 55/19 61/4 65/24 69/18 101/20 105/25 124/9 128/20 133/17 145/18 146/16 182/20 205/7
were [392]
weren't [12] 43/11 47/5 66/22 85/7 87/1 88/17 93/6 99/4
188/12 194/16 201/14 206/5
what [234]
what's [1] 17/14 whatever [5] 38/12 113/7 149/14 168/18 186/2
WhatsApp [4] 22/12 125/4 140/16 173/2 when [77] $3 / 167 / 24$ 8/4 10/1 10/8 13/8 17/25 18/13 23/3 23/23 25/13 29/3 41/5 46/12 47/8 47/8 48/13 59/25 60/13 60/17 62/1 65/17 67/21 73/18 85/24 86/4 86/23 87/3 87/3 87/23 88/2 88/8 90/12 92/21 99/22 102/8 104/25 111/25 117/6 120/10 123/20 123/21 123/22 125/16 128/19 131/3 131/7 131/11 133/24 134/9 135/6 137/10 139/14 140/3 140/8 140/12 142/17 143/11 144/15 147/15 151/2 152/9 155/25 164/21 165/16 168/20 177/4 189/8 192/11 195/13

197/4 197/10 199/2 201/25 202/24 209/24 211/7
whenever [2] 215/15 215/17

61/23 63/4 69/14 78/12 84/17 84/20 86/4 88/3 88/14 88/19 89/24 91/11 91/17 97/2 101/25 109/5 115/25 118/12 125/7 128/11 130/16 130/20 131/18 139/6 140/17 145/15 154/4 161/3 171/15 172/21 177/19 177/24 185/10 193/5 196/15 196/20 196/21 196/25 197/17 202/9 212/4 214/23
whereas [1] 184/21
wherever [1] 82/12
whether [56] 6/22
8/14 8/22 13/5 17/5 18/3 22/3 25/6 26/2 26/20 26/22 27/23 30/19 30/23 31/13 34/20 35/18 38/21 41/6 42/20 45/20 53/2 63/11 63/13 66/18 68/6 68/10 70/2 84/13 85/5 87/12 87/20 88/1 88/6 90/9 91/9 91/25 105/17 106/25 115/25 120/22 121/10 121/11 126/13 129/17 134/12 135/19 142/25 145/5 157/17 160/8 163/20 163/22 167/20 168/6 208/9
which [195] 2/25
3/24 4/1 4/23 6/25 7/19 8/2 8/3 9/7 9/24 10/19 10/25 11/3 11/10 11/23 15/10 15/12 15/16 19/8 19/12 20/7 20/10 23/24 24/17 25/19 25/23 27/11 28/4 28/9 28/9 29/6 29/14 30/1 30/2 32/2 32/9 32/13 $32 / 1732 / 2032 / 24$ 33/22 34/9 36/15 36/20 37/11 39/3 42/18 43/4 43/6 43/19 43/25 46/16 48/25 51/11 52/3 61/4 61/6 61/7 65/3 66/24 69/8 70/6 70/9 70/22 75/25 78/5 78/20 78/23 79/2

80/8 82/9 83/1 83/20 87/2 87/15 87/18 87/19 87/22 87/25 89/19 92/9 99/18 101/14 104/22 106/18 107/12 108/5 108/14 108/14 109/11 109/20 111/2 113/6 113/22 114/2 114/18 116/7 116/12 118/11 120/4 120/5 120/13 120/21 122/14 123/19 124/13 124/16 126/1 126/7 127/14 128/4 128/12 128/17 128/22 130/22 131/15 132/11 132/20 132/22 133/13 134/24 135/2 135/10 135/23 138/9 139/8 139/9 139/13 140/8 140/9 142/3 142/22 147/20 148/7 148/14 151/18 152/6 152/11 152/12 153/20 153/21 158/13 159/9 159/11 160/11 162/6 164/16 172/7 178/6 178/18 179/12 179/18 179/24 181/22 182/1 182/13 184/1 185/25 186/18 188/8 188/22 189/15 190/5 190/23 192/9 192/20 193/2 193/7 193/20 193/23 197/19 197/20 198/11 198/23 200/8 200/20 200/21 202/21 202/25 204/17 205/15 205/25 206/7 206/25 207/11 208/1 209/10 209/17 212/7 212/16 213/1 213/2 213/18 213/20 214/12
while [4] 35/16
136/19 174/20 193/22
whilst [4] 81/13 95/1
153/6 214/4
Whitehall [2] 27/6 30/11
Whitty [4] 11/4 74/12 109/17 203/15
who [95] 5/18 10/24 17/17 17/24 19/21 19/21 21/8 21/18 22/17 26/5 28/1 30/11 31/10 31/12 31/22 33/9 34/3 34/3 36/25 37/1 37/4 40/12 43/2 47/3 47/4 49/6 50/25 59/14 64/8 64/11 65/5 65/19 65/20 65/23 66/8 67/2 68/4 68/22 70/18 75/18 79/16 79/19 80/7 83/21
83/23 83/23 84/21

84/25 85/3 89/11 93/2 106/23 114/25 125/16 127/20 129/14 135/16 135/19 144/5 144/17 154/9 157/23 161/10 162/8 162/18 162/25 166/2 166/18 181/8 182/8 182/25 184/3 186/6 186/21 188/24 189/9 190/11 190/15 191/10 192/14 195/22 202/19 206/4 207/19 208/4 209/16 210/18 211/23 211/23 212/1 212/11 213/5 214/24 214/25 215/16
WHO's [1] 116/20 whoever [2] 54/15 82/5
whole [11] 103/20
134/22 137/16 150/6 166/15 178/13 178/24 178/24 180/7 186/10 214/9
whom [1] 31/22
whose [1] 68/12
why [36] $9 / 13$ 34/25 99/21 104/11 106/16 107/4 110/17 111/17 112/16 113/9 113/18 118/17 122/11 125/15 126/11 133/15 135/4 137/18 137/20 137/23 138/10 141/22 147/20 148/7 148/14 155/25 164/16 166/21 192/10 192/14 199/25 201/12 201/14 204/24 205/13 207/18
wide [3] 58/25
109/25 112/1
widely [4] 4/11 97/21
160/2 163/13
wider [13] 14/24
58/22 59/21 60/20
73/15 80/22 96/19
98/19 167/12 167/16
202/7 210/24 211/3
widespread [15]
90/13 91/2 92/12 93/3 94/7 110/6 110/14 112/5 112/6 155/14 158/11 158/18 159/20 160/23 199/5
will [81] 2/8 2/15 4/19 4/21 4/22 4/24 5/5 5/9 6/22 13/13 16/4 21/14 23/11 31/15 38/10 38/12 42/24 43/21 46/1 48/8 48/13 48/18 50/7 50/7 56/11 57/1 67/21 68/7 71/23 74/2 79/4 86/15 86/21 87/10 89/5 90/13
won't [8] 16/1 74/2 78/3 79/6 95/20 97/6 172/18 191/25
wonderful [1] 88/18
Woolhouse [1] 40/12 words [12] 7/17 13/24 13/24 24/25 46/7 119/5 123/16 158/23 185/12 185/13 194/8 197/19 work [48] 3/21 6/7
14/21 17/5 22/24 42/10 50/22 53/24 60/13 60/15 60/18 76/9 82/5 98/12 106/2 108/7 110/11 122/3 122/13 122/14 140/3 145/6 146/6 146/16 146/22 162/8 162/18 162/25 179/20 180/8 180/8 180/14 181/2 182/4 184/23 185/1 195/1 195/24 196/1 205/19 205/20 205/22 206/8 207/3 207/5 207/5 207/19 211/15 worked [4] 17/5 136/1 148/2 203/1 worker [2] 212/24 212/24
workers [10] 18/4 18/6 61/18 61/18 73/15 171/14 172/5 173/13 212/23 214/25 workforce [4] 27/4 52/12 53/23 177/18 working [16] 17/22 19/20 27/25 28/21 29/6 37/23 92/7 98/25 99/8 99/14 100/6 106/3 106/3 111/2 122/21 155/21
works [3] 20/7 46/25 197/4
world [2] 69/16 198/1 worldwide [1] 55/12 Wormald [5] 35/21 35/23 77/13 77/17 217/15
worn [3] 53/4 163/9 163/9
worried [2] 125/7 163/15
worry [4] 45/6 94/10 137/18 161/11
worst [29] 30/1 32/21 35/19 37/20 38/13 39/5 39/18 39/20 40/2 40/13 40/25 102/18 105/3 106/1 109/20 115/15 116/7 121/9 121/11 122/1 127/22 128/3 139/15 139/17 156/19 157/4 157/19

187/22 188/20 worst-case [22] 30/1 32/21 37/20 38/13 39/18 40/2 40/13 40/25 102/18 105/3 106/1 115/15 116/7 121/9 121/11 128/3 139/15 139/17 156/19 157/4 157/19 188/20 worth [1] 109/18 would [208] 6/3 6/10 8/15 8/17 8/22 12/19 14/21 14/22 14/25 15/5 15/6 15/13 20/19 20/21 21/11 21/12 23/24 24/9 24/14 26/18 26/21 26/25 28/13 30/13 30/14 30/20 30/21 30/22 31/1 33/4 34/22 35/3 35/4 35/10 36/12 37/3 37/7 37/12 37/16 37/22 38/19 40/2 41/4 41/15 42/18 43/12 46/17 46/21 46/23 47/4 54/7 54/13 56/21 59/14 60/8 61/19 61/19 62/14 63/1 64/10 64/11 64/14 64/14 64/15 65/1 65/5 65/5 65/6 65/18 65/20 65/20 65/25 66/2 66/3 66/6 66/7 66/8 67/3 70/11 70/15 70/18 70/22 71/2 71/11 72/5 72/10 72/12 76/15 77/5 79/21 81/7 82/3 82/14 82/22 83/2 83/10 83/12 84/23 89/24 90/20 91/3 91/3 93/22 94/10 94/14 97/3 97/4 98/10 99/10 99/25 100/1 100/7 100/7 100/11 100/11 102/21 103/2 103/15 104/4 104/6 104/20 108/10 109/13 112/3 112/5 112/6 112/13 112/15 113/18 114/7 115/9 116/21 117/18 121/11 128/15 128/15 128/18 130/11 130/12 133/5 133/7 139/3 139/18 139/24 140/6 140/11 140/18 140/19 142/1 146/5 146/9 146/21 147/15 148/5 148/23 149/24 151/3 151/5 152/7 158/11 158/12 158/13 158/13 158/19 159/18 162/12 162/12 165/14 169/6 170/13 170/17 171/17 172/2 173/9 173/14

173/17 173/19 179/21 Year's [2] 12/11 183/4 187/5 188/5 188/14 188/22 189/5 189/7 190/11 190/14 191/3 191/5 191/8 191/9 191/10 191/21 193/11 193/20 194/17 195/11 195/14 195/19 196/5 198/10 199/4 201/1 201/3 201/4 201/21 208/4 209/3 wouldn't [8] 39/6 40/5 46/20 61/25 83/13 120/14 133/12 133/23
write [2] 169/6 213/23
writes [1] 173/5 writing [6] 169/5 169/11 170/10 170/24 199/19 203/25
written [14] 19/7 25/15 39/16 49/18 52/4 52/10 129/6 133/21 159/9 185/5 191/7 202/2 213/12 213/13
wrong [8] 24/10 70/3 87/14 112/7 112/8 117/5 124/9 172/12
wrongdoing [2]
91/12 91/16
wrongful [1] 89/13
wrote [1] 211/23
Wuhan [2] 105/8 105/15

Y
yeah [66] 3/19 6/11
9/9 9/18 10/18 11/15 11/23 13/11 13/12 13/15 14/13 20/25 29/13 30/21 31/20 31/25 39/10 44/10 46/5 53/19 53/25 56/25 58/12 59/20 60/15 61/2 63/19 71/18 79/14 94/23 98/23 102/10 107/10 107/14 107/18 111/4 112/21 116/24 117/19 118/24 123/14 125/6 125/12 129/10 130/19 132/14 132/18 133/10 134/8 135/3 137/3 141/17 142/16 143/6 143/17 144/12 144/14 144/25 145/3 145/11 146/4 146/8 146/13 149/3 149/16 163/13 year [13] $1 / 162 / 2$ 3/24 10/23 24/7 25/24 29/3 29/3 52/7 71/25 175/9 176/14 179/23

181/4
years [6] 1/23 23/24 34/10 51/19 51/21 165/10
yes [163] 2/4 2/12 6/19 7/14 7/18 10/7 14/20 16/1 18/1 19/1 19/9 21/21 28/24 28/24 29/15 29/25 31/1 32/23 34/16 34/16 41/20 44/13 46/2 50/14 51/10 52/20 53/9 53/25 54/12 54/14 54/21 55/6 55/10 55/14 55/16 55/21 55/23 56/1 56/5 56/10 56/22 58/1 58/18 58/23 59/2 59/10 59/18 60/12 60/17 60/22 61/10 66/9 68/9 69/12 70/14 71/2 71/9 71/17 71/18 72/12 78/25 81/16 81/18 81/23 83/18 84/7 85/11 86/13 94/2 95/3 101/9 101/19 102/3 103/5 107/24 108/2 109/15 114/19 117/17 118/3 118/7 119/3 120/1 122/20 124/25 125/2 125/9 125/14 128/25 129/4 134/20 134/22 136/11 139/1 143/9 145/7 145/21 147/1 147/5 151/11 153/15 155/8 155/24 155/25 158/21 158/25 162/11 162/21 163/6 163/12 163/12 165/8 168/18 169/6 169/22 171/15 171/15 172/11 174/23 175/11 175/17 175/21 175/25 176/4 176/8 176/11 176/15 177/7 177/23 179/7 181/4 181/10 181/19 182/15 182/22 183/21 184/19 185/17 187/4 187/16 188/18 189/12 189/18 189/19 191/5 195/17 196/2 196/23 197/2 197/24 199/15 199/18 199/20 200/3 202/1 203/5 203/13 203/23 204/5 204/10 206/14 208/13 216/6
yesterday [3] 19/15 48/10 48/24
yet [4] 23/8 129/9 129/18 140/24
yield [1] 201/6
you [730]

(95) you know - Zambon

