Tuesday, 10 October 2023
(10.00 am)

LADY HALLETT: Mr Keith.
MR KEITH: Good morning. May I please call Lord O'Donnell. LORD GUS O'DONNELL (sworn) Questions from LEAD COUNSEL TO THE INQUIRY

MR KEITH: Could I commence, please, by asking you to give your full name.
A. Gus O'Donnell.
Q. Lord O'Donnell, whilst you give evidence, could you remember, please, to keep your voice up and also try to speak as slowly and as concisely as you're capable of doing in order that your evidence may be more easily recorded by our stenographer.

Lord O'Donnell, you have been good enough to provide to the Inquiry a witness statement dated 26 June 2023, INQ000215548. There we have it. Is that a statement that you signed and declared to be true to the best of your knowledge and belief, I think, on the last page, page 16 ?
A. Yes.
Q. Probably on 26 June. There we are.

Lord O'Donnell, significantly, you were once upon a time the Cabinet Secretary, and, in order to be able to get our bearings, were you Cabinet Secretary between 1
relevant later.
Q. Yes, indeed. Have you, since the commencement of the pandemic, in fact published a number of articles concerning the government's response to the pandemic, including an article based upon an annual lecture that you gave to the Institute of Fiscal Studies in September of 2023. I'm not sure actually, perhaps, that that's the right date, but in any event you gave a lecture to the IFS and that lecture was subsequently produced and reproduced in an article entitled "The Covid tragedy: following the science or the sciences?". You also published an article entitled "Far from Well: The UK since Covid-19, and Learning to Follow the Science(s)", an article you published with a professor or an academic at, I think, King's College London, Harry Begg. Also, thirdly, an article, "When to Release the Lockdown? A Wellbeing Framework for Analysing Costs and Benefits".

So you have looked, in broad terms, quite carefully at some aspects of the government's response to the pandemic and you've published your thoughts in relation thereto?
A. Yes, I should explain that as president of the Institute of Fiscal Studies, we were due to have a Nobel Laureate come and give the lecture. It was Covid so they didn't come across from the States, so I stepped in at

2005 and 2011? Were your successors, then Sir Jeremy, later Lord Heywood, who tragically became very ill whilst still in office and died? He was succeeded by then Sir Mark, later Lord Sedwill, between 2018 and 2020. He resigned in September of 2020, and he was replaced by the present incumbent, Simon Case. Have we got the chronology right?
A. That is correct, yes.
Q. Did you leave the civil service in 2011 when you ceased being Cabinet Secretary?
A. Yes.
Q. You're now a crossbench member of the House of Lords. Do you carry out a number of different functions and have a number of roles, including being chair of Frontier Economics, you're the president of the Institute for Fiscal Studies, chair of the public interest board of PwC, and are you also a chair of a number of worthy establishments and groups and entities, including the All-Party Parliamentary Group on wellbeing?
A. Yes, for a full list you should look at my House of Lords register. For example, I finished being chair of the public interest board at PwC some time ago. But there's a full list, including, as you rightly say,
the fact that I chair Pro Bono Economics, which may be

## 2

relatively short notice and produced that lecture, which was then turned into an article with Harry Begg, who I fear is not King's College but is Blavatnik School at Oxford, Oxford University.

I should say that one of the reasons for this and the point that I wanted to get across very early is that this was a really serious event, a massive thing for government, and I just wanted to make my personal view that I feel very strongly for all those affected by it, by the victims of this. As an individual, I was affected by it as well of course. So I just want to say that I feel for you, and I understand where you're coming from, and I think it's really important that this Inquiry works, as you are, incredibly hard to learn lessons from the events.
Q. In your articles, one very important theme emerges, and it may be put in this way, Lord O'Donnell, you posed the question: were the appropriate structures in place to ensure that the best possible decisions were made?

I'd like to commence, please, with an examination of that question. Why does it matter, when government is making momentous decisions of this type, that the structures and the processes which underpin that decision-making are appropriate, adequate, suitable, worthy unto the day?
A. So what's important when you hit a crisis is the ability to bring together all of the information in a sensible way, to get that to the ultimate decision-makers, who are of course ministers, in a form in which they can understand and apply their judgement to that information and evidence that you've given to them.

So you do need to do this. And it's also important that quite a lot of people fight the last war. So some of the structures were set up, in a sense, with regard to the previous crisis. So in my case I lived through SARS and things like that. So there is -- there was an element of us thinking about pandemic flu. A lot of the time that was top of our -- the National Risk Register, which was started in my day.

But each crisis is very different. If you think about, for me, the biggest crisis during my time was the global financial crisis. That was very much about the economy, the Treasury, global issues. So that was -that required a certain set of structures.

Covid was different, in that quite often, for example, SARS was mostly a health crisis dealt with through health means. So, for example, you were thinking about how much of the medicine should we buy, and we were criticised later for buying too much. Actually I think, you know, my goodness, I think we may 5
the crisis you're dealing with, so what would have been right for a global financial crisis would absolutely not have been right for Covid.
Q. The type of evidence and information to which you refer was of course, during the pandemic, the sort of information relayed to decision-makers through, as we know, SAGE -- and we'll come back to that in a moment -and COBR, to which we'll also revert in a moment.

But presumably at some point in this structure, in this system, the information, the evidence, the wherewithal to be able to enable decision-makers to make the best possible decisions had to be routed through existing government structures, so the Cabinet Secretary, the Cabinet Office, Number 10 and, perhaps to a lesser degree -- the extent to which it was a lesser degree we'll examine in due course -the Cabinet.

How important in this decision-making process or this evidence gathering process is the role of the Cabinet Secretary?
A. Very important. But I would say one thing about -- you don't necessarily need to put it through existing structures, you can create new structures.
Q. Of course.
A. And we did, for things like the global financial crisis.
be ... I personally would stand by all the decisions we made then.

But Covid was different, in the sense that there were going to be medical ways of solving this, vaccines eventually, there were drugs, there's various things, but also there were -- I think the term that everybody uses is NPIs, which were very different, and actually required understanding of how people's behaviour would change, and also of their impact in a broader sense.

So, for example, closing schools would have an effect on transmission, which experts in epidemiology could tell you something about, but in order to understand the overall impact and put this to ministers, you needed to have someone saying, "What's the impact of that on the children, on their education? What's the impact on teachers? What's the impact on the mental health of the parents and, in due course, on the economy as a whole?"

So there were lots of -- I always -- I refer to it in the papers as a mixed crisis, in the sense of it starts with a health issue but it's solved by a combination of health and non-health interventions. And that's complicated, and therefore you need a multidisciplinary approach right from the start. Hence you need to set up the structures to deal with 6
Q. But I'm asking you about the existing structures, because the Cabinet Secretary played a vital role, of course, in the response to the Covid pandemic.
A. Absolutely. And if you think about what the role of the Cabinet Secretary is in this, it's to make sure that both the Prime Minister and Cabinet -- and I think this is important, it's actually in the name: if you're Cabinet Secretary you have dual roles, right, you are there as a policy adviser to the Prime Minister but you are also there to support Cabinet and Cabinet decision-making. So you have to try to set up structures that make sure that both of those, as it were, clients are treated properly, and you need to make sure that the structures you've got work well for this.

So, for example, COBR was used at various times. COBR is a structure that works at its best -- sorry, you --
Q. We're going to come on to COBR in a moment.
A. Fine, okay.
Q. Can we remain focused on the Cabinet Secretary for a moment.
A. Sure.
Q. The Cabinet Secretary is, in effect, is he or she not, the head of the government machine? They liaise with the Prime Minister, to whom of course they are
the Cabinet Secretary. He or she will be the head of the civil service, probably, not necessarily. They liaise with the Cabinet, they are the secretary to the Cabinet, and they are at the head of the structure, the civil service structure which will give advice to the Prime Minister.

Is that a fair summary?
A. Yes. I would stress, though, it's Prime Minister and Cabinet, and sometimes you're going to talk to the Prime Minister about ways of involving Cabinet more. So, you know, it's not just one way. You have two masters in that sense.

And you are, as you absolutely rightly say, head of the civil service, so all of the permanent secretaries to the different departments report to you as Cabinet Secretary. So you are trying to make sure that all of the departments work well together, particularly when you've got an issue which goes across departmental boundaries, and Covid would be one where that absolutely was true.
Q. So in a time of crisis, the demands on the Cabinet Secretary are greater than in normal times, because they have to try to broker, or broke the position within government as well as respond to and be at, I suppose, the top of the pile in relation to 9

I actually did have three roles at the time: I was Cabinet Secretary, head of the civil service and I was Permanent Secretary for the Cabinet Office. Which I thought was too many, and I wanted to get there to be a separate Permanent Secretary for the Cabinet Office. But ultimately you are always going to be overseeing the Cabinet Office, whether you've got the titular head of Permanent Secretary for the Cabinet Office or not, because that is the mechanism by which you're bringing together all of the departments.

You are -- as Cabinet Secretary, it's worth pointing out, every Wednesday for an hour you bring together all the heads of the government departments, all the agency heads, and you talk about the big issues of government, and you do this knowing that Cabinet will be meeting to talk about some of the same issues.

So there is a very big role in bringing together the whole of the civil service and government machine.
Q. How important is the interface between the Cabinet Office, which performs this wider governmental a role of broking between departments, of trying to apply a level of control, to try to focus the information and the evidence in a way that assists the centre of government, and Number 10, where executive power in the form of the Prime Minister is essentially
the government's ability to deal with the ensuing crisis?
A. Yes, I would say so, but I would also say that, as Cabinet Secretary, I was told there was a crisis every single day, and that turned out to be there was a bad headline in a newspaper. My response always was: how many people have died? And you need to get that calibration in there to understand that some crises are really, really important and need urgent attention. I think Covid was a classic example of that.

So there is this kind of role of the Cabinet Secretary to get things in perspective, to say, "You might think this is a crisis, but this is going to be something that would be resolved in a few days and it might be a few bad headlines", "This is something that is an absolutely existential threat and therefore requires everybody to change their behaviour it might require new structures, and it might require all of us to think about things quite urgently as to what we need", for example collecting more data.
Q. Is the Cabinet Secretary the head of the Cabinet Office, which is itself a government department, although perhaps to call it a government department may be to mislead indirectly?
A. Good question. So when I was Cabinet Secretary 10

## vested?

A. So you have to manage both, and you have to remind the Prime Minister at times that he may be, a phrase to use primus inter pares, first amongst equals, but he is head of a Cabinet, and it's important that Cabinet gets to discuss some of the important issues.

So the Cabinet Secretary will spend quite a lot of time with the Prime Minister, saying, "Actually, Prime Minister, you should take this to Cabinet", or, "You should take this to a certain committee", or whatever, rather than just saying, "Prime Minister, you've got to decide this or that".
Q. It's self-evident, isn't it, that these working relationships, the relationship between the Cabinet Secretary and the Cabinet Office and the Cabinet, and the relationship between the Cabinet Secretary and the Prime Minister, and between the Cabinet Office and Number 10, are all absolutely essential to the way in which a government can respond to a crisis? If those relationships break down or become degraded, the government is likely to respond less efficiently and less well. Would you agree with that general proposition?
A. These are all personal relationships, and it's -you know, having worked closely with John Major, 12

Tony Blair, Gordon Brown, David Cameron, Nick Clegg, I would say in every single respect you have to take into account the personality and strengths and weaknesses of the Prime Minister you're dealing with, and therefore as Cabinet Secretary you have to adjust to that, because they are the Prime Minister, you know, and you need to make the relationship work. So different styles are needed at different times, depending on who you're working with.

But yes, at its best that relationship is a very strong and close one and allows the Cabinet Secretary to do what we always say, speak truth unto power and be able to challenge the Prime Minister and say, "No, Prime Minister, actually I think you're wrong, I think, you know, you shouldn't do this, you should do that".
Q. And you say at best, but if at worst the relationship breaks down or there is a loss of confidence, that is
likely, is it not, to have a deleterious, a damaging effect on the nature of the decisions which the government will then make?
A. Yes. I mean, there's no doubt that if that -- in my time, I can only speak about my time -- in my time if I had not felt that there was mutual trust and respect between me as Cabinet Secretary and the Prime Minister, that would have made life very difficult, and I was very 13
make and the information and evidence they needed.
That was clearly, from the evidence you're seeing -obviously I wasn't anywhere near this at the time, but from the evidence you've got from other people, that was clearly an issue. And once that's an issue, you need -the reason that the Cabinet Secretary, Simon Case, would have been talking to Patrick Vallance about this is they need to understand how to operate in a way in which -the top is not functioning as well as you would like it to, and when that's happening, you obviously need to think about: how do we ensure that the best decisions are made for the country when it's not working as well as one would like?

And that means that sometimes you have to, you know, be clear with the key officials, like Patrick Vallance, Chris Whitty, that there are problems with these relationships, and therefore things may not happen as quickly as you would like.

So that's the world you're living in, they are there, you can't change them, a lot of these issues are for, you know, our political appointees, and the Cabinet Secretary can't do anything about that.
Q. But the outcome, the ultimate outcome of a failure to take a grip on factional infighting or loss of confidence in important individuals or breakdown in the
fortunate in that all of the Prime Ministers I worked with I felt that that relationship existed.
Q. It is now well known that Sir Patrick Vallance, then the Government's Chief Scientific Adviser, kept a set of diaries or evening notes in which he recorded his contemporaneous views on the workings of government during the crisis. In those dairies, in fact on 11 November 2020, he says this of your successor, Cabinet Secretary, Simon Case:
"Simon Case says No 10 at war with itself - a Carrie faction (with Gove) \& another with SPADs ..."

What are SPADs?
A. Special advisers. Political appointees, not civil servants.
Q. "PM caught in the middle. He has spoken to all his predecessors as [Cabinet Secretary] \& no one has seen anything like it."

Lord O'Donnell, were you one of the predecessors to whom he spoke?
A. Most certainly I was, yes. And like I say, you know, I look back on this and think I was blessed, I actually had a relatively easy time. All of the prime ministers I worked with, I could say I think there was that sense of mutual trust and respect, and ability to get prime ministers to focus on the decisions they needed to 14
relationships of trust between these various departments and the various individuals will be, won't it,
a degradation in the decision-making? No government sensibly constituted can respond properly to a crisis and make these momentous decisions if it's at war with itself and if its various moving parts are, bluntly, dysfunctional?
A. There are always differences of view amongst members of Cabinet, and differences of view even within Number 10.
So -- and that, to be honest, is healthy. You would not want groupthink to take over. There are always competing factions, there are always competing views of looking at the same evidence, coming up with different answers. The job is to try to make sure that there is a consistent framework, that there are rational decisions being made, rational in the logical sense, that can be explained consistently both to -- within government but also to the public, to understand why certain decisions are made.

So that's -- I think that's the key. You have to accept the fact that there won't be unanimity amongst all of these different players, but you need, as best you can, to use the processes at your disposal to make sure that all of these different voices are heard, but there is a good decision-making process that comes up 16
with the right answers.
Q. This material, though, Lord O'Donnell, goes beyond, doesn't it, debate or even ferocious debate? It indicates a level of dysfunctionality, "no one has seen anything like it", there are references to "chaos", internecine warfare going on within Number 10. That's not the normal part of government, is it? That's not debate, that's a systemic failing, is it not?
A. Like I say, I wasn't there. All I can say is during the time when I was there, there was healthy debate. You know, there was -- a lot of people have written about Tony Blair and Gordon Brown not always sharing the same views. That actually, to my mind, was a strength of government, a Chancellor and a Prime Minister testing out ideas with each other. But, yes, I wasn't -- and I don't think anyone has ever said that there were problems like those that Patrick Vallance is referring to and others have mentioned. So that, to my mind, means that Simon Case was dealing with a far, far more difficult situation than I ever had to face.
Q. It's a matter of public record that Lord Sedwill gave up the position of being Cabinet Secretary publicly in September of 2020, although the debate in Downing Street as to how long he should continue for raged throughout 17
witnesses have said, I can understand why that might be very, very difficult, then you can understand why there's a decision for that Cabinet Secretary to go and for a new one to come in.

I mean, of course, the other side of it is when prime ministers should go, and that's obviously an issue that's either decided by the electorate or their own party. That was done.
Q. You've used the phrase, perhaps the euphemism, "it would be a difficult situation". In terms of government administration and the proper workings of this very highest level of government, that breakdown of relationship with the Prime Minister and the Cabinet Secretary was, frankly, a car crash, wasn't it?
A. Well, you have to do your best to make sure that it's not. So you have to --
Q. But it was, was it not? It does appear that the relationship broke down completely at the highest level of government, and that is a most regrettable feature of the way in which the government responded.
A. It's -- most certainly, yes. I mean, I would say it would be far better if they were getting on well. Precisely -- you know, the job then of the Cabinet Secretary, Mark Sedwill, would have been to 19
the summer. What, in your experience, would have been the likely impact on the decision-making processes of the change in Cabinet Secretary in those terrible months?
A. Well, on the one hand you want a Cabinet Secretary that can manage the relationships with the Prime Minister, and if that relationship's broken down, it's a bit like -- as Cabinet Secretary, it was always my job to go and talk to a minister if they weren't getting on with their permanent secretary and to think about, was it something about the way the permanent secretary was acting or behaving, was there some personality clash or whatever, and you'd try and find a way to make that relationship work better, and to then think about, ultimately, if it wasn't going to work, how you manage the smooth transition. So, in a sense, that would be my playbook as to how -- unfortunately that playbook works when you're talking about ministers and permanent secretaries; obviously when it comes to the Prime Minister and the Cabinet Secretary, there's no one else to go to. So that's the kind of -- that's a very difficult situation.

And if a Cabinet Secretary and a Prime Minister ultimately can't work together, and, you know, from what we've heard about the Prime Minister's style, what other 18
try to make sure that the damage of that relationship not working was as small as possible.
Q. Indeed.
A. You know, so Mark needs to think about: okay, what's the future, can we get a new Cabinet Secretary in? Can we make sure that this doesn't damage things in the way that ...

You're right, because the Cabinet Secretary is a very important position for bringing all of this together, at a particularly difficult time, so the potential is there. The job that Mark tried to do was to make sure that the damage was as small as possible, given the behaviour of other participants in it.
Q. Generically, there is, of course, the well known division of function between the civil service, which acts primarily in an advisory role, and ministers, who carry executive power, who are the decision-makers. Without delving too far into this extremely complex conceptual and administrative divide, does that division of function work particularly well in a crisis, where you have civil servants giving, with the best intentions in the world, advice, but leaving it to ministers, some of whom may have more experience than others, to make the executive decisions?
A. In a sense that's democracy for you. You know, we've 20
decided that we want to go down a route where the ultimate decision-makers are elected politicians, mostly. I mean, there can be some from the House of Lords, obviously. And they can move around. You know, during my time I had nine ministers of pensions in five years. I mean, it's quite a long-term issue.

So you would want your decision-makers to be really good at one thing. You can't expect them to be good at the subject matter in the sense of -- you know, because they could move from health to defence or whatever. What you really want is for them to be good at decision-making under uncertainty, because you're always going to have uncertainty and you always want them to -and I would -- you know, if I had one wish it would be that ministers had training in decision-making under uncertainty. Because that's the nature of what they do.

And this is, particularly in Covid, it's complicated, the stats you're giving them, you know, the whole, you know, epidemiological modelling. There are some of us who -- you know, I grew up teaching how to do modelling, you know, but that's not their background for most of them. So this is hard for them, and it's hard for us to explain complicated things to people haven't done basic stats, and understanding probabilities, and 21
who suffer from the first crisis.
A. Absolutely. Which is why, when it comes to a new kind of crisis, like I say I call this a mixed crisis, where you're very aware that you're putting to people really complicated issues that they will find very difficult, hence the importance of having people like the Chief Scientific Adviser, the Chief Medical Officer, to try to distill the wisdom of others and put that evidence to ministers in a way that they can understand it and allow themselves to apply -- which ultimately they have to, as the elected ministers -- their decision-making process to it.
Q. The second aspect of your earlier answer referred to or related to churn. In your article "Far from Well", you note that Mr Johnson's Cabinet went into this crisis with comparatively limited experience in positions of power. You said there had also been significant churn among the top positions in the civil service, and plainly, therefore, those ministers had not had any opportunity to take part in live planning exercises.

To what extent do you believe that that comparative lack of experience in ministers had an impact on the decision-making in the early days of 2020?
A. Well, I should say that you can't control this, to start off with. You know, you imagine 1997, Tony Blair comes 23
the uncertainties around these things. Because, to be honest, dealing with Covid, you were mostly dealing with situations where the honest answer most of the time is "We don't know". "But" -- but, and this is a really important but -- "we know ways to try and find out", which mostly involved collecting more data early.
Q. Just picking apart some aspects of that answer, Lord O'Donnell. Firstly, in terms of crisis management, is there any training for ministers at all in advance of taking up their role, their position, in order to better prepare them for crisis management?
A. Well, obviously there are -- there are training programmes, people like the Institute for Government, Blavatnik School, do training programmes for would-be ministers, and they will cover things like crisis management. You get good training for them if they do tabletop exercises. So they have to live it. And I found that was one of the most important things.

Also you've find that ministers get better on their second crisis. So when they go through it the first time and they understand how COBR works and issues like that, they get better. You know, I think all of us would say, you know, the second time we do something is so much better than the first time.
Q. That may provide little solace for the poor unfortunates 22
into office, Tony Blair had never ever had a ministerial role, he becomes Prime Minister. Right? Very, very few ministers, when there's a change of administration, have had any experience whatsoever. So this is something you have to live with in a democracy.
Q. Can I pause you there, Lord O'Donnell?
A. Yeah.
Q. Your article was entitled "Far from Well" and was a piece of learning on the relative performance of the United Kingdom Government and its decision-making. You wouldn't have referred, on page 785, to the significant churn amongst ministers and civil servants unless you had taken the view that it mattered and it had an effect on the standard of decision-making?
A. Sure, don't get me wrong, what I'm saying is it does matter but it's not within your control. If there's just been an election, imagine the next election, imagine if there's a change of administration. By my count there will be seven people in government, if the Shadow Cabinet became the government, who have actually had any ministerial experience. Right? That's the world we live in. You can't assume that ministers have got prior experience.

So here we are in a government where there hasn't been a change of administration for a long time --

24
Q. Sorry, can I just ask you to slow down just a little bit, Lord O'Donnell. Thank you.
A. What I'm saying is that -- so you have to have systems that will work with ministers that are new in place.
Q. Well, ameliorate, in effect, the lack of ministerial experience?
A. Precisely. In an ideal world, and I remember saying this to David Cameron when I had the access talks with him, when he was Leader of the Opposition, he asked me, "What's the one thing I could give you, Gus?" And I said, "Minimise the churn in ministers."

The longer ministers are in place, the more chance they'll have the training, the more chance they'll have been through one of these issues. So I think it is absolutely vital.

And our ability to respond, and I would say any democracy's ability to respond, will depend to some extent on the experience of ministers. And if ministers, even though they haven't been through a crisis like this, have had training about how to manage crises, that would be even better.

So I would love them all to have pre-ministerial training.
Q. I think you might describe yourself fairly as being in the Sir Oliver Letwin camp in that case? 25
ministers will be, frankly, at sea?
A. So, yes, they need the proper advice, but this comes back to my point about working as well as possible with the ministers you've got. So if you know you've got a minister that is liable to, on being told there's a new variant, to immediately jump to a policy conclusion which you think may be wildly mistaken, then it actually makes sense to pause for a second and say: okay, so if we say there's this new variant and it's much more powerful, we really need to be able to answer the Prime Minister's question afterwards, which is, "So what should I do about that?"

So you might want to hold back and say: let's do some analysis first, let's make sure that we've considered various policy options and put before the Prime Minister these various things. Because otherwise there's a chance the Prime Minister will come to a snap decision when told about it and will then talk to somebody else who will say, "Yes, but there's a case for doing the opposite". So you really need to work with what you've got, in terms of ministers, and you need to understand how the machine can help those ministers make the right decisions. Which may well often mean that you pause for a second before you actually give them some new piece of data.
A. He would be a perfect minister in many respects, because he did take these things seriously.
Q. Thirdly, arising out of your earlier answer, a lack of ministerial experience places an even greater premium, does it not, upon the receipt of straightforward, clear and speedy advice from the civil servants?
A. Yes.
Q. One of Sir Patrick Vallance's diary entries from December 2020 says this, that the permanent secretary had become annoyed that the Chief Medical Officer and the Chief Scientific Adviser had told the Prime Minister about a new variant, and he says:
"Sounds familiar. Really we had no choice and he needs to know. The civil service reflex to slowly manage politicians is really awful."

Does it follow that if there is a lack of ministerial experience, then any level of dysfunctionality in the civil service, in Number 10 or the Cabinet Office, in terms of informing ministers, informing the Prime Minister, providing them with the right information, the right evidence, will have an extreme, perhaps a disproportionate impact on the ability of those ministers to make proper decisions? Without the experience and without the proper flow of information and advice from the civil service, those 26
Q. And this machine was stuttering, was it not?
A. I'm not sure I could vouch for that. I would say the machine was doing what it could in terms of understanding the virus and all the rest of it and bringing together the evidence in the best way it could.

The question of whether it was stuttering at that point or at the point where it hits the minister is not something I could say, because I wasn't there.
Q. I understand. Just focusing now on the Cabinet Office generally for a bit, a considerable amount of evidence appears to show that systemically the Cabinet Office failed to exercise the sort of institutional levers of power that are required to be operated in order to bring other departments into line, to be able to broker different positions between different departments, and to synthesise the information, the evidence and the decision-making for ministers.

During your tenure was any concern ever expressed that the Cabinet Office was too amorphous, that it had too many moving parts yet had insufficient control over the rest of central government?
A. There is, I would say, throughout my career, a long career in the civil service, there have always been different views about this, that -- on the one hand, if you talk to departments, they will tell you that the 28

Cabinet Office gets in the way too much, that they are slowing us down, and, on the other hand, the Cabinet Office will say that they need to join up more and more.

I mean, to give you one little example, one incredibly effective way of getting government departments to work together was when you present them with a problem which they have to answer quickly. A classic would be: there's an EU directive on X, it affects five different departments, there's going to be an EU council meeting in a week's time, we need a single government position.

Alas, that doesn't happen any more, and quite often you'll find, therefore, that departments are basically not resolving that, not coming up with the single thing.

So this cross-departmental aspect is very difficult to do in our system.

And that's where the -- you need the structures to work effectively, and I would say one of the most effective ones in my time was the setting up of the National Security Council.
Q. Just pause there, though. It's axiomatic, is it not, that if the system is not working, if the Cabinet Office is unable to exercise sufficient levels of control over other departments, and if there is an institutional war 29
crisis or can it only really operate in the first few days and perhaps weeks of an acute crisis?
A. Yeah, COBR is at its best -- and some of you will be very familiar with this -- dealing with, for example, a terrorist crisis. When it's something short, immediate, you need action, you need the people round the table, you need the Met Police, you need all the rest of them there, and you get as much information as you can, and it's something that's dealt with in a few days. It can deal with slightly longer-term ones, foot and mouth and all the rest of it, but if it's an ongoing thing that you think is going to be there for a year or more, I would say you don't want to use COBR, you want to set up structures which are different.

COBR is -- partly it's a signalling mechanism, to say to the world you're taking this very seriously, but as a kind of structure to sort out longer-term decision-making in something as complicated as the Covid crisis, yeah, I would try to move away from COBR quite quickly.
Q. Is that, in essence, because, as an ad hoc committee which convenes to deal with an emergency, it's simply not designed to be able to develop a coherent and long-term strategy, and a strategy and a coherent plan is essential for any government to be able to properly 31
going on as to who ultimately has the whip hand, whether it's Number 10 or whether it's the Cabinet Office and the Civil Contingencies Secretariat or the lead government department, in a time of crisis, that level of lack of co-operation or lack of proper exercise of power will be all the more exemplified?
A. Well, ultimately we know and departments know that it's for Cabinet and the Prime Minister to make decisions. So when it's something which crosses departmental boundaries, you want as far as possible to set up machinery of government, you know, various committees that cross these boundaries, which actually allow you to bring everybody together.

But it's, you know, you shouldn't -- the realpolitik of this is that there's always a battle going on between central control and individual Secretary of State's freedom to do what they want. It's never that easy.
Q. Now, you refer then to the bodies and the organisations which can exercise power in times of crisis. It's very plain, and of course it's a matter of public record, that the institution known as COBR, the Cabinet Office Briefing Room structure, was set up, of course, and convened to deal with the crisis.

In your experience, is COBR the sort of body which is properly designed for a long-term whole government 30
respond to a crisis?
A. Yes, I mean -- and that's what you need to start off with. You know, the government had an action plan eventually, but it's basically yes, you need, for something like COBR -- there might -- for something like Covid, there might be something you need COBR to meet early on to kind of -- when it thinks: is this a short-term crisis or not? Once it gets to the stage where you've got the information which tells you actually this is something that's big and is going to be around for a long time, you then need to say: okay, what are the right institutional structures to handle this kind of crisis? And then you start setting up the machinery of government which will work effectively for this.
Q. And, as you know, there were a number of ministerial implementation groups convened. They were then replaced in May of 2020 by the Covid-S, the Covid strategy ministerial committee, and the Covid-O, operational ministerial committee.

Did COBR, in your opinion, continue to be convened for too long? It was convened until May, in fact. And if so, what is likely to have been the impact of that in terms of the government's ability to respond?
A. That is incredibly hard for me to say from outside, 32
because I wasn't sure why they were using COBR, to be honest. If the structures were working you would like to think that they would have meant that COBR didn't need to meet. It could be that they'd given some specific role to COBR that I don't know about, so ...
Q. Well, at page 777 of your own article "Far from Well" you did attempt to address that thorny issue, and you were able, in fact, to answer that question, because you said:
"... COBR continued to be convened well into May, by which time various implicit political tensions had become apparent ..."

So you obviously did take the view at that stage that it had been convened for too long. What did you mean by --
A. No, I think what -- I can't see how you infer that from that sentence.
Q. "... COBR continued to be convened well into May, by which time various implicit political tensions had become apparent ..." So --
A. Yes.
Q. -- it plainly went on to such a point, until such a time, that these political tensions built up and became apparent? 33
have set the strategy and would have made the big decisions, having got all of the other structures that you would set up to feed those in.

One of the great strengths of that NSC structure, National Security Council structure, was that it allowed all the officials to give their best view of the evidence and explain the pros and cons of various different policy options and then to observe the ministers talk about those different options and come to a political decision about what they were going to do.

That had the great advantage -- that system has the great advantage of ensuring that all the ministers get the evidence directly, and, you know, with the various experts in the room they can cross-question each other and they can cross-question those experts as they wish, but also that those experts go away and can report back to their various groups on why those decisions were made, what the political reasoning behind saying, "Look, we advised X but they decided to do Y , and the reason they did that", because they were in the room when it was made, "is the following". And people can understand that and therefore interpret that, that it wasn't that they disagreed with your example, for example, they just put a different judgement on the benefits of $A$ versus 35
A. But you're implying causation there. It's because COBR was meeting the implicit political tensions arose. I was saying --
Q. What did you mean by "political tensions"?
A. -- that Covid -- that implicit political tensions were rising, which meant that certain different structures might be required.

So COBR was carrying on, not quite sure why, but it was quite apparent from other events that were going on that there were some internal issues, politically, which were creating problems.

They may -- and those were problems probably related to the sorts of things that Chris -- Patrick Vallance was saying about the different factions, which made decision-making harder. It's not necessarily related to the -- what I call the comitology, the committee structure.
Q. You do, though, express the view plainly that Covid-S and Covid-O, to which I've referred, may not have been brought into existence soon enough.
A. Well, my personal view has always been that this kind of crisis should have been dealt with by something like what I would call a National Security Council structure, which would have been the key political decision-makers plus the key officials round a table, and that would 34
the benefits of $B$.
Q. And SAGE, to which we'll turn now, was not a body that enabled that process which you've described to take place. The politicians were not on SAGE and SAGE provided scientific advice which was relayed through the Chief Medical Officer and the Government Chief Scientific Adviser?
A. Precisely. I mean, that's -- SAGE would have been one of my sub-bodies, although I would have liked a more multidisciplinary sub-body.
Q. We'll come back to that in a moment.

So, SAGE. You've referred, Lord O'Donnell, already to the vital importance of the supply of proper advice. It's self-evident that in a crisis the executive decision-makers, the ministers, must have up-to-date reliable data and advice. They need that assistance.

What about the issue of public trust? In terms of managing a crisis and responding to a crisis, how important is it for the public to know that the government is the recipient of high-quality, speedy, proper, effective advice and data?
A. That is massively important. We know that this crisis would involve asking people to radically change their behaviour, and that meant that they had to trust that you were doing this for good reason. So public trust is 36
absolutely essential in this.
We have lots of research evidence that in places where trust is higher, lots of things work better. It's kind of fundamental getting trust up there, and everyone should do their best to think about trust building exercises, how you ensure that you get across to people that what you're doing is trusted. And often that's through thinking about: who are the best messengers for this?

Again, it's part of the whole behavioural playbook that people will believe certain people and trust them much more than they, dare I say it, would trust politicians in general. Trust in our politicians is rather low, unfortunately.
Q. Was that in part why, of course, the government proclaimed that it was following the science?
A. Well, it's a very --
Q. We will come back to the detail of that, but there is a link there, isn't there?
A. There is a link there. What you're trying to do is get people out there as spokesmen, which they did with the Chief Medical Officer and Chief Scientific Adviser, that people will trust that are -- that they believe are on top of the science. Though I would always argue that we need to interpret science very broadly in that term, 37
volition, of its own motion; it was, in effect, too much of a responsive committee rather than a body or a forum which could proactively make suggestions for ministers to decide to accept or not?
A. Yes, I would agree with that. I think the fundamental problem there, though, was that if you ask SAGE kind of very specific detailed questions and it doesn't know what the ultimate outcomes the government's trying to achieve are, I think that's the problem.

If you give them something about the ultimate outcomes, then they can talk about various ways of achieving those outcomes. If you ask them a very specific question about: what should we do about social distancing? Then you'll get an answer about social distancing. You won't get an answer that says: yes, but maybe social distancing isn't the right way to think about this, because of the objectives you've given us.

And I think that failure to kind of specify what the overall objectives were was one of the things I would kind of look back on and say that's what made it very hard for all the advisers, not knowing what -- the ultimate source of this. Because there were various statements made, like stopping the NHS falling over or whatever, but nobody really, to my mind, ever laid out a good strategy and what the overall objectives --
to include social science.
Q. Let's look at SAGE briefly, and I just want to put to you a number of propositions, drawn in fact from your articles about the operation of SAGE.

Firstly, in terms of its composition, it's well known that it comprised largely epidemiologists --
A. Yeah.
Q. -- modellers, behavioural scientists. Is it your view that it was, certainly at first, dominated by medical professionals and that there were insufficient numbers of experts on infection control, I don't know, community mobilisation, the social sciences, and nursing and intensive care?
A. Yes, I would say, and I would refer to the evidence given by members of SAGE who have said that there were all sorts of areas that they didn't cover and they didn't understand what research was going on in those areas. So, yes, but obviously there could have been other bodies in which -- which did that.
Q. Well, we'll come to that in a moment.

Secondly, do you report in one of your articles that there was an element to SAGE which perhaps indicated that, because it was designed to address questions put to it, on a commission basis, if you like, it simply didn't feel able to be able to raise issues of its own 38
for example, minimising the impact of Covid on the country as a whole, and then you go from that to say: well, what does that mean? And you could layer it into economics, social, et cetera, and health obviously.
Q. A number of the scientists on SAGE in their witness statements have referred to the fact that a lack of a clear strategic direction from the government or a lack of information about the government's priorities made it very much harder for SAGE to understand what it was they were truly being asked.

There is, in one particular set of minutes, these words:
"Modelling suggests earlier and/or combined interventions will have more significant impact."

That sort of phrase may be reflective of this scientific commissioned position, as opposed to SAGE being asked "What do you recommend we should do?" in plain terms. And is that one of the areas that you think is problematic?
A. Well, I think it's -- I mean, SAGE was, as I say, filled with a certain set of experts. You know, it depends on the question you're giving them. If the question is: should we close schools? Then clearly the kind of experts you need are people that understand the impact of closing schools on the educational effect on 40
children, the effect on their parents, general effect on the economy of doing these sorts of things, as well as the things that SAGE might have been very good at saying, which is the impact that might have on transmission.

So you need to balance all those things together. That's a hard thing to do, and that's where you really need to be thinking about: how can we put this to ministers in a way that it makes it possible for them to bring their judgement to bear, to weigh up these different things, to come up with an answer?
Q. You make the point in one of your articles, quite rightly if I may say so, that SAGE was onlial scientific advisory group, it simply wasn't constituted to be able to weigh up the economic and societal consequences of any whole-society order or measure that might be put in place.

You refer in that context to the vital question of whether or not there should, in future, be a committee structure above SAGE that can synthesise not just the scientific advice from SAGE but all the other economic and societal, pandemic management, complex public health issues that might arise outside the narrow confines of a scientific advisory body.

Did you have in mind and do you have the mind 41

But that, I think, is the way I would set it up. So for each crisis, I would want to sort out the structure, but based on there being very clear strategic objectives of what we are trying to achieve. And then that feeds down to what committee structure you need, what experts you need around that table.
Q. Does it follow, Lord O'Donnell, that if you have or if you were to have and if my Lady were to recommend an overarching structure above SAGE to synthesise the information and present it in the presence of ministers --
A. Yes.
Q. -- there would be no need for the relatively narrow conduit that existed during the Covid crisis of SAGE's information and advice being routed through the Chief Medical Officer and the Chief Scientific Adviser to government?
A. Yes. Because when you think about it, SAGE wasn't looking at, say, for example, the economic stuff. So they're always doing a partial thing, and ministers are then going to have to feed that together with other things. So they need to have this information from the range of specialists and advisers that are relevant to the decision they're going to have to make. And that's -- you know, again I stress, these are very 43
the sort of structure, that operates a little like the National Security Council that you've described, where all that material can be put together and officials and advisers, scientists and ministers can cross-examine each other about the importance of the information being provided?
A. Most certainly. I mean, you know, SAGE, the answer's in the name, that's what they were doing, Scientific Advisory Group. It will be crisis-specific, let's be absolutely clear. The people you want round the table, the kind of committee structure you need will depend upon the nature of the crisis. So I wouldn't have a single answer now. I would say let's have some principles. The principles should be: let's work out what our objective is. If our objective, for example, with Covid, would be minimising the impact on the UK population, so there would be some health impacts, there would be some economic impacts, there would be some social impacts, there would be some impacts on the wellbeing of the NHS staff, you know, you could go on, and there will obviously be impacts on -- and deaths and the like, like that. So that tells you the kind of structures, the number of experts you need, and the kind of structure you should have.

Sorry, too fast.
42
difficult decisions because they're having to weigh up, make trade-offs. You know, yes, we could close down, we could lock down forever, but that might have all sorts of negative implications beyond the health ones. So they have to weigh up and make trade-offs, which ultimately are things that ministers are paid for.
Q. Lastly on this subject and the position of SAGE, do you consider that it was fair on SAGE for the government to declare publicly that its momentous decisions were the result directly of SAGE advice, by virtue of the proclamation that it was, repeatedly, "following the science"?
A. I think -- I mean, if the implication of that is, "Don't blame us, blame SAGE because they advised us", then obviously that is completely wrong. I mean, ministers make decisions. Ministers ultimately can ask for different sets of advice from different sets of people, so when they say they are following the science I think that's a way of trying to build trust in things. The question is -- you know, science is much bigger than just SAGE. There are lots of other social sciences that were really highly relevant to this.
Q. And the government decisions were far greater than science?
A. Oh, absolutely, because -- and science, if we define 44
science very narrowly as the kinds of things that SAGE
looked at, which are mostly the epidemiological
material. Mostly. They did some other things.
MR KEITH: My Lady, is that a convenient moment?
LADY HALLETT: Yes, certainly. 11.15.
(11.02 am)
(11.15 am)

MR KEITH: Lord O'Donnell, just some concluding questions, if I may, in relation to the structures and the process issues that we've been looking at.

Firstly, the National Security Council system and the National Security Council itself exists in order to be able to respond to threats, and in particular threats which eventuate, which take place, as opposed to risks. So a pandemic is a risk. A terrorist outrage is a threat, and in fact a threat coming to pass.

When you were Cabinet Secretary, did you give consideration to the possibility of setting up the sort of structure that you've described today in relation to risks as opposed to threats?
A. So something like that did happen when Gordon Brown set up something he called the "National Economic Council", which is a bit like an NSC but also included one thing which I think is really useful in these sorts of
you've described by way of your National Security
Council-type committee, was it that the CTF was not a ministerial body, ministerial power remained vested in Covid-S and Covid-O, and therefore what you envisage is in fact an amalgamation of the structures that the government ultimately put in place, namely the Covid-19 Taskforce on the operational front and the Covid-S, Covid-O ministerial committees?
A. Yes, a lot of people think that you can have one group that does strategy, another one that then goes away and does the operational implications of it.

I always think it's important to make sure that you've got round the table someone that actually understands about operations when you're having that strategic discussion, because it's quite possible that that strategic discussion will come up with something that operationally is impossible. the table together so that they could actually -- the operational people could put their hand up and say, "Can't do that", you know. And I think there were some operational things here where -- you look at test and trace, you know, the local authorities were good at it, we dismantled it for some reason. You think about the labs, you know, why did we not use private labs 47

## (A short break)

 45So I was always keen on having the two groups round
committees, which is bringing in outside experts to talk -- to focus on some things.

So I -- so the idea was that things like NSC would think about threats, as it were, and then when something became very apparent you would move to some other different structure, which was determined by what the nature of the crisis was.
Q. But in general terms, the position remained that there was a scientific advisory group, there was a COBR to deal with the acute crisis and then the lead government department model kicked in?
A. That's right --
Q. Remained as such.
A. -- yes.
Q. All right.

Secondly, you are aware of course that the government changed from a model in which there were ministerial implementation groups to a system of a Covid-S, strategy, and a Covid-O, operational, ministerial group, or two groups, and then ultimately in late May or the summer of 2020 the inauguration of the Covid-19 Taskforce.

To what extent was that Covid-19 Taskforce not replicative of the process that you've described? Is it because, or if you agree that it wasn't the process 46
more? There are lots of things where someone with an operational understanding would have said, "Actually, if that's your objective, you need different answers, and here's what you should be doing".
Q. I've mentioned the lead government department model. Are you aware of the government's December 2022 Resilience Framework document?

My Lady, that was the subject of great debate, you'll recall, in Module 1. Does that Resilience Framework document note and acknowledge that where risks are more complex, meaning that there is in essence a whole government response required, there are distinct limitations on the efficiency or efficacy of the lead government department model?
A. Yes. Yes, absolutely. I would say you don't really want a lead government department when it's something that crosses so many departments and has such a big impact on all of them. Covid being a classic. You know, the Treasury, a massive impact, you know, something like the furlough schemes, billions and billions of pounds.

So you actually want Cabinet Office then to hold the ring and create structures and bring all the departments together. I think if there's something which is $90 \%$ one department, the lead government department thing will 48
work well. When it's much more diffuse and spread, I would go for a much more Cabinet Office-led model.
Q. Presuming that the Cabinet Office is able to step up to the mark in that scenario?
A. Absolutely.
Q. Yes.

Finally, under the National Security Council process, is that a body at which the devolved administrations are represented, do you recall?
A. They're not. Because of the nature of national security it's at UK level. That's not to say you couldn't have a body which did involve devolveds. In fact, I would always say with this structure you need to modify it for the nature of the crisis. So it could well be the devolveds, it could be the local mayors, it could be all sorts of things that you would want to add in.
Q. And if, of course, it's a pan-UK crisis, then the devolved administrations would be required to have a seat at the table, because, of course, it's a pan-UK crisis?
A. It's a bit more complicated than that, I'm afraid, because there are various things --
Q. Somehow, Lord O'Donnell, I knew you would say that.
A. There are various things that are protected at the UK level that aren't devolved.
a real mistake. But you're absolutely right, you know, these bodies work because they're relatively small.
LADY HALLETT: Yes.
A. And you shouldn't -- you know, Cabinet is a very big body, and therefore that creates limitations to what you can put to Cabinet.

The NSC was deliberately kept quite small.
LADY HALLETT: Sorry to interrupt.
MR KEITH: My Lady, not at all.
Strategy. I really don't want to ask you to get
into the weeds of the debate about the relative merits of suppression, that's to say control of a virus, as opposed to mitigation, that is to say flattening the curve or squashing the sombrero.

In one of your articles, however, you make the point that it is an essential part of strong political leadership in the face of a crisis to have and to communicate a strategic plan.

Why, Lord O'Donnell, is that so? Why is it necessary for a government to have a strategic plan in a crisis and to communicate it?
A. It's --
Q. Shortly, if I may.
A. Sure. It is absolutely vital, because the decisions you're making will involve trade-offs.
Q. Ah, yes, you're talking in terms of, potentially, national security issues, but, for example, in the case of a pandemic, a viral pandemic striking the whole country, under a new model, of the type perhaps that you've described, it would be essential to have the devolved administrations represented at that new model?
A. Yes. I would think it would make an enormous amount of sense to do that.
Q. Strategy.

LADY HALLETT: Sorry, before you move on.
How do you make sure that that council, that body, doesn't then become -- have so many people on it that it becomes unwieldy and really doesn't do anything?
A. Absolutely right, which is why we talked about the devolveds, very small number of devolveds. Once you start thinking to devolved -- below the nation state, and so you're talking about regions and local mayors and all the rest of it, you're absolutely right.

So I think there is a case for there being that overarching body and then thinking about one of the subgroups having much more representatives of local authorities, devolved areas, mayors, depending on the different structures we have around the country. Which are very different.

But to lose that information I think is -- would be 50

So let's imagine the objectives are to minimise the number of deaths, to minimise the impact on the economy, to minimise the effect on children and their education, et cetera, minimise the impact on the wellbeing of the UK population as a whole. How do you do that? How do you do those trade-offs?

So if you have a strategy which has the overarching goals, then you start to say: okay, so tell us more about how you see the trade-offs.

One of the issues that you would like to have is a consistent way of making trade-offs. People might disagree with the weight you give the different parts of the trade-off, but actually for them to be consistent is absolutely vital.

That's -- leads us into the whole of my push for there being a wellbeing approach to all of this, and using WELLBYs and various technical things which haven't been used yet, but I'm glad to say the Treasury's own Green Book now has supplementary guidance on how you might do this kind of analysis.
Q. We'll return to the question of your wellbeing structure or framework in a moment, but is this the nub of it: in order to be able to take the country with it, the government ought to and must in fact demonstrate what its plan is in order to increase confidence, to greater 52
ensure compliance. But also, if it has a plan, is it more likely to be able to discharge the primary function upon it of making the right decisions?
A. Absolutely. If you've got a plan and you've got clear objectives, then you can work to that. It makes the communication -- and I say this as a former press secretary to a Prime Minister -- you know, it makes the communication easier. If the communication is easier, you build up trust. And in -- as we said earlier, when you're asking people to change their behaviour radically, far more than I ever thought we -any government ever would, you need that trust, that this is based on some really good evidence and it's going to result in better outcomes.
Q. As far as you are able to say, did the government ever publicly debate, put to the country what its strategy was in relation to what level of loss of life it would deem is acceptable? So in this debate about suppression, that's to say complete control or mitigation, there is this terrible issue of herd immunity: if you are merely mitigating or managing a virus, by implication it requires the virus to spread through or to continue to spread through parts of the population that you're unable to hermetically seal.

Did the government, in your view, make plain 53
the ability of the public to understand what was going on and what was being decided and on what criteria these momentous decisions were being made, the material demonstrates very clearly that at the very highest level, at the Prime Ministerial level, there was a certain degree of what has been described as flip-flopping or trolleying behaviour, that is to say, an apparent inability to make a decision and stick to it.

It may be self-evident, Lord O'Donnell, but why does a consistency of approach matter so very much in the teeth of a crisis?
A. And I think that's important, because when people talk about flip-flopping, there could be good reasons to flip-flop and bad reasons, and if you have a framework which basically says, "Look, you know, here are -here's the way in which we're making decisions about whether to lock down or not, you know, the costs and benefits of lockdown and how we're trading them off", and then -- "and they're based on this data and information" -- if that data and information changes, then it makes perfect sense to change the policy and to change your decision. And you can do that and maintain trust if you've established the framework and people understand the framework and they understand why you've
the limits of and the nature of this strategic debate, this strategic issue?
A. I think they were very nervous to do this, and I think they were very nervous because if you take the implication of your statement to its logical conclusion, it gets you into a discussion of: what's the value of life? And we know that governments routinely make decisions based on a particular evaluation. You know, the cost-benefit analysis for roads dating back 30 years has done this.
Q. And medicine, medicinal products --
A. NICE, for example, where NICE works out whether -sorry, National Institute for Clinical Excellence works out whether a new drug can be made available, you're doing these things. Politicians very rarely like to have that debate, because it's a very cold-hearted debate to say actually it's not worth saving this life because it costs too much money.

So it is difficult for them, I accept that, but actually implicitly they are making those decisions, so it will be good if, even implicitly, there were understanding that behind this there is a consistent application of their judgement as to what the trade-offs are.
Q. Another aspect of government decision-making and 54
changed your mind.
And I think this is the key point, that it's not necessarily wrong to change the policy prescription at a certain point in time if new information becomes available which you didn't have at the time which says, actually, policy B turns out to be better than policy A which you chose in the first place.
LADY HALLETT: How are you ever going to get that -realistically, how are you ever going to get a political party to talk to the public about possibly allowing a disease to run riot through care homes, killing people in large numbers?

I mean, yes, you could have a rational debate of the kind you've talked about, but is that really going to be something a political party is going to want to engage in with the public, and possibly hostile sections of the media?
A. That's a very good question. I mean, there's nothing to stop the public inferring what the implied value of life is. And indeed, you know, some people did that. So it's not like this is hiding away.

I think part of political leadership is getting the public to face up to the fact that there are going to be difficult decisions, that we can't save everybody, therefore we want to put our resources in the places 56
that will save the most people that we can.
Now, the public would get that, and they would understand that, you know, there were limitations on what could be done. But the fact, if there is trust, that you are really trying to do the best, and having laid out in your strategic plan what the best means, then I think you start to build public trust and you can start to have that debate.
MR KEITH: These are fairly obvious issues, albeit of the greatest importance, the most momentous decisions for any society, but they're at the level, aren't they, of asking the country: do we do whatever is necessary to avoid death at all costs? To what degree do we batten down the hatches in order to prevent the spread of the virus at any cost? To what extent do we seek to try to hermetically seal segments of the population and thereby allow the virus to continue to spread amongst those who are more capable and more able of being able to deal with it?

Is that the sort of level at which this debate is required?
A. What's essential is to get across to people that there are always trade-offs. You know, the fact that there's -- a new drug becomes available and it's $£ 10$ million and it will extend someone's life by 57
Q. In any event, on page 4, paragraph 2 of this article, you set out the metric, that is to say a chart setting out the sort of considerations or issues by way of the cost and the benefit of any particular decision so that you can see how it might operate in practice.

So you refer there, at paragraph 2, to the analogy with the QALY metric, which is the -- well, the metric which is used in the NHS for being able to evaluate the cost and the benefit of particular treatment, also triage, and a number of matters relating to clinical affairs.

What you've proposed is that in the different field of whole society, whole country measures, by way of social restrictions, for example, it should be possible to identify the costs and the benefits of such measures by reference to matters such as the impact on income, the impact on unemployment, on mental health, confidence in government, educational prospects, and the benefits in terms of fewer deaths, of course, because it's largely a mandatory system for compliance with social restrictions, fewer deaths in terms of road deaths, commuting, the impact on CO2 emissions and so on. That is the chart which you produce there on that page we can see there on the screen.

You've made the point that of course the parameters 59
three months, whereas you could use that $£ 10$ million in another way that would extend babies' lives forever, for the rest of their life. You know, alas, these are the tough decisions we have to make, and leadership is about confronting people with those tough decisions, and ...
Q. And if there is a framework --
A. Exactly.
Q. -- by which the cost and the benefit of these decisions can be objectively evaluated, then that will promote consistency of approach and better enable decision-makers to be able to make a rationalised and perhaps more straightforward decision?
A. That's what all of my articles were about, it's like the need for a framework. And one can argue about what goes into that, one can argue about the parameters as to, you know, what value would you put on life or whatever, but if you've got a consistent framework at least you then start to have a grown-up public debate.
Q. Could we have on the screen, please, INQ000189725. This is, Lord O'Donnell, your article "When to Release the Lockdown? A Wellbeing Framework for Analysing Costs and Benefits", from, I think, April 2020.
A. Yeah.
are open for debate, but is it your view that this sort of momentous decision, and a whole society decision, which is not a decision to produce a medicinal product or to give treatment to an individual, is capable in principle of this sort of cost-benefit analysis?
A. I think it is. I think with all of those numbers, those parameters, there will be disputes about what the right number is. You know, we put these numbers in, mainly -not to say precisely when lockdowns should change, but to show that there was a framework that could be used. Government would then say: actually, you know, we don't really care much about the income effects but we care massively about the mental health effects. Or whatever. And gave their own weight to this.

And then the great virtue would be they'd apply some weights and then, when it came to a future decision, you could say: okay, so we assume the weights are the same.

So that would rationally help you explain why you've moved from one position to another.

But I do think it's a very important way of being able to present to ministers the trade-offs, the really difficult decisions they have to make. Without this kind of thing, you end up -- and I've seen them -endless submissions which list: here are -- you know,
there's going to be effects on these five things, and there are going to be good effects on these five and bad effects on these five.

Well, how do you weigh them up? You know?
And that's what the whole -- that's what QALYs try to do, quality-adjusted life years, that's what WELLBYs, wellbeing years -- they are ways of bringing these things together.
Q. All right, thank you.

The final topic is that of trust in government. It is obvious and it is well understood and known that there were a number of breaches of rules and standards by ministers, officials and advisers, in particular in Downing Street.

The social and personal impact of those breaches is obvious. It was outrageous that whilst members of the population buried their loved ones that sort of behaviour was going on. But systemically, in terms of a government's ability to ensure compliance and to ensure that it takes a country with it in terms of these whole-society measures, why does leadership and setting an example and the behaviour of government officials and ministers matter so much?
A. It comes back to the point you have mentioned many times: it's all about trust. And it's all about 61
to say, "Well, you know, should I do this?" I mean, and that's the whole point about these behavioural compliance changes, is that you need people to respond to them. And, you know, you can imagine, there having been lots of lapses this time, you know, if you were trying to do this again, would you get the same levels of compliance? And, really, once you've made the decision, let's assume the decision is right, that various things are required, you really want people to comply with it. And therefore you need maximum trust.

So, yeah, I think it has been damaging, and damaging to future ability of governments to get across behavioural issues.
Q. The police issued, I believe, 126 fixed penalty notices to 83 individuals in and around Downing Street. It may be thought that there was a general ethos of misbehaviour. Had you known, would you have allowed parties to take place in Downing Street?
A. Absolutely not. I mean, this is -- under no circumstances would one want a party which violated the rules that you were telling everybody else on terms of social distancing and all the rest of it.

There is no question about that.
MR KEITH: Thank you.
Questions from THE CHAIR
63
building that trust. That actually you're putting forward, you know, unprecedented restrictions on people's behaviour because you think they are in those individuals' best interests. And if you then operate in a way that says, actually, but you're not going to -you don't think they're in your own interests, therefore you don't follow them, that destroys that trust.

So it is absolutely essential that you demonstrate by your behaviours that you believe what you're saying to the public is the right thing to do and your own behaviours follow that.
Q. So putting aside the personal opprobrium, any view personally on the behaviour of those who were involved, in terms of a government's ability to be able to manage a pandemic, was this incredibly destructive?
A. Without a doubt it was destructive, because, you know, you need -- you're relying on a behavioural response, right, you're relying on people complying with rules, and for most people that will be about whether they decide that that's what they should do. It's not about police enforcement, because there aren't going to be police chasing round everywhere, so it's do they think this is the right thing? Do they trust the people that are telling them this is the right thing?

When that trust breaks down, then people are going 62

LADY HALLETT: A couple of questions, Lord O'Donnell.
Firstly, if you had the kind of structures that you would like to see in place ready to respond to this kind of emergency, with the kind of membership and sub-bodies that you've described, to what extent would the perfect structure, in your view, be undermined by personalities?
A. Well, that's why you try to create structures that are, as it were, independent of personalities. That's why, in a sense, when faced with the question about why is it that Chancellors decide to cut interest rates ahead of elections when it's not in the best interests of the economy, you say: well, let's set up a structure where they can't do that. So you've given the power to the Bank of England.

There could be some institutional changes which take power away to bodies that we professionally trust, so that's one possibility. But there is also this aspect that our system does depend upon people behaving well.

I mean, Peter Hennessey called it the "good chaps" theory, which is a bit sexist, I have to say, but I do think that there are some areas where this showed up that our system operates if people abide by the rules. When they start not abiding by the rules, you get serious problems. And we need to look again at our structures to say: do we need to tweak them in some way

| to make sure that these things operate? | 1 |
| :--- | ---: |
| I would say -- you know, in my time we put together | 2 |
| the Cabinet Manual, which was kind of pretty much trying | 3 |
| to bring together the rules. I hope a new version of it | 4 |
| could strengthen some of those rules which learn from | 5 |
| the problems we've had this time around. | 6 |
| LADY HALLETT: Last question from me: in my lifetime I've | 7 |
| seen the growth of, use of, importance of SPADs. | 8 |
| A. Mm. | 9 |
| LADY HALLETT: What is it like for a senior civil servant | 10 |
| operating with SPADs? How does that relationship work? | 11 |
| A. So I'd say, I've always said this, good SPADs are worth | 12 |
| their weight in gold. I work with people like Ed Balls | 13 |
| and Ed Miliband, who were special advisers to | 14 |
| Gordon Brown. They were really helpful to | 15 |
| the civil service, they trusted and respected the | 16 |
| civil service, and they were good avenues and sounding | 17 |
| boards for finding out what the Chancellor, whose time | 18 |
| is very limited, would think about something and how you | 19 |
| might manage, you know, trying to help them make | 20 |
| the right decisions and the kind of information they'd | 21 |
| need. | 22 |
| And I've also seen bad special advisers. They are | 23 |
| disastrous. And they're mostly disastrous for |  |
| the minister that employed them. They end upbringing | 24 | 65

will have political implications, and the SPADs, it's
their job to come in and point out those political implications. It's your job as a civil servant to say
"Actually, we think policy A is best for the country as a whole". Yeah, there might be some political problems and you might want to talk to your SPADs about how you mitigate those political problems, but our job as civil servants is to say what's best for the country, and we will say, "In the long run, Prime Minister, (inaudible) this, that's what's best for you and best for your recollection chances".
LADY HALLETT: Thank you.
A. Could I just say one other thing?

LADY HALLETT: Yes.
MR KEITH: Lord O'Donnell, are you about to raise the issue of the global comparative study?
A. 1 am .

MR KEITH: My Lady, there are no questions from the core participants, or at least none in relation to areas that we together haven't covered, but this morning Lord O'Donnell mentioned a great interest that he has in the need for there to be, in light of this pandemic, a far more sophisticated global comparative study of the impact that the various government NPI decisions have had.
the minister down quite often.
So I would say that there is a lot to be said for restricting the number, and making sure that they have good training. You know, good SPADs are technically well trained. Ed Balls knew a lot about the economy, economic issues, that was really important. If you've got a bunch of SPADs who are trained in PR work and who only think about, particularly, pushing their individual minister and their status and how their minister got it right and everybody else got it wrong, they're the pretty disastrous ones. They add very, very little. And quite often they're working for a minister rather than the government. And therefore they're damaging to prime ministers and Cabinet government in general.
LADY HALLETT: Sorry, having said it's my last question, just following on from that, when you have -- so the SPADs are basically political advisers, and when you have a political party who obviously want to make sure that they get re-elected, how does the civil servant maintain their independence and objectivity and not get swept along with "This will play well with the electorate" or "That won't play well"?
A. Well, you need to -- so civil servants need to be political with a small $P$. You need to understand that when you emphasise one policy rather than another, it 66

Is that the nub of it, Lord O'Donnell, that there is a need for us all to be a great deal better informed about how, comparatively, the various government decisions which governments around the world have made in the face of this pandemic in fact operated and to what level they had benefit?
A. That's exactly right. The point I make -- the reason I make this point is that there will be lots of individual inquiries which will look at the impact for their country. If you want to try to find out, you know, for example, did lockdown work, did these other things, you need to start with: so what's your ultimate objective? Let's say it was excess deaths or whatever. But there's going to be lots of countries around the world that did different things with the same virus and had different outcomes. By looking at that large sample of lots of different countries, we can infer, controlling for all the other factors like age distribution, ethnicity, you know, there's lots of other things going on, but a really good study could look at all of those things and would, I think, be a massive advantage to the world.

And it's really hard for any individual country to do that, so I just hope that somewhere along the way you can give a push to someone doing that.

| LADY HALLETT: Thank you. | 1 |
| :--- | :--- |
| MR KEITH: My Lady, that concludes the evidence of | 2 |
| Lord O'Donnell. | 3 |
| LADY HALLETT: Thank you very much indeed, Lord O'Donnell, | 4 |
| extremely interesting. Thank you. | 5 |
| THE WITNESS: Thank you, my Lady. | 6 |
| $\quad$ (The witness withdrew) | 7 |
| MR KEITH: My Lady, the next witness is | 8 |
| Professor Sir lan Diamond, the National Statistician and | 9 |
| head of the Office for National Statistics. | 10 |
| Yes, please. | 11 |
| PROFESSOR SIR IAN DIAMOND (sworn) | 12 |
| Questions from LEAD COUNSEL TO THE INQUIRY | 13 |
| MR KEITH: Good morning. | 14 |
| A. Good morning. | 15 |
| Q. Could you give the Inquiry, please, your full name. | 16 |
| A. I am lan Diamond and I am the National Statistician. | 17 |
| Q. I'm going to call you Professor Diamond, if I may. You | 18 |
| are in fact Professor Sir lan Diamond, but for ease of | 19 |
| reference, that's how I will address you, if I may. | 20 |
| Professor, you have been good enough to provide two | 21 |
| very extensive witness statements concerning | 22 |
| the extremely important issue of statistics, | 23 |
| the relevancy to this inquiry into the pandemic of which | 24 |
| is obvious. |  |

69
Q. What is the National Statistician?
A. The National Statistician was a post first brought into place by Winston Churchill when he was Prime Minister, when data from different parts of government were coming to him and he decided that he needed someone to adjudicate on which ones he should use. And that is a role that I take very, very seriously.

But at the same time I am the chief executive of the UK Statistics Authority. The UK Statistics Authority is an independent body which is charged with all matters related to statistics, both regulation and production of official statistics, and I head the Office for National Statistics, which is, if you like, the statistics production arm of the UK Statistics Authority.

In addition, I am head of the Government Statistical Service, which covers statisticians right across government. I provide professional leadership to them, although they are employed within their department, or arm's length body. And I am head of the Analysis Function, which brings together statisticians, economists, operational researchers, actuaries, geographers, social researchers and operational researchers right across government.
Q. That is quite a number of statistical hats to have to

You have provided one -- dated 8 September 2023, INQ000268012, I think that's the one on the screen. You would have signed that, I think, on 8 September, with the usual declaration of the truth of its contents.

You also provided a second statement in which you produced a very large number of tables and charts relating to specific areas of data and statistics, compiled by the ONS, the Office of National Statistics, to which we'll come in a moment. Is that one, dated 11 September, INQ000271436?

Whilst you give evidence, Professor, could you please remember to keep your voice up and also speak as slowly as you are capable of, in order to assist our stenographer.

I'm going to start, if I may, with that first statement, the statement of 8 September, Professor, because it sets out, does it not, the building blocks for the data, the specific data and statistics, which you then provide, setting out how the UK Statistics Authority and the Office for National Statistics operated during the pandemic.

Dealing firstly with the nature of the ONS and of the UK Statistics Authority, you are the National Statistician?
A. Yes.

70
wear, Professor.
A. It is.
Q. The position, therefore, is that the UK Statistics Authority is actually the independent statutory body established by law, and you are, as the National Statistician, as you've said, the chief executive of the board of that body. It has a function, or part of it is the Office for National Statistics, which produces the statistics and the data, and that authority provides oversight of the overall provision of statistics by the government which, might be usefully described, as you said, as the Government Statistical Service?
A. Yes.
Q. But for our purposes, therefore, what we are most concerned about is the production of statistics by that production function arm, namely the Office for National Statistics?
A. Yes
Q. It does the heavy lifting of the production of statistics?
A. Very much so.
Q. All right.

You are supported by three Deputy
National Statisticians; is that right?
72
A. Yes, the three Deputy National Statisticians, each of whom take a different area, one economic statistics, one population and health statistics, and one, broadly, data governance and IT. I'd have to say that over the course of the pandemic, sometimes as different areas became more important, we flexed some of those responsibilities, but three Deputy
National Statisticians. And I was also supported from --
Q. Just slow down a little bit, please, Professor.
A. I will slow down a little bit. I was also supported from September 2020 by second permanent secretary Sam Beckett.
Q. It is obvious that during the pandemic, the Office for National Statistics discharged the extremely important functions of informing decision-makers, the government, with regular data and analytical insights, and also informing the public with the state of play and what the statistics and the insights produced by the ONS were amounting to.

We're going to look at the specific supply of data in a moment, and the particular analyses that you produced, but in general terms, did the ONS start producing data for government at a relatively early stage of the crisis, or in your opinion could it have 73
insight. Very early on in the pandemic, I did feel that while data were flying very quickly -- actually, as I said to one person, I remember saying, "This is a data deluge, we need to bring data insight", and I pushed very hard, and ONS pushed very hard to make sure that instead of, for example, saying "Tell me something interesting about", we moved to "What is the question you want an answer to?" And we, ONS, embedded someone inside the Covid Taskforce in the Cabinet Office to be able to get those kind of questions.

And that led us to really answering new questions.
So, for example, setting up a Covid infection survey to understand the level of positivity and, indeed, antibodies in the country, and also to understand more about opinions and attitudes.
Q. Have you therefore referred to an important distinction in this field, which is the distinction between the provision of datasets, hard statistics, and insights by way of analysis drawn from the various surveys which the ONS carried out?
A. Well, sometimes you would do analysis on those former datasets. So, yes, one provides data and enables others to use it, but at the same time one does analysis which enables questions to be answered.
Q. Was the ONS therefore able to produce data and insights
provided that vital support at an earlier stage, and no doubt would have done so had it been asked?
A. Yes. I mean, I think we became seriously part of the production of new insights in March 2020. I think my personal view would be that we should be involved at the earliest possible stage, but of course you need to know what questions there are to be asked, and so we were involved from an early stage but perhaps not the earliest stage.
Q. From the stage at which you became involved, did you produce the whole plethora of charts and analyses and datasets, or did the system ramp up to the point at which you were providing a great deal many datasets and analyses?
A. I think I would have to say that we were agile in responding at different times to different questions, but there were really three main areas I would point to. Firstly, we needed to maintain our business as usual measurement of the economy, for example monthly inflation rates. Now, that's hard if you're not able to go into shops to check on prices. It's hard if companies are furloughed to know how you estimate their output. So there were some changes that we had to make very quickly to maintain that economic measurement.

Secondly, we moved very quickly to providing 74
across a very wide number of societal themes? So, for example, economic data, social data, plainly data in relation to health, and mortality, and also across great swathes of British public life, so across business, across schools, and so on?
A. Very much so, and some of those data, you mentioned economic measurement, were things we would do anyway, but we had to pivot in the situation, where -for example, we couldn't send interviewers into homes -to make different ways to collect those data.

But also we produced new data and we did new surveys. We tended to do new surveys in partnership with real experts in those areas. An example would be when there was a need to understand what was going on in care homes, we partnered with Professor Laura Shallcross from University College London, who was an expert in social care, and to design with her a survey of care homes using the care home chain, VIVALDI.
Q. So did you introduce a number of different surveys, the Business Impact of Coronavirus Survey, the Schools Infection Survey (SIS). You've mentioned the Covid-19 Infection Survey already, CIS.

Did you also introduce or make changes to a particular type of data or analysis known as the Opinions and Lifestyle Survey (OPN)? What is that 76
and how does it differ from other surveys or from datasets?
A. Well, the Opinions and Lifestyle Survey was a survey which went out every two months, and is what it says, an opinions survey, to understand attitudes. You know, sometimes it's nice to know fixed data on how much a firm is making, but sometimes you need to know attitudes, and the only way I know how to get attitudes is to ask people.

So we have a methodologically rigorous survey which went out every couple of months. We pivoted that very quickly to go out every week, and so it would go out on a Wednesday, we would close responses very early on a Monday morning, and have results Monday lunchtime, so that we were able to understand what was going on and the attitudes of the public in a really quick and timely manner. And we worked with parts of government who wanted questions put into that survey to enable them to get the insights very quickly that they needed for their policy making.
Q. Just on that question of OPN, Opinions and Lifestyle Survey, was the Cabinet Office, in particular the Covid-19 Taskforce, and the Covid-19 Taskforce was only brought into play in the late summer, were they primary users of that data in particular? 77
throughout the pandemic there were daily press conferences, and early in those press conferences perhaps the quality of the slides that were presented were not of the highest level and so we were asked, and embedded a team in the Government Communication Service from pretty early on, to help with the production of those slides.

And I know I would say this, but I did feel that the quality of those slides improved greatly when the ONS team were there.
Q. You say in your statement that the organisation worked hard to maintain quality whilst delivering to a fast timeline.
A. That's right.
Q. Is that a euphemism for saying you worked flat out --
A. It is. I mean, just --
Q. -- day and night?
A. Well, just to give you one example, if I may. We are charged with providing weekly death registration by cause of death. Since 1993, the death certificates come to us and we have -- we can, computer-wise, you know, put them into cause of death reasons.

There wasn't a cause of death for Covid. We worked with the World Health Organisation quickly to define a cause of death, but there was obviously no time
A. They certainly used it. And indeed, as I indicated, we had embedded someone into the Cabinet Office to be able to understand the key issues of which answers were needed. So they were primary users, as were other parts of government, including Health.

And also we were able to get behavioural information. So one of my colleagues joined what is known as SPI-B, the behavioural science part of SAGE, to make sure that some of the behavioural science questions that they wanted asked could be asked.
Q. Did you in fact personally yourself attend SAGE?
A. I personally attended SAGE from the 15th meeting, on 13 March 2020.
Q. Did the ONS also create something known as the Covid-19 latest insights page --
A. Yes
Q. -- in order to educate the public, who had access to that information, and it collated other separate datasets together centrally to make it easier to --
A. We thought it was incredibly important to provide accessible data to the public, and we did this in a number of ways, and the insights was where we tried to bring together data from various sources and put them in one easily accessible place.

The other point that I would mention is that 78
immediately for that to be automatically run.
So my colleagues, who do death, cause of death registration, and I have to say this is a pretty stressful thing to do, went on to 12 -hour shifts to enable us to be able to deliver those statistics on a weekly basis. And I really do hold out my hat to them.
Q. Can we just take a step back, please, and look for a moment at the phrase "weekly death registration by cause of death". Is the position in the United Kingdom that every death has to be registered, perhaps with the assistance of a coroner or a coroner's officer, and that that is a formal document, but it is a document limited, in terms of the information that it provides, to the age, sex, cause of death and, I think, the location of the deceased?
A. That's right.
Q. Therefore, the ONS could access, on a weekly basis, cause of death registration documents, but that cause of death did not in the early stage include, you've just told us, Covid-19 as being a cause of death?
A. Well, it could do. The cause of death could be written by the practitioner, and was, as Covid, but what we didn't have was an automatic process to then turn that into the weekly statistics. So we had to take the cause 80
of death -- or the death certificate, read it, take a view, and then manually transform it, until we were able to actually move to an automatic process.
Q. We'll look at the system in more detail later, but were those weekly cause of death registration documents the genesis for the core death from Covid datasets --
A. Yes, for death --
Q. -- produced by the ONS?
A. That's absolutely right, yes.
Q. All right.
A. I should just add a rider in that they don't include deaths which have to have a coroner's inquest. We get them, but only after the inquest, and that can be some time.
Q. All right.

You have produced for us, have you not, by way of
exhibit, a list of all the datasets that you produced during January 2020 to the end --
A. Should I be able to see something on my screen, sir?
Q. You will in a moment.
A. Thank you.
Q. We're not quite as fast as the ONS, Professor.

So that's INQ000252620.
LADY HALLETT: Whilst that document is coming up, you said
getting that -- but also where there had not been a test but it was pretty clear to the medical practitioner -and these are smaller numbers, the majority there'd been a test -- where there had not been a test, then it could be "virus not identified".
LADY HALLETT: Thank you.
MR KEITH: Professor, I'm sorry to say that we're unable to get the document up on the screen that I had wished to put to you, so may I put the point in a different way.

The overall list of datasets which you provide are voluminous in number. You provided a very, very large number of datasets to the government during the pandemic.

Does the list of datasets show that from a relatively early stage, your datasets and your OPN surveys focused in on the impact of the pandemic on members of ethnic minority groups as well as on those who were clinically extremely vulnerable? So ethnicity and vulnerability were topics, positions, issues for your data examination to look at and they were from a relatively early stage?
A. Very much. One of our pillars at the Office for National Statistics is inclusivity, and we, if you like. Lived that value right the way through the pandemic, that we were trying to make sure that every citizen had 83

Could we have, please, on the screen INQ000252620. 81
that you worked with WHO about the cause of death for Covid sufferers. What was the end result? In other words, what went on the death certificate to indicate that Covid was a cause?
A. It could either be death "virus identified" or death "virus not identified", and the distinction really is a minor one, but it's very much the one around had the person had a test and had that test proved positive. And we would put the two together, because sometimes -you know, the medical practitioner is pretty good at identifying what has happened, we would suggest.
LADY HALLETT: Doesn't it depend on the medical practitioner? I mean, I've seen a death certificate that said "old age" or "heart failure", which arguably, sadly, applies to -- everybody dies of -- I mean, was there a problem in getting the medical practitioners to provide the information you needed so that the government could know just how many people were dying with this awful disease?
A. We believe that pretty quickly the medical practitioners were able to identify whether there had been a test. If there had been a test then they wrote Covid-19 either as the primary or the secondary ...

I mean, I have also seen many certificates which says "old age" or whatever, but, you know, we were 82
a voice in our data and that we were, if you like, understanding, through our data, the inequalities that existed through this dreadful disease
Q. In your statement there is a section dealing with quality and accuracy. It is obviously of huge importance that the information in the data that the Office for National Statistics provides is accurate. Is a great deal of work done to ensure the accuracy of the work product?
A. Well, yeah, the -- at the end of the day, we have to have the highest quality data, there's not much point in us giving people data which are not accurate.

Having said that, all data are subject to uncertainty, and we always try to give a measure of that uncertainty with our data. It's often called a confidence interval. But it's incredibly important; when you do a survey you're making an estimate of what's going on in a population and that estimate is subject to some uncertainty.

But we worked very hard to maintain quality, and I'd say in four different ways. Firstly, conceptual. You know, for example, if a company is furloughed, how do you estimate in the gross domestic products their output? Or if -- how do we estimate, in education outputs, home schooling? So, really, conceptual issues 84
there.
Secondly, issues around data collection. We couldn't go into people's homes to ask them, so we pivoted very quickly to telephone interviewing, for example in our Crime Survey for England and Wales.

Thirdly, we introduced what we call weighting, to make sure -- to come back to your point about inclusivity, we weighted some of our data to make sure that they were really good population estimates, so methodological input.

And, finally, we had to pivot very quickly our own internal workforce to working from home, and we did that at great pace.

Those four areas, really done at pace, always focusing on quality.
Q. Professor Nazroo, who was a witness from whom my Lady heard last week, on the issue of ethnicity referred to ONS data drawn from the 2021 census, which included data that was backward looking, so it included in fact I think -- or rather, sorry, the survey or the dataset produced by the ONS included information that was backward looking, it looked back towards data from 2012 to 2019.

He described that particular dataset as being based upon experimental statistics, he described it as 85
a national statistic.
Q. Thank you.

Did you provide from January 2020 to May 2022 what you described as "management information" from ONS surveys to ministers, key officials, key departments? So information drawn from many, if not all, of the surveys, the CIS survey, the SIS survey, the weekly mortality statistics and so on to which I've referred. So you provided, for management purposes, to enable the government to respond more efficiently to the crisis --
A. Yes, we did.
Q. -- certain amounts of data?
A. Yes. And we would always then publish them. But -- so, for example, with our Covid Infection Survey, we were ready so that we would, if you like, stop the last test -- or the last test which we would include would be on a Friday. It's quite a lot of analysis. You know, this isn't, I would suggest, you know, a question of just doing a few five-bar gates on the back of an envelope, there's a lot of mathematics that goes into making the estimate, and we were ready, typically by Tuesday evening, to have some numbers. And things were moving so quickly that we judged it was important to enable people to have those early data, which would then 87
innovative and exciting, but ultimately open to some degree of debate or uncertainty.

What is the degree of accuracy or probity of experimental work done by the ONS?
A. We would say it was highly accurate, but it's a new methodology.

And I think you are referring, with
Professor Nazroo, to some work where we linked 2011 census data with mortality data between 2012 and 2014. And we are working with Professor Nazroo on that at the moment just to make sure that he is comfortable with what we have, and I would be delighted, if it would please you, to send you a short note, which should be ready in a couple of weeks, of that.

But you see there, what we're doing there is really innovative, because, as you rightly said, death registration does not include ethnicity. For very good reasons, actually. And -- but, therefore, what we did was link the death registration to the census data, which would have ethnicity, and of course one's ethnicity doesn't change, and that was innovative work -- we're very comfortable that it's accurate, but because it's innovative we call it, initially, experimental, before we finally move to doing it, if you like, on a very regular basis and when it would become 86
be subject to further quality assurance and preparation for publication, and they were then published on the Friday.

But particularly when, if you go back to some of the Omicron wave, where the doubling time was two and a half days, we didn't want, if you like, to be providing historical information, we needed be to providing data as quickly as we could, and so enabling government to have those numbers as management information, as they're called. But subsequently to publish them is the right thing, I would suggest, to do.
Q. Therefore did information go straight from the ONS to the Cabinet Office, to the Civil Contingencies Secretariat in the Cabinet Office, and to the data and dashboard team, which was the primary team concerned --
A. There is a list which I could provide.
Q. Just a yes or no, Professor, will suffice.
A. Yes.
Q. Thank you.

You've mentioned the Covid-19 latest insights, which is a live round-up of information. Over time, did that provision of information, that insight, change? Did it, in fact, expand, become developed and then ultimately merge with other roundups that the ONS produced?
A. Ultimately, yes. So we only -- we wanted just one. But 88

| yes, it definitely did change over time, as different | 1 |
| :--- | :--- |
| questions became important. So, for example, our | 2 |
| Opinions and Lifestyle Survey at times asked questions | 3 |
| about attitudes to face mask wearing. Now, that is | 4 |
| the sort of thing that would come in and then we | 5 |
| wouldn't ask forever. So there was certainly an agility | 6 |
| in what was there because we were providing answers to | 7 |
| questions that were relevant at that particular time. | 8 |
| Q.Did you yourself have regular meetings with |  |
| permanent secretaries, you attended SAGE as you | 9 |
| described, did you meet also with the Chief Medical | 10 |
| Officer, Professor Sir Chris Whitty, the | 11 |
| Chief Scientific Adviser, Sir Patrick Vallance, and did | 12 |
| the ONS engage with a number of government departments | 13 |
| as well as the devolved administrations in order to be | 14 |
| able to understand what it was that they wanted? | 15 |
| A.Yes, and to explain the nuances of any analyses that we <br> gave. 16 |  |
| Q.You have described in outline a number of the different | 17 |
| datasets and the surveys, the Opinions and Lifestyle | 18 |
| Survey, the Business Insights and Conditions Survey, and | 19 |
| the Covid-19 Infection Survey. | 20 |
| Focusing for a moment on that latter survey, | 21 |
| the Covid-19 Infection Survey, was the need for | 22 |
| the sort of data that that infection survey produced | 23 | 89

coronavirus infections and antibodies that the
ONS carried out, did it start -- well, you've described how it commenced. There were pilots, were there not, that took place in England, and then field work began and that field work expanded to the devolved administrations --
A. The pilots -- just because of the need, the pilots were very, very, if you like, quick and we expanded very quickly. We then brought on Wales, Northern Ireland and Scotland, and we were asked in the summer, late summer of 2020, if we could move from national estimates to regional estimates. That requires an increase in the sample size, basically, and so we moved to a larger sample size, we were doing 150,000 swabs a fortnight, and that was the largest survey, certainly of the type that we did. It was the largest -- the only -- often -I think probably the only survey of its type in the world and that required -- and that gave a lot of interest from other countries who wanted to gain some of the insights that we gained.
Q. Another area on which you focused your attention was the prevalence of the long-term symptoms following infection from Covid, known of course as Long Covid.

Your witness statement makes plain that you received a request from in fact No 10 Downing Street at one
discussed at a relatively early stage at SAGE by you at a particular meeting in April?
A. Indeed. You may recall that at that time test and trace was stretched, GPs were stretched, and the answer to the question "What proportion of the population are positive?" was one that was seen to be incredibly important.

I'd have to be honest and say when I'm asked to do this, the statistician in me says, "Let's do a survey", and so we designed very, very quickly a survey in partnership -- we wanted to work -- we are statisticians, not virologists and epidemiologists, and so we worked with the University of Oxford. And often these surveys, you know, rightly take quite a long time, but the importance and the urgency was such that we -between a Thursday, when the SAGE meeting was held, we were in the field the following Thursday. And so that was much faster than we would normally do. And at that time we weren't sure how people would respond to giving swabs, to 20\% giving blood, and we designed a longitudinal study, a longitudinal household study, which I remain extremely proud of the design and which has been extremely helpful in a number of other areas, for example in being able to monitor Long Covid.
Q. And was the CIS the largest regular survey of 90
point, in September 2020, for data on the prevalence of the Long Covid condition.

When did the ONS start collecting data specifically on Long Covid, can you recall?
A. Yes, so that request came from the data science unit within Downing Street, and as I indicated we had put in place a design which is called a longitudinal design, by which I mean we go back to the same people once a month, and so that's quite helpful in this case, and we were collecting some symptoms. So initially we used the design that we had and followed up people, and in late 2020 we were able to make some initial estimates of those people who had experienced symptoms for four weeks or more.

But at the same time we worked with other people who were, if you like, experts. So I know that you are speaking to, from your programme, Professor Khunti I think later this week.
Q. Indeed.
A. We worked very closely with Professor Khunti, and also we worked with some of the Long Covid sufferers groups to be able to make sure that we had an appropriate survey. It was the Covid-19 survey, but we added appropriate questions around symptoms that could then enable us to make better estimates, because we had 92
better symptoms data.
Q. So the upshot was, Professor, that having started to commence the collection of data on Long Covid, eventually you added questions on Long Covid to the main Covid Infection Survey, and then you ultimately produced monthly surveillance estimates on the prevalence of Long Covid, alongside the other monthly datasets that you provided?
A. That is correct.
Q. Just a yes or no, if you would --
A. Yes.
Q. -- humour me in relation to that particular point. Thank you.

Can I turn, then, to mortality statistics in order to set out some of the ground rules relating to that type of data before we look at the actual charts.

During the period of the pandemic, were there two main data sources available on deaths: the data provided by the DHSC, generally daily; and the weekly death registration data that the ONS provided, of which you've already spoken?
A. Yes.
Q. Did the DHSC data on deaths come from other bodies?
A. No, so the DHSC data, which I think are very useful as, if you like, an indicator, are based on the reported 25 93
provides a more accurate assessment of deaths involving Covid?
A. Yes.
Q. Thank you.

Could you please answer this particularly difficult question about the death certificates: do the death certificates reflect deaths in which Covid-19 has played a part, or deaths relating from infection from Covid-19?
A. Both.
Q. Both. Is that in part why those statistics are therefore -- or those registrations are more accurate?
A. Yes.
Q. Deaths in care homes. Did the ONS produce data releases relating to deaths in care homes?
A. Yes.
Q. Deaths registered weekly in England and Wales, deaths notified to the Care Quality Commission, care home resident deaths registered in England and Wales?
A. Yes.
Q. Did the ONS expand to produce an ever increasing list of surveys from, as l've mentioned, clinically extremely vulnerable people, international arrivals, students, attitudes, the care home study, the VIVALDI study, which you've already mentioned, the Liverpool mass testing study, the over 80s vaccine studies, and so on?
deaths in hospitals. So that's --
Q. So the information came from other bodies such as NHS England, Public Health Wales, Health Protection --
A. To the NHS.
Q. To the NHS?
A. And they -- the DHSC published them. But of course that doesn't include deaths in private homes, for example, and it is just based on the number of deaths reported on a particular day, so one tended to see a reduction every weekend, just simply because, you know, deaths were not reported on those days.

I believe those DHSC data were incredibly useful as fast indicators of what was going on, but they did not have the true picture, and that came from our weekly data, which was able to be based on the death certificates as we have discussed earlier.
Q. Is this the nub of it, that the DHSC data originally, in the early days of April, reflected deaths in hospital where patients had tested positive; later they'd started to publish data daily of figures on deaths, of all deaths where there had been a positive test, wherever the death had taken place, so not just in hospital, but although the DHSC data turned itself around quicker and was generally indicative of trends, the ONS measure, which rests upon the registration of death certificates, 94
A. Very much so, and always in response to questions that we were being asked and which we could provide insight. And also, for example, we did one on prisons with the Ministry of Justice, we worked in partnership so that our contribution was often methodological and data collection, always working with experts to make sure that the content was appropriate.
Q. Would it be fair to say that by the end of the pandemic, the ONS, along with other bodies, provided a vast amount of data --
A. Yes.
Q. -- concerning the impact of the pandemic?

Were there a number of other studies which may, therefore, lead one to conclude that the United Kingdom led the world in the provision of data from the REACT study, the SIREN cohort study, the CoMix surveys, the recovery trials, it was a vast amount of information by the end?
A. I think it's arrogant to say we led the world, but certainly we did many things that other countries didn't do, and I can't think of another country that was in the same place, and certainly --
Q. Well, that's my definition of leading.
A. Sorry.
Q. All right.

The ONS did not, as a general rule, produce statistical models, did it? So did the ONS play any part in this provision of data by SPI-M and SPI-M-O, to which you've already referred?
A. We really worked hard to make sure that the statistics that we were producing and which were informative to the excellent mathematical models that were being produced in a number of centres were available as quickly as possible. So we did not produce mathematical models ourself, with one exception, but we provided statistics and made sure the data that were required were available as quickly as possible.
Q. Now just some final very short topics before we turn to the charts. Did the ONS provide directly the information used by the government in the press conferences which were held by the United Kingdom Government daily?
A. We didn't always provide the information. We did, as I've indicated, really work hard with having a team embedded to make sure that the production of the graphs was of the highest standard to be able to communicate to the public what was going on.

Not all -- the data weren't all ours, but we certainly, if you like, drew most of the graphs. 97
establish excellent working relationships with the government in all its many parts.

Do you advocate in your statement for the ONS to be involved in any future crisis at as early an opportunity as possible?
A. Absolutely. I think it's incredibly important.

I also think that the National Situation Centre, with whom we have very good relationships, needs -- and which identifies some of the national risks -- needs to have data flows ready and we need to be prepared absolutely at the beginning to get those data flows flowing.

So I think the ONS needs to be involved right at the beginning, and we stand ready, sir, to do so.
Q. You also established excellent working relationships with the devolved administrations, but did the ONS become involved in terms of the provision of data from the devolved administrations and to the devolved administrations at as early a stage as you would have liked?
A. In exactly the same place as I've just think we should be involved. I have a very good relationship with the chief statisticians of Scotland, Wales and Northern Ireland and I do think they should be properly involved at the earliest possible stage and, where
Q. On the subject of devolved administrations, did the information that was provided by the ONS cover data extracted from, drawn from, the devolved administrations?
A. In some part. So, for example, the Covid Infection Survey was designed UK-wide. It started in the different devolved administrations at different times, but it was a UK-wide survey, as was the Opinions and Lifestyle Survey to which you have referred in the past.

Other public health data are devolved and so those were provided by, for example, Public Health Wales or the associated institution in Scotland or Northern Ireland.
Q. Did you provide mortality data by way of weekly provisions of material, weekly extracts, to Public Health England, the Joint Biosecurity Centre, SPI-M, Public Health Wales, the Welsh Government, and a number of other --
A. Sure, yeah
Q. -- national and devolved bodies?

You refer in your statement to pandemic challenges and lessons learned. You've made the point already that the ONS was keen to become engaged from as early a point as possible, in order to be able to provide data to assist the government, and you say that you did 98
appropriate, the ONS stands ready to help.
Q. You referred earlier to the conceptual methodological and practical difficulties of assembling data and of accumulating information from the general population. Were there particular challenges in receiving data from others by way of the application, or on account of the application of control of patient information notices?
A. Well, very quickly, I do think sharing data or being able to link data together -- l've already given one example -- has the potential to provide evidence to improve the lives of all our fellow citizens in a way that almost nothing else does, and that requires easy, ethical, privacy-enhanced data sharing.

Now, there's no legal impediment to data sharing, but there are, if you like, inherent cultural and conservative issues about, you know, "I'm a bit worried about sharing my data", people would say.

I do think during the pandemic we were able to make progress in a way that we were not able to make progress before, and the control of patient information rules were very helpful, although I would have to say on occasion it took some months longer to get access than one would want.

Most recently, though, with those stopping -- and it 100
does seem to me not to be helpful if we can do some really important work, shall we say, on Covid, and you want to do almost the same work to look at cardiovascular disease -- we can't do that.
Q. Because of?
A. Because control of patient information --
Q. It's based on patient data --
A. -- were about Covid.

So that is why Sir Chris Whitty and Tim Ferris from the NHS and myself have asked Professor Cathie Sudlow to do a review of the barriers to data sharing in health, because there are just so many things we can do in the future, we would argue, ethically, privacy-enhanced, with public engagement, but, critically, in the public interest, and I think we need to be able to do that better.
Q. So is it your view that in future it's of vital importance, in order to enable the swift, efficient flow of data through the ONS, that the legal and ethical and medical structures which are in place which guide access to data, such as the control of patient information notices, are made as, well, as swiftly and as easily as can be to operate?
A. That's absolutely right.

And it's not just about the data sharing. The Royal

Sir David Norgrove, have occasion, have cause to write to the then Secretary of State for the Department of Health and Social Care, Matt Hancock MP, on 2 June 2020,
about this issue of, we'll all recall, the testing data, the announcement by the government that it had reached a certain number, 100,000 in fact, tests?
A. Yes.
Q. What was it that caused Sir David Norgrove to have to write to Mr Hancock?
A. Sir David wrote to Mr Hancock because there was a lack of operational clarity in the data that were being provided as to whether we were talking about tests that people had taken or tests that had been sent to people, or indeed the testing capacity. And Sir David said that it was incredibly important that we had clarity on exactly what was meant. Because the public would have rightly wanted to know: is this tests that have been taken or is it testing capacity?

Sir David met with Matt Hancock. I was not at that meeting, but I understand it was a very good meeting. Sir David suggested that there should be a protocol to publish regularly testing statistics. Matt Hancock agreed. And Sir David came back to me and I asked my Deputy National Statistician, lain Bell, to develop that protocol, and it was produced and used.

101

Society's DELVE committee suggested that, you know, analysts with the right skills could be, if you like, given a licence to enable them to access data quickly, and that is something that we would agree with. My colleague Alison Pritchard calls it "we need a green channel", with the analogy of Customs posts, and we are very much in favour of that. But, again, when I talk to data owners, they are not so keen because they are very keen to, if you like, only allow access to certain people for certain projects, when actually, as I repeat, ethically, privacy-enhanced, with public engagement, for the public good, entirely transparent, we could make an enormous amount of progress very quickly.
Q. It appears axiomatic that the ONS must be seen as a trusted voice in the United Kingdom, that the provision of data is carried out with the greatest care possible in order to ensure that it is received and understood to be accurate, so that we may all understand where we stand?
A. We do not believe that it is for the public to trust us, it is for us to prove to the public that we are trustworthy. And that's a distinction that I think is important.
Q. On this subject of trustworthiness of data, did the chair of the United Kingdom Statistics Authority, 102

MR KEITH: Thank you very much.
My Lady, is that a convenient moment?
LADY HALLETT: It is. We have been going for an hour and a half since the last break, so I think a break is probably welcome to many. I shall return at 1.45 .
( 12.46 pm )
(The short adjournment)
( 1.45 pm )
LADY HALLETT: Mr Keith.
MR KEITH: Professor, we turn now to your additional witness statement and the particular datasets that you've kindly provided, dealing with such issues such as mortality, excess deaths, infections, Long Covid, and the social impacts of Covid-19 on particular groups.

You provided for us -- could we have, please, page 5 -- an executive summary which broadly encapsulates, does it not, the charts, the tables and the data which follow?
A. Yes.
Q. Just to run through them, please, one by one, at (a), what is your finding in relation to the figures, the data taken from the death certificates?
A. That there were 186,668 deaths involving Covid-19 between March 2020 and February 2022 and, for the reasons that I've indicated earlier, there were no 104
death registrations involving Covid in January or February 2020.

And we calculate something called "excess deaths", where we look at the number of deaths in any time period over and above the average in the previous five years, and we would say that during this period there were 138,909 excess deaths, in other words deaths over and above that which we would have expected, all things being equal, in that period.
Q. (b), do the death certificates provide the sex of the deceased, enabling you to work out mortality rates between men and women?
A. Yes, they do, and we demonstrate a marked trend that men were more likely, sadly, to have been impacted than women.
Q. And were mortality rates, as we all know very well indeed, highest in the oldest age groups?
A. Very much so. Significantly so. And of course that, given that with old age comes an increasing probability of disability, the two are quite interlinked.
Q. (c), did nine out of ten deaths involving Covid in England occur in a hospital or care home?
A. Yes, they did.
Q. What about the position with private homes? Generally speaking, were the numbers of deaths in private homes 105
whom that could have occurred, but we then control to make sure that we are comparing, if you like, apples with apples, by saying we will have one age distribution. Because if the people in one occupation were all in their 20s and the people in another occupation -- I exaggerate -- were all in their 60 s , then you would expect it was the age distribution that was impacting that rate rather than the true difference. And so we control in what we call an age-standardised rate for differences in the age distribution of people with different, in this case, occupations.
Q. Does that approach also apply and did you apply it to other categories of groups, such as age groups, because there happen to be fewer 90 -year olds in the population than there are 60 and 70 and 80 -year olds, and so if you produce a chart showing the absolute numbers, it's not in fact representative of the degree of death in that cohort?
A. No, that's right, if you look it up, absolute numbers simply tell you the numbers you need. I would suggest to use rates, and those rates can either be what we call age-specific, so for a particular age, but if you want to compare two sets of characteristics, then you need to standardise the age distributions, so that you are comparing like age distributions.
quite small?
A. From Covid-19. So around about, we would say, $40 \%$ or $30 \%$ of deaths occur in private homes, but with regard to Covid deaths, this was around 6\%. So most people who sadly died of Covid would have done so either having gone into hospital or were in a care home.
Q. Of course, they could have contracted -- they could have acquired or become infected with Covid either before or during their residency in hospital or a care home?
A. Exactly so, and there was a lot of discussion over the period certainly of the first couple of waves of nosocomial infection.
Q. (d), did the majority of Covid-19 deaths in England occur among disabled people?
A. Yes. And that again, as I indicated, was due to the association between old age and disability.
Q. Was that link between disability and old age and death prevalent or in existence even after accounting for factors such as socio-economic and demographic characteristics and vaccination status?
A. Yes.
Q. (e), having applied a higher aged standardised approach, what is that, succinctly, please, Professor?
A. What we do is we look at the mortality rate, that's the number of deaths divided by the number of people to 106
Q. Did that age-standardised approach demonstrate that mortality rates were higher amongst groups associated with transport and mobile machine drivers and operatives and elementary administration and service occupations?
And we'll come back a little later to describing what those were.
A. Yes.
Q. (f):
"Many people ... reported ongoing symptoms after infection, known as Long Covid."

Did your data show the highest rates of self-reported Long Covid amongst adults aged 35 to 69 also amongst women and also those living in more deprived areas and amongst disabled people?
A. Yes.
Q. Right.

Now, just moving quickly through some, I promise you not all, of the charts and the tables that you've provided, could we have, please, the first page of the document I produced during the opening, in the Inquiry pack, INQ000283367.

Professor, this chart is familiar to us, it's a chart which I introduced earlier during the opening. Does it show, in essence, the particular nature of the waves, wave 1 and what you describe as wave 2? 108
A. It certainly gives you daily deaths by those first two waves. What I would also add is it shows that in subsequent waves there was much lower mortality.
Q. Now, you've actually described in your statement the emergence of Alpha and Delta.

Alpha was, generally speaking, from January 2021 to June 2021. Delta was June 2021 to January 2022. What was the impact, in general terms, upon daily deaths?
A. Well, Alpha, as the graph in front of you shows, had a really significant peak of daily deaths. There was then Beta, which, although there were a number of multiple introductions, didn't really take hold in this country. And then Delta came in the autumn of 2021, and while there were significant amount -- there was a significant amount of positivity, you will see that there were much lower levels of mortality.

We have said (a) that as the different variants came through, they tended to be more transmissible but less likely to cause death, but, at the same time, by Delta the vaccine programme had really been operationalised, and I would argue that the vaccine programme also had a strong impact on reducing the number of deaths.

It's worth saying that the level of positivity in the autumn of 2021 and the winter of 2021 was much higher than we had seen before.
to males and females?
A. Yes.
Q. Is that the genesis, therefore, of your executive summary to the effect that the pandemic impacted to a considerably greater extent upon males than females?
A. Yes.
Q. In, please, now, the document prepared over the weekend, the pack, does this show the number of death registrations by five-year age group? So --
A. Yes, it does. In addition, it shows the age-specific mortality rate which I referred to earlier, so that you have both, and it shows very clearly that, very sadly, the great majority of deaths occurred to older people.
Q. Did you apply the age-standardised approach to the bar chart, or is that absolute --
A. No, the bar chart --
Q. -- figures, or to the dotted line?
A. No, the bar chart is just the numbers of deaths. The dotted line here is the rate for each five-year group, and calculated and reported and then a curve driven through it.
Q. Does this chart therefore enable you to work out the greater risk of death at, for example, 90, because if 0.3 persons per 100,000 people at the age of 13 died from Covid, that can be compared to the number of
Q. Daily deaths is of course one way of examining the impact of the pandemic. Another way is reported infection.

Could we have page 5 of this document. Because, in the early stages, there was no effective means of reporting infection, because there was no established scaled-up testing process, does this chart, which reports infection, show, therefore, very low levels of reported infection during the early days, the first wave, and only really showing the full extent of the infection latterly?
A. Yes.
Q. Page 6, the next page. Is that an ONS infection survey which estimates the true level of infection by way of estimates of positive tests, but again it relies upon the positive tests, and showing the massive impact of the Omicron wave latterly?
A. Exactly so. And I would note the arrows on the left, which were when the surveys for different countries started.
Q. Could we please turn to page 12 next of your second statement. That's INQ000271436, and table 3.

Did you apply the age-standardised approach to the mortality rates for deaths involving Covid by lockdown periods across the United Kingdom by reference 110
persons per 100,000 persons at the age of 90 , working out that there is a 10,000 or so greater risk of a 90-year old dying of Covid than a 13-year old?
A. Yes.
Q. The next chart I want to take you to, please, is back in your statement, the additional statement, table 5. Does this show, Professor, death registrations across the whole of the United Kingdom but divided by country and region, showing, again, the age standardised mortality rate for each of those regions as well as each of the nations? Page 15.
A. Yes, it does.
Q. So the United Kingdom has an age-standardised mortality rate of 143.2, but the highest country in the United Kingdom is actually England at 145 ?
A. Yes.
Q. Followed by Wales at 144.6, Northern Ireland at 130.7, at the bottom of the chart, and Scotland are the lowest?
A. And I would advise that, particularly between England and Wales, that the difference is not significant enough to be seen as a difference.
Q. But if you look at the regions, we can see that there's a very significant difference between the age-standardised mortality rate for London, at 192.1, and, for example, Yorkshire and the Humber, 151.4? 112
A. Yes.
Q. And more markedly even than that, the southwest?
A. Yes, very much so.

And I think it is important just to add on that particular point, the southwest does have the older population, and I think that's worth saying that's why we need to age-standardise the rates.
Q. Going now to the pack, INQ000292765, and your evidence earlier on the distinction between death in homes, hospitals, care homes and other places, does this chart -- when we get to it, page 5 -- demonstrate what you were saying earlier, which is that the majority of deaths occurred in hospitals and care homes, taken together? We can see there the blue line for home, the orange line for hospital and the grey line for care homes.
A. Yes, it does, and it shows a number of points. You will see a very big peak for care homes in that first wave, and $I$ think it is really important to note that.
Secondly, the two peaks that are there for hospitals, and that is -- and that that moves away as the vaccine programme comes in. Thirdly, that in private homes the number of excess deaths stays high throughout the period and, while there are a variety of reasons for that, I would -- it is important to point out 113
an authoritative view. There are many potential reasons why that might have come, and one would need to look in much greater detail at the causes.
Q. All right. which gives us age-standardised mortality rates of deaths involving Covid-19 for those aged 10 to 100 years by ethnic group and sex.

Does this show that once you apply the age-standardised approach, therefore taking account of the absolute numbers in the population of persons of the absolute numbers in the population of persons
defined by ethnic group, the age-standardised mortality rate was significantly higher for, firstly, all non-white groups than the white British group, and non-white groups than the white British group
secondly, it was highest overall for those of Bangladeshi ethnicity?
A. I would just qualify that briefly, if I may.

You're absolutely right, but in the first wave the highest group was actually for people from black African and black Caribbean backgrounds, and I would argue that some of that explanation could be due to the geography of the first and second wave. The second wave was much more in the northwest and north of England, and less so, initially, in London.
Q. It shows, of course, therefore, also the very distinct 115

## Can we then go back to page 2 in this document,

It shows, of course, 115
cardiovascular illness as being very high, as causing deaths in private homes over and above those we would have expected.

The expectation --
Q. Sorry to interrupt, because this is of course,

I emphasise, the number of excess deaths --
A. These are excess deaths.
Q. -- not deaths from Covid?
A. Not at all. These are excess deaths from all causes.

Zero means the number of deaths would be the same as we would have expected from the previous five years for that particular week, and a positive number more, a negative number actually less than we might have expected.
Q. Why, in your view, does the orange line for hospital go below the absolute line of zero in the summer of 2020 and the early part of 2021?
A. There are a number of potential reasons. One reason, of course, is that people were being somewhat more healthy. For example, we didn't have a flu season, as it is called, in the second winter.

In addition, some -- I mean, it's very sad to say so, but some of those people who died from Covid might subsequently have died in hospital anyway, and this -it's very sad to note that, but it is hard to give 114
differences between the impact of the waves. So --
A. Yes.
Q. -- for those of Bangladeshi ethnicity, there is a very stark difference between the first and second wave, and then the Alpha wave, and similarly in relation to those of Pakistani ethnicity, and then also you can see the very distinct difference between male and female?
A. I completely agree.
Q. Had the ONS carried out previous analysis in relation to ethnicity and the impact of the pandemic?
A. This was the first analysis that we did, and we did it by linking these -- these data come by linking death registration to 2011 census data to be able to get ethnicity. We then subsequently linked in other data to be able to ask the question of the extent to which these stark differences could be explained by different ethnic groups as a group -- I mean, clearly there's heterogenity flying around, but, as a group, having -living in more disadvantaged surroundings, being more disadvantaged in more socio-economic occupations, for example, which were much more likely to be public facing, where the degree of positivity would have been higher.
Q. Was the ONS able to draw any general conclusions, therefore, as to the link between ethnicity and 116
socio-economic conditions? So, when you put it another way, that the mortality rate was, therefore, affected not simply by the fact of ethnicity, but by
the socio-economic conditions, deprivation, housing or poverty, experienced by members of that particular ethnic group?
A. The socio-economic conditions, the lower dis -- the lower levels of advantage. Also, as I indicated, for those who were of working age, the higher likelihood to be in public-facing occupations.

In addition, we showed that for women of some ethnic heritages, living in a multi-occupied household had a real impact. And then the other point we note as we move into the later waves was differences in vaccine uptake played a real role in the probability of mortality.
Q. Could we go back to page 3 in this document. Did you in fact produce data showing mortality rate, therefore, by deprivation?
A. Yes.
Q. And the greater degree of deprivation, the greater the mortality rate?
A. These -- what we do is we use a number of indicators, which we add together for small geographic areas, and then we link the death registration to the geographic 117
and operatives. Applying the age-standardised mortality rate approach, were there some occupations which had a markedly higher mortality rate and therefore, by implication, a higher risk of death?
A. Yes, there were, and these tended to be public-facing type jobs, so, for example, when we talk about transport, we're talking about taxi drivers and bus drivers --
Q. Could we go forward one page, please, and we will see transport and mobile machine drivers and operatives at 82.
A. And when we talk about protective services, that's largely the police and security and things like that.
Q. So -- thank you for highlighting 82 -- the highest standardised rate was for transport and mobile machine drivers and operatives, at 78.7.

By contrast, if you go back one page, health professionals, health and social care associate professionals, had lower rates of mortality, 22.2 and 32.6.

Why do you think that they had an age-standardised lower mortality rate even though they were in the health and care sectors?
A. What we show is that they had a relatively high rate of contracting Covid in other data, but that the relatively 119
area, and as you indicated we've got the address that we can get from the death registration, and what that shows is a very straight gradient between people in the most deprived areas having the highest levels of mortality and people in the least deprived areas having the lowest. And as you rightly say, these are standardised so that we control for differences in the age distribution which may occur between those areas.
Q. If we then go forward one page to page 4 in this document, did the ONS also provide, by way of self-reported information by disabled persons describing whether they were limited a lot in their disability or limited a little in their disability, on the mortality rates by disability status?
A. Yes, we did, and this graph shows that. I would just add that, if anything, it might be an underestimate, because we get -- this is self-reported disability from the 2011 census and therefore it is possible that people may have become disabled in the interim period.
Q. If we could then go, please, back to your second statement, INQ000271436, at page 34, we come to the issue of occupation group. You will recall that you referred earlier to protective service occupations and other operatives, transport and mobile machine drivers 118
lower levels of mortality, at this stage -- I mean, I'm a statistician, so I apologise if my knowledge of epidemiology is not brilliant, but much -- in many ways, better protection, much higher levels of vaccine uptake would be a really -- and early vaccine uptake -- would be important factors.
Q. What about barrier care, so the more prevalent use of PPE and so on?
A. That's certainly an impact, but as I indicated there were relatively high levels of Covid uptake amongst some health professionals.
Q. So there was a high risk of infection, notwithstanding the use of PPE as one --
A. Yeah, we were --
Q. -- would say?
A. You have those in another table.
Q. But the levels of mortality were lower --
A. Were relatively low.
Q. -- perhaps because of a greater take-up of vaccination?
A. Exactly so.
Q. Could we go, please, to page 10 in this document. We then come on to the -- sorry, not in that document, I do apologise, in the pack document, INQ000292765.

Did the ONS produce for the Inquiry, in fact over the weekend, some international comparisons -- so it's 120
page 10 of this document, please. Thank you.
If you could scroll out so we can get the whole chart, international comparisons between a number of different countries, showing where the United Kingdom is in terms of all-cause mortality, that's to say all deaths not just Covid, but also the difference between the numbers of excess deaths during the pandemic and the pre-existing position?
A. Yes, these are from a publication that we have put out and which uses, again, a standardised population. So we control everything to a standard European population, and what it shows -- and I would concentrate on the -it's ranked by the blue dots, and what it shows is the relative -- the proportion to which the mortality rate for a particular country was bigger than the average, and what you see is that in Central Europe in particular, and then in Italy, the rates were much higher. And then largely in Scandinavia the rates much, much lower.

The other point I think it is important to refer to on international comparisons, which we report in a number of publications, is that the UK, and particularly England, was one of the very few countries in the first wave to have a national epidemic. So if we were, for example, to look at Italy, Italy had much 121
conditions, health, and so on and so forth?
A. That's right, which is why we have controlled for the age distributions.
LADY HALLETT: If you wanted to compare the UK with other countries, this would be a better way of doing it, because we don't know how other countries necessarily recorded deaths from Covid?
A. Exactly so.

LADY HALLETT: Yes.
A. There is some variation in the recording, and that is why we have always used excess all-cause deaths, and you can see particularly in the first wave a very strong correlation in England between excess all-cause deaths and reported Covid deaths.
MR KEITH: At pages 8 and 9 of that document, finally, do you produce figures -- thank you -- for Glasgow, Edinburgh, Cardiff, Belfast and the United Kingdom average, and then changes in mortality rate in England, thereby showing the different rates of mortality across the United Kingdom and across England?
A. Yes.
Q. Do they show in relation to the top chart in general terms a broad similarity of line, of graph, reflective of course of the waves, but if you go to the bottom chart, please, that's to say page 9 , we can see in 123
higher levels of mortality than we did around Bergamo, in northern Italy, for example, but almost none at all in the south of Italy. The same in France, where we show that the French first wave epidemic was largely around Paris and Strasbourg, whereas in England the epidemic came right the way through the country.

And that's why I do think what we have reported elsewhere in a series of papers is we divide areas into what are called NUTS regions, that's regions of around about 200,000 population, and when we do that, we are able to see much closer the granularity of mortality, and in those data we show that regions or areas, for example, in London, the highest in the first wave was Brent, are -- that those areas are -- well, regions are a much better level of granularity to look at than nation states.
Q. Okay, thank you, that's very helpful.

And you should make clear, shouldn't you, Professor, that this is a chart of comparative excess deaths, so all these countries have produced excess death figures that you have been able to draw upon, but of course the rates of mortality in any given country will depend on a multitude of factors --
A. Yes.
Q. -- such as population age, resilience, socio-economic 122
relation to October 2020 to February 2021, for London, a very considerable dip during that period, and also, between October 2020 and June 2021, relatively speaking, much higher figures for Birmingham than for the Manchester or London areas.
A. That is right, and that speaks to the point I made earlier about geography, where the first wave very much, you know, right across but in London in particular, the second wave, in that autumn of 2020, you may recall the outbreak in Leicester, you may recall some of the outbreaks across the northwest, very sadly, and indeed that crescent, which more or less starts in Liverpool, goes through the north and then down to Leicester, was very much where that second wave came, and that is reflected by London having a relatively lower level there.
Q. That wave or crescent of mortality sweeping through that part of England, is that in any way redolent of past infections or disease --
A. If you were to look at --
Q. -- rates in the united Kingdom?
A. I mean, look, if you were to look at a map, if you were to make a map of the geography, shall we say, of infant mortality in the 19th century, it would not look unlike that, I would have to say. So it is -- we have parts of 124
our country that have long-lasting levels of ill health and the -- and everything around ill health.
Q. You, finally, address in your statement the issue of Long Covid. I've already asked you some questions on that, but at page 7 of this document do you produce figures for persons estimated to be experiencing symptoms of Long Covid, showing the absolute very large numbers of persons estimated to be suffering from Long Covid?
A. Yes, we do. This slide shows people experiencing symptoms for at least four weeks. We also published data which shows people experiencing symptoms for at least 12 weeks. And a point I would like to make is that as we get closer to where we are now, the difference between people suffering for four weeks and 12 weeks becomes very, very small. In other words, people who are experiencing, very sadly, Long Covid are experiencing it for a long time.
Q. And are continuing to experience it?
A. Exactly so.

MR KEITH: Thank you very much.
Professor, those are all the questions that I have for you.

LADY HALLETT: I have provisionally agreed and I confirm, Mr Weatherby, you have some questions, I think, followed 125
the chain of the correspondence, but this is a letter of correspondence that started on 11 May of 2020, and each of the letters, as you've just helpfully explained, and the responses are published on the UKSA website, and they're there to be seen.

Again, for context, the correspondence was regarding
Mr Hancock's 100,000 tests per day target by the end of April for testing, and 200,000 tests per day target by the end of May. So that's the context.

I'll take you, as I say, to the key passages in
a moment. But the correspondence that culminated in
this letter was raising significant concerns about
the government's presentation of the testing data,
wasn't it?
A. Yes.
Q. And it's significant, isn't it, that the chair sought to write to the Secretary of State; that underlines how important this was?
A. We saw -- I mean, Sir David saw this as really important, that the public were fully aware --
Q. Yes.
A. -- of accurate data that were transparent, to use your words.
Q. Yes. Thank you.

Let's just go to the key parts of that, if we may, 127
by Ms Shepherd thereafter. Mr Weatherby.

## Questions from MR WEATHERBY KC

MR WEATHERBY: Thank you.
Professor, I ask questions on behalf of the Covid Bereaved Families for Justice group, which represents many bereaved families from across the UK, just a few questions.

I'm going to return to a point that was touched upon before lunch by Mr Keith, and that's correspondence between Sir David Norgrove and Matt Hancock.

So Sir David was the chair of the UKSA, you were the chief -- you are the chief executive, Matt Hancock at the time Secretary of State for Health.

Mr Keith touched upon a letter of 2 June of 2020, and it's right, isn't it, that that was a published letter and you're aware of it?
A. Very much so. That is the policy of Sir --
Q. Yes.
A. -- well, the chair, if there is an issue that wishes to be raised then a public letter is written.
Q. Yes, openness and transparency.

I'm going to put it up in a moment, so l'll just give the reference, but I don't need it up quite yet, INQ000237314.

Now, for the reasons of time, we haven't included 126
if we can just have it up on the screen, and the first page, bold type, Sir David Norgrove's response, so that indicates it's part of this correspondence, and it's dated 2 June.

Then the second page, if we can jump to that, please, is the subsequent -- so I'm just going to read the start of it, I'm not going to read the whole letter out, but:
"Dear Secretary of State,
"Thank you for your letter of 27 May, in which you described some welcome, though limited, additions to the official data on COVID-19 tests, including a proposed note on methods (not yet published ...). I am afraid though that the figures are still far from complete and comprehensible.
"Statistics on testing perhaps serve two main purposes.
"The first is to help us understand the epidemic, alongside the ONS survey, showing us how many people are infected, or not, and their relevant characteristics.
"The second purpose is to help manage the test programme, to ensure there are enough tests, that they are carried out or sent where they are needed and that they are being used as effectively as possible.
The data should tell the public how effectively
128
the testing programme is being managed."
Yes? Then this:
"The way the data are analysed and presented
currently gives them limited value for the first purpose. The aim seems to be to show the largest possible number of tests, even at the expense of understanding. It is also hard to believe the statistics work to support the testing programme itself. The statistics and analysis serve neither purpose well."

Yes? I'll read on in a minute, but where we're up to at the moment, Sir David is highlighting the proper purpose of the data; yes?
A. I would suggest that Sir David's letter is clear and comprehensible.
Q. Yes, thank you. And he's pointing out that the way it's being presented to the public is not fulfilling either of those purposes but is being used for another purpose, to simply show the largest possible number of tests.
Yes? That's clear and comprehensible from that --
A. That's what Sir David is saying.
Q. Yes. And you agree with that?
A. I think it's a fair statement.
Q. Yes. I'll just read on slightly further.
"To mention just a few issues ..." 129
impression of the actual positive diagnoses?
A. I mean, that's a reasonable -- I mean, it assumes that those tests that weren't carried out will have the same probability of a positive test as those --
Q. Yes.
A. -- that were carried out, so there's an assumption in the arithmetic but the --
Q. Yes.
A. -- arithmetic's absolutely --
Q. I follow that, but that's the two effects that --
A. Yes.
Q. -- Sir David is trying to get over.

Then jumping to the third page finally, just two short passages from there and it's the paragraph below the bullet point:
"I warmly welcome of course your support for the Code of Practice for Statistics."

Now, that relates to the earlier correspondence where the integrity of statistics had been made clear between the two of them:
"But the testing statistics still fall well short of its expectations. It is not surprising that given their inadequacy data on testing are so widely criticised and often mistrusted."

So here Sir David is making clear to
131

Just the first bullet point there:
"- the headline total of tests adds together tests carried out with tests posted out. This distinction is too often elided during the presentation at the daily press conference, where the relevant figure may misleadingly be described simply as the number of tests carried out. There are no data on how many of the tests posted out are in fact then successfully completed. The slides used in the daily press conference do not show the date when the tests were carried out."

So am I right that in fact what's happening is that the number of tests that is being presented to the public is misleading because it adds two different pieces of data together?
A. That's what Sir David is saying.
Q. Yes.

Jumping to the third bullet point, just the last sentence of that, the consequence -- or one of the consequences:
"This presentation gives an artificially low impression of the proportion of tests returning a positive diagnosis."

So on the one hand there is an inflated figure of the number of tests carried out, and one of the consequences is that there is an artificially low 130
the Secretary of State how very important this matter is; yes?
A. Yes.
Q. And finally, just for completeness, the final paragraph:
"I do understand the pressures that those concerned have faced and still face. But I am sure you would agree that good evidence, trusted by the public, is essential to success in containing the virus."

Yes?
A. Absolutely.
Q. And you'd agree with that?
A. Yeah.

MR WEATHERBY: Yes, thank you very much, that's all I want to ask.
LADY HALLETT: Thank you, Mr Weatherby.
Yes, Ms Shepherd.
MS SHEPHERD: My Lady, before we came into court, I understand that those who represent FEHMO wanted to ask some questions. I'm happy for them to go first and, if we've got time, to come to me.
LADY HALLETT: I don't think l've given --
MR KEITH: My Lady, may I assist, Mr Thomas KC approached me during lunch and said would I go back to the issue of Professor Diamond's evidence where he said there were good reasons for not having ethnicity on registration of 132
death certificates and he wondered whether we would return to that issue.

I indicated on account of the time that I probably wouldn't, so I suspect that what he is really doing is making a section 10(4) application ex post facto in order to return to that point.
A. I'm happy to briefly --

LADY HALLETT: Well, can you explain the reason? You said there was --
A. Yes.

LADY HALLETT: -- good reason for not --
A. Well, this is -- my view is that it is -- you should minimise what is on a death certificate for the very simple reason that the person who most understands the answer is sadly no longer with us, and therefore you are going to have -- you are going to have errors coming into the data that you cannot control for.

That is why I am completely in support of
the current proposals that are being made around the legislation which will bring ethnicity, using the full census definition or census categorisations, into National Health Service data, and then those National Health Service data can be lifted into death registration, using the kinds of linkage that l've talked about before, and that will give us absolutely
administrations incorporated into this tool?
A. Thank you for that question. The answer is: yes, they were. Where they were -- well, they were incorporated directly where ONS collected the data in a UK-wide basis. So the Coronavirus Infection Survey, the CIS that we've talked about previously, and the opinions survey which we've talked about previously, collected UK-wide data and the data were made available through that tool.

Where data were collected explicitly in a devolved administration, for example some of the mortality data, we provide on the insights tool a link to where you could get those data. So if you were interested in Welsh data, there is a link to where those Welsh data are published but we do not publish them, if you like, as one UK-wide data.
MS SHEPHERD: Thank you, Professor.
Thank you, my Lady.
LADY HALLETT: Thank you, Ms Shepherd.
Thank you very much, Sir lan, it's very kind of you, and I won't say I got excited by the statistics -- I can never say the word -- but you certainly made it extremely interesting and very informative.
THE WITNESS: Well, thank you for the huge privilege, thank you.

133
top class data.
So, just for clarity, I am very much in favour of having ethnic differentials of mortality calculated and published regularly, and we at ONS would very much like to do that, but I just think it is better that the person who sadly is no longer with us has the opportunity to provide that information and then we add it later, rather than we try to bring in errors -data that can be subject to errors that we can't control.
LADY HALLETT: Thank you.
I hope that answers FEHMO's questions.
MR DAYLE: I believe it does, my Lady.
LADY HALLETT: Thank you very much.
Ms Shepherd.

## Questions from MS SHEPHERD

MS SHEPHERD: Thank you, my Lady.
Professor Diamond, I appear on behalf of Covid-19 Bereaved Families for Justice Cymru.

You have already been asked by Counsel to the Inquiry about the extent to which ONS data were gathered from the devolved administrations. I want to ask specifically about the Covid-19 insights tool which was for the benefit and information of the public.

Were data from Wales or any other of the devolved 134

LADY HALLETT: Also I heard a number of references by Mr Keith to work done over the weekend. I hope we haven't imposed too great a burden on you.
THE WITNESS: We always work over the weekend at the Office of National Statistics.
LADY HALLETT: Good. Good advert. Well done, thank you.
(The witness withdrew)
LADY HALLETT: Mr O'Connor.
MR O'CONNOR: My Lady, may we now please call Gavin Freeguard.

MR GAVIN FREEGUARD (affirmed) Questions from COUNSEL TO THE INQUIRY
MR O'CONNOR: Could you give us your full name, please.
A. Gavin James Freeguard.
Q. Mr Freeguard, you have kindly prepared a detailed report for the Inquiry on the subject of data processing and the use of data in government during the Covid pandemic. We have the first page of the report on screen. You can see it there. And we can see that just above your name and the date, you've included a statement explaining your understanding of your duties as an expert, and you've indicated there that the detail within the report is true to the best of your knowledge and belief. Is that right?
A. That's correct.
Q. Mr Freeguard, you are currently a freelance data consultant, I think?
A. Yes, that's right, I tend to work on data policy, research and advocacy, and also focus on digital government as well.
Q. Thank you.

You've set out in your report, we don't need to look at it, a range of roles that you undertake at the moment, including that you are an associate at the Institute for Government, and also a special adviser at the Open Data Institute?
A. Yes.
Q. You've also indicated that prior to undertaking freelance work, you were in fact an employed researcher at the IFG holding the post, latterly, of programme director for data transparency and digital government?
A. Yes, that's right.
Q. Mr Freeguard, as I've said, the focus of this report, which I should perhaps have said is a lengthy one, it's 70 or so pages long, is to do with data matters and how they affected the taking of core political and administrative decisions during the Covid pandemic, and you are aware, because these were all part of your instructions, that the list of issues for Module 2 of this Inquiry relate to matters such as identifying 137
Q. So you have fairly made the point that you can't help us in an expert way with those matters.

Just finally by way of introduction, it's important to make it clear, and for the sake of those who go to your report, which we will of course adduce in evidence in full, that you were at the outset instructed to prepare this report on the basis of your own understanding of these matters and materials that were publicly accessible.

You weren't provided with the very considerable amount of evidence that we have now obtained, the reason for that being you were instructed before we had all the evidence.

You have latterly seen some of the evidence that the Inquiry has obtained, and we'll look at some of those documents together, but any reader of your report should not assume that the judgements you express in the report are made on the basis of a review of all of our material. That would not be right, would it?
A. That's correct.
Q. Thank you.

I want to start then, Mr Freeguard, by some fairly broad summaries of the early stages of your report. You make the point at the outset of your report, and perhaps it's a theme, perhaps the most important theme running 139
the key sources of data available to decision-makers;
yes?
A. Yes.
Q. Questioning whether decision-makers had access or adequate access to reliable data, statistics and so on; asking to what extent the data collection during the pandemic addressed the impact of Covid-19 on vulnerable and at-risk groups; and finally, addressing the question of the adequacy of sharing of data within government structures during the same period, and all those matters are addressed in your report, are they not?
A. They are, yes.
Q. It's right at the outset to make it clear, as you do in your report, that your expertise in this field is very much focused on matters relating to Westminster government and institutions. So, as we know, we were addressing devolution matters yesterday, that covers matters relating to England and the UK, but you've explained in your report that your expertise doesn't really extend to similar matters within the devolved nations, Wales, Scotland and Northern Ireland?
A. That's right, I occasionally touch upon that in my report and think it's an extremely important topic, but my work has been focused on Westminster and Whitehall. 138
through it, that data is a vital tool for policy making, particularly in times of crisis?
A. Yes, that's right. I think for policy making, in terms of bringing evidence to that, in terms of evidence of what works when it comes to policies that are being implemented, but also to the operational side of government, and I think we see that through the pandemic as well, particularly when it comes to healthcare data.
Q. Yes, thank you.

When you answer my questions, if you could try and speak slowly, that will assist all of us, including the stenographer.

You explain in your report that in recent decades, the last decade or two of the data revolution, the potential desire for government accessing, sharing, manipulating these very large datasets has grown alongside the availability of datasets of that nature?
A. Yes, that's right, and my report begins by looking at, I think, around 30 different reports that we've seen since the mid-90s about how government might improve, how it makes the most of some of those opportunities, and also that we've tended not to follow up on quite a lot of those or looked in detail at which recommendations have succeeded and which ones have not, and the reasons behind that as well.

140
Q. Let's perhaps just -- I'm certainly not going to take you to all of those reports, in fact possibly only one of them, Mr Freeguard, but if we go to page 8 of your report, I think it's fairly obvious, even just glancing at the pages -- so we see your listing those reports. The earliest I think is in 1996.
Then if we can just scroll forward quickly through the pages, we can see all of these different reports -thank you, just if we can keep going -- it's a long list, Mr Freeguard, of reports, in the large part commissioned by central government, asking themselves questions as to how they can use data more efficiently.
You've touched on this point, but the question is: is there almost a failing in itself by noticing quite how many reports there are within a relatively short period?
A. I think so, yes. Again, it's not been for lack of trying, it's not been for lack of interesting ideas about what might need to be changed and what needs to be done in order to change things, but it does feel like we often repeat recommendations.
There's some very strikingly similar language even from the late '90s that we could find in a report published, you know, in the last couple of years. Government just doesn't quite seem to grasp some of 141
technology, where some of the computer systems and some of the data systems that have been in use in government have been in use for many decades, it becomes more and more difficult to extract data from those or you need much older expertise, and then trying to reform those systems and bring in newer technology becomes more challenging.
Q. So those are the technical barriers. You refer to legal barriers. In a few sentences what do you mean by that?
A. That tends to be where the law does not provide or is not clear that it provides the sort of locus for different parts of government being able to share or access data. I think that's one area, and you will see this in the sort of chronology of reports, where some of those problems have been tackled over the last decade or so. Things like the Digital Economy Act and some of the clarity brought by the General Data Protection Regulation have sort of solved some of those problems, but there are still some challenges with there being a lot of different pieces of legislation that can allow data sharing, lack of clarity about how to make the most of some of those routes as well.
Q. Yes.
A. And I think just a final sort of legal issue is I think because different parts of government are different 143
the opportunities sometimes.
And I think we're also quite poor at learning from the successes and failures of those different recommendations.
Q. You in your report have tried to crystallise some of the key issues that come up, as you say, time and again in these reports: routine failures in the data field and, if you like, barriers -- I think that's a word you use -- to data sharing within government.

I want to ask you about them just briefly in turn.
First of all, you talk about technical barriers, and by that I think you mean interoperability problems, the fact that government perhaps can't speak to it -- or different parts of government can't speak to itself very well, or at least transfer data between areas of government.

Is that right?
A. Yes, that's right. So that often stems from a lack of data standards, so people in different parts of government might be recording similar data but doing it in very different ways, which makes it much more difficult, as you say, for interoperability, to compare and collate those various different things. Sometimes the data simply isn't collected, which is definitely a technical problem. But we also have issues of legacy 142
legal entities, that can sometimes make sharing across those different organisations more challenging.
Q. Thank you.

That does, I think, lead into the third of those barriers that you describe, which is cultural and organisational barriers, and at least one of the points that you make in that regard is that, going back to the legal barriers, even if in fact as a matter of legality it is possible to share, let's say, a dataset from one part of government to another, you might find that the general sort of concern about legality of sharing means that there is a sort of inertia there and that datasets that might be shared end up in fact not being shared, and that's one of the points you make under cultural and organisational barriers of that nature?
A. That's right, and in a sense that comes from a very good place. I think that's people within government organisations not wanting to get something wrong, they're quite fearful that they might accidently share something that they shouldn't be, and it speaks to a need for greater guidance and more support for people that are trying to do that.

I think some of the other cultural and organisational barriers that it's worth picking out are 144
that, you know, some of this is not about data, it's about the structure of government and the fact that siloed government departments don't tend to work together as effectively as they might, and sometimes the incentives aren't there for different departments to share or make their data available.

So, for example, one department might be the one that has to invest in a particular dataset, the benefits might accrue to a different department, that will not necessarily be reflected in sort of funding or anything else.
LADY HALLETT: Mr O'Connor used the word "inertia", I wonder if "caution" might be a better word.

I mean, I remember when we first had to start dealing with data management for the judiciary, and some extremely able lawyers found some of the provisions quite complicated, and therefore that may have led to a degree of caution.
A. Yes, I think that's right, and certainly traditionally
that complexity, especially when there were a lot of
different legal gateways, led to some of those challenges.

I think we're also in a relatively early stage,
still, of some of that legislation bedding in, which
means some of the legal precedents are still being 145
to a greater or lesser extent in many or all of those reports at which we looked, all flashing on the screen, and those who want to can look at in more detail by looking at your report itself. We are obviously going to come on and talk about the experience during the pandemic, but is your view that those four issues, as it were, also had their part to play during the pandemic?
A. Yes, that's definitely right. I think as well it's worth saying that the pandemic helped overcome some of those barriers. The fact that there was such urgency, there was such a clear purpose and such a collective purpose from different parts of government meant that perhaps some of that cross-government working happened where perhaps we haven't seen it in the past. Obviously there was a strong political imperative to get things done as well.

So we definitely saw some of them being overcome in a way that perhaps we haven't during business as usual periods in government.
Q. Thank you very much.

Mr Freeguard, I did mention that I might ask you
about one of these many reports and in fact as it
happens it's one of those which is shown on the screen
at the moment, it's the national data strategy, so
Q. Thank you. I'm going to come back to the point about the chief data officer in a moment, but just finishing then this point, you've referred to those four really very generic barriers. Those are points which emerged 146

I wonder if we could just highlight that or enlarge that subparagraph in the middle there. Yes, all right. We can go -- thank you, there it is.

So, Mr Freeguard, that, as we can see on the screen, was a report, a strategy, that was published in fact during the pandemic, although you make the point that it had been commissioned some two years earlier, and I think it had been -- responsibility for the review had been passed between government departments during the time it was being considered.

But tell us a little about that strategy.
A. So that came from, as you say, a sort of machinery of government change and I think a renewed focus on what better use of data could do for government. And it was designed deliberately as a framework strategy, that is setting some overall missions for the use of data in government, better use of data being based on particular pillars -- l'll come back to one of those in a moment -and then there being lots of different activities, specific activities, to be conducted by different parts of government underneath that.

One of the pillars that I mentioned is -- probably of most interest to the Inquiry -- about data availability. That is a term that the strategy uses for data sharing, accessing data, finding data, more

148
generally. Again, as a framework strategy, it was very much there to be an overarching thing that other parts of government might be able to use the principles from as well.

I was at a roundtable last year, a roundtable discussion organised by Civil Service World, which suggested that lots of departments were still looking to some of the principles in the strategy to try to improve their own use of data, although it does feel like over the last year or so it's received less prominence. It's now the responsibility of the Department for Science, Innovation and Technology, and when that was created this was not one of the initiatives that was sort of highlighted as moving from the Department of Digital, Culture, Media and Sport to DSIT.
Q. I don't think it's clear from your list, but has this strategy yet been replaced by yet another review or machinery of government exercise?
A. It's still there, there are still some teams within DSIT working on particular missions within it, I've spoken to some of them quite recently, and I think, again, the fact that it's a framework strategy, with other parts of work mentioned within it, means that it's still living in some way.

> So, for instance, Cabinet Office, the Central 149
but it's right, as we understand it, that before 2022, so last year, the Treasury, which is, clearly, one of the departments that had a large role to play during the pandemic, didn't have a chief data officer at all. I mean, it was only last year that a chief data officer for the Treasury was appointed, no doubt as a result of this strategy.

Are you able to help us with whether that, as it were, was indicative of a lack of control of data within the Treasury before the appointment of a chief data officer within that department?
A. I think it certainly brings more focus to the use of data within the department, and means that there is somebody who is responsible for thinking about it, which may not quite have been the case before.

I think something we find sometimes across government is there may be people playing some of the roles associated with a chief data officer. They may have different names, they may not be quite the right seniority to be able to do anything with it, and that sometimes does make the picture more difficult to understand
Q. Then what about the chief data officer for the government as a whole? That post still hasn't been filled, as we understand it, despite the recommendation 151
government pledge.

I'll come back and ask you about the chief data officer, 150
dating back to 2020 ?
A. That's right, there have been a few interim holders of that role, there have been a few attempts, I think, since 2020 to fill it permanently and, again, since earlier than that to try to fill it as well. But as far as I'm aware, I think there is a process that has been ongoing fairly recently, but I don't think an appointment has yet been announced.
Q. I'm going to move on, Mr Freeguard, thank you for that.

You have mentioned briefly in that summary you gave us some of the statutory underpinning of the data world, if I can put it that way. We are all perhaps familiar, to a greater or lesser extent, with the Data Protection Act, GDPR, now the UK GDPR. You also refer in your report to the privacy and electronic communications regulations in that context as part of the basic underpinning.

I'm not going to go to the detail of any of those provisions, but one of the provisions I do want to ask you about is another one you've mentioned, which is the Digital Economy Act 2017. That's at page 13 of the report.

If we can expand paragraph 14 , the provisions of this Act are, I think, one of the areas that you mentioned a moment ago that perhaps hasn't fully bedded 152
down, or it's not fully understood exactly what 1 functions it serves and, if you like, the permissions that it grants.

Tell us, if you will, what innovation this Act represented.
A. So the Digital Economy Act of 2017 covered issues beyond those of interest to the Inquiry, so things around broadband and digital connectivity as well. But when it came to data sharing within government, it did sort of provide powers for different parts of government to be able to share data with one another, and in fact I think very much a response to some of those many reports that we've already touched on about the lack of legal clarity and around powers for data sharing.

So it introduced powers for sharing data through the purposes of digital governments and public service delivery. It does not cover sort of health and social care, adult social care provision, so it does cover other purposes but not those ones. And there is, under certain parts of the Act, a register that is published by Cabinet Office, so we have some insight into some of the data that's being shared across government.
Q. Thank you.

So perhaps two important points: one is the general 153

## LADY HALLETT: Mr O'Connor.

MR O'CONNOR: My Lady.

Mr Freeguard, I want to move and ask you some more
sort of focused questions about issues that arose,
difficulties that arose in relation to using and sharing
data at the outset of the pandemic, and as you've already suggested it may be that we see represented there some of those generic barriers that we discussed before the break.

The first of these is simply a lack of data
available on which to make decisions, and for these purposes perhaps if we can look at your report, page 41, paragraph 79.

We can see, starting four lines down, you refer to the well known decision, on 12 March 2020, to stop community testing, the test and trace initiative, and the very simple consequence of that, from a data point of view, was that the tap was turned off. And so you refer there to a modeller making the comment, "if you're only seeing the tip of the iceberg - hospitalisations, deaths - you don't know how broad that iceberg is". The understanding of the spread of the virus in the community was simply not something that was available as a matter of data at that stage?
A. That's right, and I'm not sure I can put it any better
point you make that under this Act is a freeing up of the ability within -- for -- well, of sharing of data within government, but important to note, particularly of course given our focus on the pandemic, that that general liberalisation of sharing of data did not apply to health or social care data; is that right?
A. Yes.
Q. That sharing of data of that particularly sensitive nature can be done but there is a special procedure which you refer to in your report, I'm not going to take you to the provisions, but it's the Health Service Control of Patient Information Regulations which permit a Secretary of State to, as it were, grant specific and very focused permission for the sharing of, for example, healthcare data. In fact this morning we heard Sir lan Diamond talking about what are known as COPI regulations, and I will ask you some short supplementary questions about those in a few moments.

My Lady, I wonder if that would be a convenient point for a break?
LADY HALLETT: Certainly, perfect timing, Mr O'Connor. I shall return at 3.15.
( 3.00 pm )

## (A short break)

(3.15 pm)

154
than that quote from the modeller.
Obviously in order to properly monitor the outbreak and understand how to tackle it, that sort of data is what you need decision-makers to have, and the decision to stop testing meant that case data was much more difficult to come by.
Q. As we heard in Mr Keith's opening, only a couple of weeks or so later the discrepancy between cases, known cases of Covid, which had been the subject of tests, and what retrospective estimates of what was in fact the position, had grown, a bit like the iceberg, so that there were some 6,000 or so positive test results, but the estimate was that it was something close to half a million people were infected by that stage. The data simply wasn't available to inform the position.
A. That's right.
Q. So that's perhaps one example of a challenge faced.

Another slightly different challenge, but which again goes back to those barriers we were discussing, was a reluctance within government, or an inability perhaps, to share data that was available. That's where we come back to the Digital Economy Act that we were discussing, which on the one hand had freed up the sharing of most data within government, but not healthcare data.
Thank you. It's paragraph 48 of your report, which refers to the first Control of Patient Information notice being issued or COPI notice as we heard Sir Ian Diamond refer to them as.
This was a notice issued by the Secretary of State under these regulations which, in effect, put healthcare data into the same category as other forms of data under the Digital Economy Act, although for an express purpose and a limited period of time, and I think you refer to the fact that these notices had to be renewed, I don't know if it's every three months, every six months, something of that nature?
A. That's right. I think it's worth underlining that the General Data Protection Regulation and the Data Protection Act meant that there was the flexibility there for data sharing, including in health, to happen, but from things that l've heard and included in my reports, the COPI notices were extremely important in sending a signal across the whole system that it was extremely important to be able to share particular types of health data, and even if -- I also note that some people were still reluctant, it still took a little bit of time to overcome their caution and to give them that legal reassurance, but it did act, in the words of some people that we interviewed for an Institute for

| 24 |
| :--- | 157

longer document, though still a short one, in April 2020
that again acknowledged that there were severe pressures
facing people in government and elsewhere during
the pandemic, and also that data did need to be shared for health purposes, particularly during the early days of the pandemic.
Q. And again, from your assessment on the ground, did this have an effect?
A. It seems to have -- again as you said, it's another security blanket that meant that people knew that there was some protection there, there was guidance there, there was support there for what they needed to do.
Q. Thank you.

I'm going to move on again to a slightly different context, which takes us back to the sort of systemic or technical barriers within government. Even if the data exists, even if there is permission to share it sometimes the infrastructure simply isn't there to allow that sharing to take place.

For these purposes, yes, it's page 40 and paragraph 75 of your report where I wanted to pick up, and you refer there, we've covered data that didn't exist, but it's the formatting, it's the process issues, and you refer to data flows not having been thought about or tested as part of pandemic preparedness 159

Government project, as a badge of honour and a security blanket, it made them feel much safer in being able to share a lot of that health patient data.
Q. Thank you.

A further safety blanket, if that's what we want to call it, was provided by the Information Commissioner, at around the same time. This is something that you refer to at paragraph 28 of your report on page 17.

We haven't mentioned the Information Commissioner so far, but again I think most of us in this room understand that that is someone who is tasked with enforcing these various data regimes that we're discussing.

Is it right that at the outset of the pandemic the Information Commissioner issued a notice encouraging people to share data?
A. Yes, that's right. There was a short statement in March 2020 where I think the Commissioner said she would be pragmatic in how she applied the existing principles to try to get people to share data that needed to be shared. That was something that was welcomed by the National Data Guardian, a sort of watchdog for the use of health data, who listens quite a lot to patients.

And then as paragraph 28 shows, there was a sort of 158
exercises. I'm going to come back to Operation Cygnus in a moment.

If we can go on to paragraph 76, you refer to:
"Several ... Downing Street figures [having] spoken about the lack of developed data pipelines and processes at the start of the pandemic. Data collection and collation was instead ad hoc, with officials emailing and being emailed Excel files, Word documents ... making phone calls ... "

Writing it down, pulling it together. All very inefficient.

Does that seem to have been the process that was taking place in, for example, Downing Street and the Cabinet Office in the early stages of the pandemic?
A. Certainly at the start, as you can see, Simon Case, the Cabinet Secretary, among those speaking afterwards about the fact that that's how it was working. There weren't those sort of reproducible pipelines, APIs, another way of being able to share data more quickly and more easily. Instead, a very fragmented process of emails, Word documents, Excel spreadsheets, phone calls, people reading off scraps of paper onto whiteboards in Downing Street, rather than having the flows there ready to go. I think in his statement Tom Shinner expresses his surprise that so much effort had to be put into 160
bringing that data in, rather than just being able to enact protocols that already existed.
Q. You might have to educate us a little bit, Mr Freeguard. I mean, to some of us, the idea of emailing an Excel spreadsheet might feel like a sort of pretty sophisticated technical thing to do, but you're describing it here as something that was not sophisticated enough.
A. When it's coming from hundreds of different health organisations at a rate of knots, it's much more difficult to keep hold of all of that, having to copy and paste it. We know as well, for instance, Public Health England at one point was compiling its line lists -- that is a spreadsheet with a line for each patient -- from individual emails. A lot of those things should be much more automatic. There should be processes in place where that data is being brought together much more easily, sort of automatically, rather than a lot of effort having to be spent collating -especially in a moment of extreme pressure -- from all of those different sources.
Q. You've mentioned APIs. We perhaps don't need to get into the detail, but essentially this is a piece of software which manipulates automatically, it's a feed; another term you use is a data pipeline. It bypasses 161
providing and best presenting data on which responders will make strategic decisions' since participants 'were unclear about how epidemiological information would be produced and disseminated'."

In other words, it seems, addressing just exactly
this point: how is this sort of data to be received and
used centrally in the context of a disaster or a pandemic?

But you go on to make the point that Cygnus was set in week 7 of an epidemic. Why is that important?
A. I would hope that you'd be able to get those data flows up and running, or would need those data flows up and running much earlier in the process, and I think it shows that although there were -- you know, there was high-level commitment to better data, the thing that was missing was actually thinking about those practicalities: what data did you need to get to which people, and how were you actually going to do it?
Q. May it have been that Operation Cygnus just rather assumed that the data flows would be coming in, but they didn't think about in fact whether that would be the case in the event of a pandemic?
A. Quite possibly. And again, there are other exercises which also thought about what data might be needed, what data might be there. In some cases, it was perhaps not 163
the need for any particular person to look at spreadsheets or documents and amalgamate them; it does it all automatically?
A. That's right, application programming interfaces which, as you suggest, allow sort of different computers to talk to one another without the need for all of that copying and pasting.
Q. There was a reference in paragraph 75 to the fact that these lessons perhaps should already have been learnt, and you refer to Operation Cygnus, which is something that the Chair and the Inquiry is familiar with from Module 1 of this Inquiry, but it may be that this particular aspect to it is worth emphasising.

If we can go to paragraph 80 of your report, please, on page 41, and picking up four or five lines down, you say:
"... there are some factors [beside the general ones you refer to at the beginning of the paragraph] more specific to the pandemic. Previous pandemic preparedness exercises touched on data, but not in much practical detail; where they made recommendations, they appear not to have been taken up. One of the best known drills [Exercise Cygnus in 2016, the flu simulation] recommended establishing a cross-government working group to clarify the 'process and timelines for 162
the data that was expected when it came to Covid. A lot of the exercises had been based about -- around different types of pandemic. So there may have been some surprises about what data was available when it came to healthcare in particular. But, again, there seems to be that lack of granularity and practicality in thinking about how those flows would actually work.
Q. We may be able to get a fairly practical insight into this by looking at a document known as a CRIP, which was one of the collations of data that was in play in the early stages of the pandemic. So if we could have up on screen, please, INQ000056187. Thank you.

Are you familiar with what a CRIP is, Mr Freeguard?
A. Yes.
Q. What does it stand for?
A. Commonly Recognised Information Picture.
Q. That wasn't a very good question, was it, because the answer was there in front of you?
A. Right on the screen.
Q. But it's a term of art, is it not, in sort of contingency planning, and CRIPS are intended to be a sort of regular daily bringing together of the critical information that decision-makers need in order to make the decisions that fall for them?
A. Yes, and I think an attempt to create a single source of 164
truth so that all of those decision-makers are at least starting in the same place.
Q. This, we note, is a CRIP dated Wednesday 18 March. As we will -- as we've already heard, but we will certainly come to hear in more detail, that was a critical moment in the early stages of the pandemic. We will hear evidence about the SAGE meeting on Friday the 13th, a few days before, where the true scale of the decisions facing the country perhaps became apparent; crisis meetings over the weekend, we're in the last few days before the decision to implement the first national lockdown were made early the next week, so it's really a sort of crisis moment.

We can also see, of course, it's CRIP number 28, so this CRIP system has been in play for a little while by that stage.

Before we look at the detail, Mr Freeguard, an important point to bear in mind is that this document is, if you like, a static document. Can you explain what we mean by that?
A. So a snapshot of data at a particular point that were being circulated and printed out, as opposed to what we saw later in the pandemic, which was something more interactive. So, for instance, the Covid-19 dashboard and the various internal equivalents, which could be 165

So it would seem that whoever was typing in the numbers into the box, or perhaps it was more than one person, perhaps from a different source, we've ended up with a short document with two very different figures for the same variable. One might have thought one of, if not the most important variable in the document: how many people do you think in this country have got Covid at the moment? You look at one page, it says 5,000 to 10,000; the next page, well, it could be 30,000 to 40,000 , this being the document that the Prime Minister is looking at in order to make his decisions.

It's quite a striking example, isn't it, of the sorts of problems we were discussing?
A. It is, and this is exactly what those hundreds of individual Excel spreadsheets or emails or Microsoft Word documents gets you to, it's that people copying and pasting, there not being the right quality assurance around the data that's coming in.
Q. We imagine someone sitting sort of besieged by emails, he's printed some of them off, he's looked at some of them on their phone, and mistakes happen?
A. Quite.
Q. If we could go on to page 5 of the document, please, again one might have thought a rather important page for the key decision-making that was going on, trying to 167
updated more regularly.
Q. We'll certainly come to look at that. So it's a static document, simply it stands for itself, but it's also the case, isn't it, that someone actually needs to populate the various tables and charts or bullet points within the document? It doesn't happen automatic, someone's got to type in the numbers and the detail.
A. That's right, with something like a dashboard the pipelines would be running to bring the data through, whereas, as you say, somebody would have to sit down and paste things in for this.
Q. It's a relatively short document, six, seven, eight pages long, something of that nature. If we just look at the next page, please, we see a situation update. I just want to draw your attention to, I think it's the fifth bullet point down at the top. There is an estimated population infected figure there of 5,000 to 10,000 . Of course we know, looking back, that that was a gross underestimate, but that isn't really the point I want to make.

If we bear that figure in mind, 5,000 to 10,000 , if we can just go on to the next page, we see in the third box down exactly the same variable, "Estimated population infected", but instead of 5,000 to 10,000, it's 30,000 to 40,000 .

166
understand what the health and social care situation is in the country.

It's quite striking that, of the columns which are actually completed, in other words data is available, one of them is for the percentage of NHS 111 calls answered within 60 seconds. Not, one might have thought, the most important data on which to decide whether to, for example, lock down the country or not.

Moving along, we also see full data for the number of urgent operations that have been cancelled. But between those two columns, the area on the sheet for the number of ICU beds occupied, the percentage of ICU beds occupied by Covid-19 patients -- and bearing in mind that one of the priorities, if not the priority, that had been identified by the government at that point was protecting the NHS from collapse because of being overwhelmed by Covid patients -- no data seems to have been provided?
A. Indeed, and I think some of the data that you would need to work out the percentages there would actually just be things like the overall number of beds in the system. Even data like that, which should have been easier to come by, was also missing at the start.
LADY HALLETT: Can I just go back? Mr O'Connor, did you say these documents were prepared for the Prime Minister and 168

Cabinet?
MR O'CONNOR: Yes. Well, we'll hear evidence about it, but these were --

LADY HALLETT: Okay. And this was number 28.
MR O'CONNOR: Yes.
LADY HALLETT: So are we assuming that that data was missing 6
in numbers 1 to 27 as well?
MR O'CONNOR: I think, to be fair to Mr Freeguard, he may not know the answer -- or certainly doesn't know the answer to that question, and in fact I don't know whether we have a full set of these CRIPS in evidence, but it's certainly something we can look at.
LADY HALLETT: Extraordinary.
MR O'CONNOR: It is, though, is it not, Mr Freeguard, of
a piece with the evidence we were looking at earlier
about frantic activity in Number 10, emails, jotting things down on pieces of paper? And I'm going to take you to another document now, which is an email from Dominic Cummings to two of the Number 10 staff expressing a degree of frustration about these types of matters.

This is INQ000174715, please. If we can pick up about halfway down where it says "Tom/Marc".

So this is an email on 25 March, so a week or so later, just after the lockdown has been announced. He 169
that's INQ000048313, page 31, please. You're ahead of me, thank you. No, you're not. It's page 31.

So we see in fact that at the top half of the page is the last bit of that email, and then Tom Shinner replies, bottom half of the page:
"You are not being unreasonable. It is a mess; it should be possible to fix all this. You'll see some of it tomorrow."

He refers to:
"... deliberate obfuscation ... in the room and the boss letting MH [perhaps Matt Hancock] [and others] get away with throwing him a random graph with subtly different numbers none of us have seen."

And so on.
Thank you.
So both in the CRIP and perhaps in that exchange of emails we see, at least in the outset, some very serious data availability, data handling problems in Number 10?
A. And as I think the Dominic Cummings email shows as well, some of those issues that come from perhaps the same thing being recorded in different ways in different places and not being able to bring it together so easily, and the time and effort that it takes to come to that single version of the truth, when you should be -you should be having time to discuss the response to all
is talking about the dashboard, we'll come back to that, but it's the same sort of data or types of data that we are discussing. He says:
"The NHS numbers remain a mess. I look at the daily COBRA reports, I scribble down numbers people say 815 or 915. I look back and none of them are consistent."

I'm not going to read it all out. If we cast our eyes down, we see he is trying to make sense of the reports.

Then if we can go to the next page, please, he is talking about beds forecast to be free, so similar type of data that we noticed wasn't available. Then he says:
"No deaths -- number reporting seems a shitshow, different times every day. WTF use is a number for 9 am that's then updated retrospectively ...
"There should be a number calculated in a sensible way and done at the same time every day and is intuitively sensible. This shouldn't be too much to ask of NHS."

Then, perhaps picking up on the same theme as the observation by my Lady a few minutes ago:
"I'm truly amazed that even after weeks this most basic stuff is so hard for us to get our hands on...
"Am I being unreasonable?"
If we can go straight to the response he gets, 170
of it, you're still arguing over the numbers to begin with.
Q. Now, we saw that one of the recipients of that email from Dominic Cummings was Tom Shinner, and he was the person or at least one of the people responsible for developing the dashboard that you've referred to, and that was a product that was designed to do something very similar to the CRIP in terms of being, in your phrase, a single source of truth, but it was a very different type of product, was it not?

Can you give us, just in a few sentences -- we'll have a look at it in a moment, but tell us how it was different.
A. Certainly over time a lot of the data pipelines became much more automated, so we avoid some of the problems that we've already discussed. It's much more visual as well, rather than just numbers in a table we can see it brought to life in actually very clear charts and graphs as well, and I think some of the -- some of the key issues around the caveats behind any data, the sources of the data, when it's updated, that becomes much more standardised and regular and clearly marked as well.
Q. Just to emphasise the point about automation, and we'll come to it, but instead of it being a product of people receiving emails, spreadsheets and manually populating 172
tables, perhaps as the name "dashboard" suggests, this was an automated process where the information simply fed into the system and the graphs and so on were dynamically generated?
A. Certainly much more automation.
Q. Let's have a look, please, it's INQ000 -- yes.

Now, this was a -- first of all, it's an internal
product for the use -- for use of the Prime Minister and other members of the government. Is that right?
A. Yes.
Q. We see it's got "COBR" at the top. The reason I mention it there was a different -- I think later there was a public-facing dashboard which provided similar, albeit less detailed, information to the world at large, but this is the internal government version of the product; is that right?
A. Yes, that's right.
Q. It was -- we've described it as being dynamic, so it was updated perhaps all the time but certainly it would be possible to look at a different dashboard for every day; is that right?
A. Yes, and across various different measures as well.
Q. Yes, and we can see that the date here in small type is 24 March. This, in fact, I think was the very first, it was almost the prototype and it was before it was 173
of those various different sources that were coming in, and then over time develop those pipelines that were much more automated to bring the data through.
MR O'CONNOR: I'm sure we'll hear more evidence about this, Mr Freeguard, but it's fair to say that none of the things that happened in setting up the dashboard could only happen once the pandemic started; these were all things that could have been done in advance in readiness for a pandemic?
A. That's correct.
Q. Just before we leave this, it's right, isn't it, that once this dashboard in fact became operational, within a week or two of this date, over time it became much more sophisticated? I think when one prints off this document it's 20 or so pages long, certainly it doubled, trebled in size, as the product became more sophisticated, more data was added to it during the course of the pandemic; is that your understanding?
A. Yes, that's right and, as you suggested earlier as well, there became a public-facing version on a website which was much more interactive, very well sourced, lots of notes about how it was being put together, and allowed any member of the public to dive into the data in more detail.
Q. Yes. Thank you.
actually being used. So it was in fact, if you remember the email between Dominic Cummings and Tom Shinner was I think 25 March, so this is around the time that the dashboard is being set up and this is, as it were, a prototype

But as you say, we see immediately it's a very different sort of product, much more accessible.

Can we go on and look, please, at pages 11, 12 and 13 in series. So there, as it happens, we see the way in which the dashboard presents the information which was missing from that CRIP: the number of ICU beds, how many are being used, therefore how many are available. And similar -- if we can just scroll forward to pages 12 and 13 , we see similar data relating to those matters.
LADY HALLETT: How did they make the transition from the obviously inadequate CRIP to the dashboard and the automated -- "populating" I think is the word, isn't it? Did they have the software available, or did they buy it as a matter of emergency? How did suddenly we make this transition?
A. My understanding is that they brought some more expertise into the centre, so people with sort of data science skills, I think there were a few private companies who may have brought software in as well that was able to, I think to begin with, patch together some 174

Just following on from this, I want to ask you about just two of the other government initiatives during the pandemic to improve the use and sharing of data. There are a number that you mention in your report. I just want to ask you about two.

First of all, what's known as No 10DS, so if we can turn to page 19 of your report, paragraph 35(c). So the DS stands for data science team. Can you tell us a little about this initiative?
A. Yes, so this was an attempt to bring in people with sort of greater data science expertise, and a sort of variety of skills around that to improve the use of data and analysis within Downing Street, so to make sure that the Prime Minister and the Cabinet were getting the best analysis they could, thinking about more innovative ways of using data to develop an even clearer picture, and I think as well ensuring that Downing Street had the data capability to hold other parts of government to account as well.
Q. And I think it's right to say that at least one of the people who was responsible for this data science team was a man called Ben Warner; is that right?
A. Yes, that's right. There were other initiatives alongside this such as JDAC, the Joint Data and Analysis -- sort of -- Centre, which again fulfilled 176
some similar roles.
Q. Yes, I think it was one of the other addressees of that Dominic Cummings was Marc Warner, who was Ben's brother, and they were both working alongside Dominic Cummings in Number 10 at around this time, and Ben Warner will be giving evidence to the Inquiry in a couple of weeks' time.

So that's the No 10DS.
On the next page, page 36 -- sorry, no, in fact on page 59, paragraph 36 of your report, if I've got that right. It may be that I haven't. But in any event, yes, the establishment of the Joint Biosecurity Centre. Now, we heard something about this yesterday in the context of its jointness, the fact that it drew in expertise from not only England but the devolved nations as well. From a data angle, what was the significance of the Joint Biosecurity Centre?
A. So it was designed to be a sort of single analytical function on behalf of the sort of public health side of things, to bring together various different health data flows, and be able to advise the Prime Minister and Cabinet and others based on that information.
Q. Thank you.

I want to move on, Mr Freeguard, and just touch on all -- or sort of survey the different types of dataset 177
various sewage centres across the country, the water there was tested to understand if there were remnants of Covid, because obviously people infected with Covid would shed sort of samples in various different ways, waste water being one of them, and that was used to indicate whether there might be a sort of rise in cases to be expected.
Q. Did that enable some sort of -- presumably some sort of regional variation to be identified, depending on where the testing was taking place?
A. Yes, that's right. I think it covered around three-quarters of England, I think I'm right in saying.
Q. The other area of datasets that I wanted to pursue with you, which again we didn't get into with Sir lan, was what you describe as non-health data. So, leaving aside all of the studies about whether people had Covid or not and vaccines and deaths, these were a really rather different source of data that were nonetheless useful, were they not?
A. Yes, that's right.
Q. Another term which is I think used to describe at least some of this type of data is mobility data?
A. Yes, so one of the data sources that was used, for example, by some of the groups modelling the reproduction number and other statistics, was Google 179
that were available to the government during the pandemic, and this is something that you explain at some length in your report. In fact, several of these areas have been covered with Sir lan Diamond this morning, which means we can take them very shortly.

If one classifies the various datasets -- and as I've said, there were very many of them as the pandemic progressed, were there not?
A. Yes, and of very different types as well.
Q. Different types, some with sort of interesting sounding names like SIREN and Vivaldi, others with less poetic descriptions. But, in any event, one might describe as testing and healthcare datasets, starting most obviously with, as you said, line data from hospitals, details of admission numbers, deaths, availability of ICU beds and so on. But also then, as the pandemic progressed, various prevalence studies, and those Sir lan did discuss, including of course the ONS Coronavirus Infection Survey which the ONS ran itself, so we don't need to take time on that.

One of the other datasets relating to prevalence that you refer to in your report was waste water datasets. Tell us something about that.
A. Yes, so again a sort of innovative use of data from the JBC and later the UK Health Security Agency where 178
mobility data. So this is where people with sort of Google on their phones have not disabled location on there and that's able to give an indication of sort of where people are moving.
Q. So just pausing there, nothing to do with searching for things on the internet, but Google also has this slightly less well known function of knowing where you are?
A. That's right, the sort of thing that enables people to see where they are on Google Maps and so on.
Q. So, just go on, how was that used?
A. So that and various other big studies as well, such as CoMix, CORSAIR, I think the Scottish Contact Survey as well, and also polling, were all used as indications of to what extent people were mixing, how many social contacts were they seeing, and that could be used as part of modelling the spread of the disease.
Q. You also referred to telecommunications operators providing data of this nature. Was that also simply relating to mobility or was that something else?
A. Yes, I think that tended to be the same purpose.
Q. It may be that we hear more from the modellers about this, but as well as being a factor that could feed into the $R$ number, it's right, isn't it, that this data also provided an insight into the simple question of whether 180

NPIs were working or not?
A. Yes, that's right.
Q. So how much less movement around the country is there this week than there was last week?
A. Exactly.
Q. It's also something you mention in your report that educational establishments, schools, universities, fed in this type of data?
A. That's right. So, again, some of the R modelling groups and others made use of school attendance data that the Department for Education got up and running, I think asking schools to fill in forms at the start and then I think also automating that process as far as they could, again as an indicator to see how people were moving around but also how many people might be absent with Covid.
Q. Yes. Thank you.

I'm going to move now to a slightly separate subject, which is one of those subjects you were asked to address in your report, which is that of data sharing between the central UK Government and the regions, the regions and local authorities in England.

For this purpose, if we could go to page 44 of your report, please, it's paragraph 85. Thank you. Paragraph 85.

181
A. -- in local government, and I think they felt they hadn't been included in any of the planning processes, and again we've seen the effects of not properly planning and thinking about this.

As you say, there's also that sense they had that central government didn't necessarily understand what they might need data for, how they might need to use it, and the benefits that it might have for them.

I think it's worth saying this is something that also happened before the pandemic. I've spoken to a lot of people in local government who are required to submit various types of data up to central government and often don't feel like they're able to make the most of it, it takes a very long time for it to come back to them, or it's very much a one-way relationship and they're not supplied with information that could be valuable to them in running their local areas at the best of times.
Q. You also make the point that it isn't a straightforward thing to do for something called central government to share data with local authorities and regional authorities, precisely because those lower level, lower tier authorities are very various, they have different capabilities, different infrastructures, different maturity when it comes to dealing with data, and so it's actually quite a difficult process, it's not just
a question of flicking a switch?
A. That's right, and again it will be quite different for different datasets, data in different areas. As you say, there are different parts of local government with sort of different levels of data maturity and being able to use that, but I think even those that are very experienced in this sort of thing felt they weren't getting what they needed. And again, you know, this is a sort of longer standing problem than just the pandemic.

I think there is also a lot of overlapping jurisdictions. I think one of the reports I refer to in the annex, somebody said that at one point during the pandemic they were asked to share data with a local resilience forum, to which their reply was, "We'd be very happy to, if we knew what one of those things was".

I think there are, as you suggest, lots of different types of organisation and, again, understanding which of those needed what at what particular moments was quite difficult.
Q. Then lastly, of these themes about problematic sharing -- actually if we could just look, please, further down the page at 86(c) -- you've referred to some of these problems being long-standing, Mr Freeguard, and emanations of difficulties that had 184
existed before, but this point is specific to the pandemic, is it not, that these problems were, as it were, exacerbated by the government setting up, for example, the Test and Trace scheme independently of local public health authorities?
A. That's right. I mean, despite -- local government again would say that the funding cuts that they've experienced over the last decade or so has been a real problem in a lot of this. They still have a lot of expertise, including when it comes to sort of tracing the spread of disease. Things like Test and Trace being set up outside those existing systems and not building on that expertise created further problems.
Q. It's going to be the subject of another module so we won't get into it, but from -- there may be lots of good reasons to set up Test and Trace in the way that it was, but what you're saying here is that from a data point of view it was in effect creating a new silo?
A. That's right.
Q. Those are, I think, the key themes, negative themes, early problems; but it's right to say, as you indicated, or as recorded in that first paragraph, that things did get better during the pandemic and these problems were overcome, to a greater or lesser extent?
A. There seemed to be improvements. Again, it would 185
together under the same sort of data headings when actually the experience might be quite different for different groups.
Q. Yes. We have heard already a certain amount of evidence, of course, about the disproportionate impact of Covid on certain ethnic groups. We heard some evidence last week from a FEHMO witness who emphasised the, as it were, almost immediate understanding amongst certainly healthcare workers of the disproportionate impact that black and ethnic minority healthcare workers were experiencing, and we saw correspondence from one of their organisations to Chris Whitty and other senior members of the sort of healthcare establishment, amongst other things, pointing to the lack of data, the urgent need for analysis and understanding of what exactly was going on.

You refer in your report at paragraph 90 to the PHE, the two PHE reports that then followed quite swiftly during 2020 addressing these matters: one, the disparities in the risk and outcomes of Covid-19, and then later the report entitled "Understanding the impact of Covid-19 on [black and minority ethnic] communities".

So that was the process, but is it right, though, that in terms of data both of those reports essentially concluded that there wasn't enough data and that, albeit 187
probably vary with different datasets in different parts of the country, but I think some things were probably learnt from the earlier days, as new data came online it may have been dealt with differently, and there were efforts from central government, particularly what is now the Department for Levelling Up, to sort of try and support others across the country.
Q. I've just got two more areas I want to address with you, Mr Freeguard, and the first of those two is the question of data on race inequality disparities during the pandemic.

Perhaps we can turn, for those purposes, to page 46 of the report, paragraph 89. You say here, quite bluntly, that:
"The system for capturing data around race, ethnicity and other characteristics was no more unified than any other data systems."

So perhaps another way of saying it shared a lot of the problems we've been discussing for the last hour or so?
A. That's right, whether it was not collected as part of certain datasets or, again, whether there were inconsistencies in how it was collected; and I think there is also a definitional issue here which is that often different ethnic minorities can be brought 186
that no doubt they addressed other steps that could be taken, in terms of the data what was really needed was more?
A. Yes, that's right, and it's again something that l've heard from members of modelling groups as well, that they would have liked to have been able to have that detail to understand how the disease was affecting different communities. The PHE reports that you mentioned again talk about possible steps such as standardising definitions across different government datasets, thinking about making it mandatory on death certificates to record ethnicity, and various other steps around the data as well.
Q. In terms of progression during the pandemic, we can see in this paragraph that it's been highlighted, just the last sentence or so, you do refer to several of the early Covid-19 studies allowing for analysis of particular characteristics, and then you refer to the ONS -- the CIS, as Professor Diamond called it -- the Covid Infection Survey having some fields for occupation, ethnicity and deprivation.

And then actually if we can look further on at paragraph 91, please, you're referring here to the technical report produced by Sir Chris Whitty and Patrick Vallance but they note -- I'm picking up on the 188
last few words of this page, and we'll go on to the next -- they note in the technical report that by the second wave, so later in 2020, the weekly Covid-19 surveillance report incorporated more disparities data.

And then dropping down a line or two, from May 2021, so over a year after the start of the pandemic, the PHE were publishing what was known as the CHIME data, so Covid health disparities monitoring for England, which included reporting on disparities, although you say that it, like several other datasets, didn't have access to underlying conditions.

So the picture seems to be, Mr Freeguard, but tell me if I'm right, that this problem of inadequate data even once the pandemic was well under way, even once the disparate effect was known and people were trying to do something about it, even as late as 2021 it seems there were still problems with these datasets?
A. Yes, that seems to be the case. And I was struck, reading the technical reports, there's an entire chapter on disparities, and it begins by saying that infectious disease outbreaks tend to exacerbate existing inequalities, and I think that does also again take us back to the questions about preparation and whether perhaps some of this could have been foreseen in terms of the demographic data might be needed. 189
us back to some of the evidence that Sir lan Diamond was
giving, first noting that ethnicity recording on NHS
systems is of poor quality, and then referring to reports from the Race Disparity Unit, their final report on addressing Covid-19 health inequalities. It says:
"... key lessons include[d] improving the quality of health ethnicity data so patterns and trends can be spotted more quickly, and continuing to monitor the impacts of Covid-19 by ethnic group."

And their recommendations -- if we just briefly go over the page -- again familiar points, points -- at least some of them -- raised by Sir lan Diamond. We see (b), for example:
"The ONS is to collaborate with others to consider how linking Census and health data could be improved ..."

So that's the innovative -- either innovative or experimental, depending on who you listen to -technique that he was describing and a way of providing more robust ethnicity data and combining different -the census data with healthcare data to that end; is that right?
A. That's right, yes.
Q. Then also we see, dropping down two points, the issue -again to which you've referred -- of collecting
Q. You fairly, though, identify in your report that there are particular difficulties, perhaps, sensitivities around this type of data. So, for example, at paragraph 95 you refer -- and again this is a reference back to that part of the technical report that you were describing -- the technical report itself stating that the data is sensitive and it was being asked of communities with relatively low trust in government organisations and understandable concerns about privacy and the use of their data.
A. Yes, and I think it's fair to say as well that the Public Health England publications and others recognise that and speak quite a lot about the importance of engaging the community.
Q. At paragraph 96 you expand on a point you referred to earlier, which is calls by the Equality Hub that a key lesson from the pandemic is that we shouldn't be treating ethnic minorities as a homogeneous group and that data needs to be more sophisticated.
A. Yes, that's right and, as you suggest, the Equality Hub, the Race Disparity Unit and others have started to do quite a bit of work on what that might actually look like in practice.
Q. Then, finally for these purposes, paragraph 98. You go back to the technical report, and this does also bring 190
ethnicity on death certificates. I'm not sure you were in the room, but that fact was something Sir lan Diamond did not support; he was much keener on trying to obtain the data from NHS records.
LADY HALLETT: You keep saying "Sir Paul", I think it's Sir lan.
MR O'CONNOR: I'm sorry.
LADY HALLETT: It's all right. The stenographer has been reporting "Sir lan".
MR O'CONNOR: She might correct it.
That's what I wanted to ask you on ethnicity data, and that just leads me to the last point, Mr Freeguard.

You have -- at various points in your report you describe the pandemic, despite the challenges that we have been discussing, as the high water or a high water mark for the use of data, the sharing of data. Just, perhaps it's obvious, but what do you mean by that?
A. So again that's a quote from the foreword -the ministerial foreword to the National Data Strategy. At that point the minister was Oliver Dowden, he is now the Deputy Prime Minister, and he says -- he describes it as a high water mark because so many people in government, who perhaps hadn't understood data or hadn't taken it seriously, were suddenly very aware of the benefits that using it properly might have in combatting 192
the pandemic, whether that was in monitoring the spread or mitigating the effects.
Q. And so, perhaps precisely because they were responding to these challenges in a rush -- and I think you describe it as mending the plumbing or something?
A. Fixing the plumbing, yes.
Q. Fixing the plumbing. But the imperative to make data work meant that it was used more broadly and understood better, perhaps, than it had been before?
A. That's right. Again, there was a very clear purpose, there was a real urgency to using data and improving some of the systems behind it to fight the pandemic.
Q. The reason I ask you this is because of a second observation that you make at points in your report, which is that the risk now is, if you like, that the tide is going in, and that some of the advantages and the forward steps that were taken during the pandemic are actually being lost?
A. That's right. Several public servants that l've spoken to have expressed their concern that without that urgency, without that problem that needed to be solved instantly, political attention might wander, some of the barriers that were temporarily overcome may return to business as usual, and I'm struck as well by -- I note one piece of evidence from Professor Keeling where he 193

He says -- perhaps I should have said, we don't need to go back to it, but this questionnaire response was in fact dated September 2022, so a little over a year ago. He says:
"I had hoped that many of these difficulties would have been resolved for the Monkeypox outbreak [that was going on at the time he wrote the questionnaire response], but if anything, the data access issues are worse. Admittedly SAGE and SPI-M are not directly involved in Monkeypox modelling, but the academic community has still been asked for its help. With Monkeypox, the UK data is only available to UKHSA affiliated staff with a UKHSA laptop, and is again siloed so that the entirety of the datasets are not available to all users."

Does that perhaps provide a concrete example of the concern that you were expressing that that sort of spirit of the pandemic making data work not only hasn't been maintained but is perhaps regressing?
A. It does, yes. I think it comes back to a point we discussed earlier as well, I think it may be due to caution, clearly, UKHSA wants to ensure that the data is not shared inappropriately, but we can see in this example it means that academics that could bring a huge amount of insight to it appear not to be able to access 195
looks at monkeypox experience --
Q. Yes, I was going to ask you about that.

Let's go, if we can -- just the last document -- to INQ000056476. As you say, Professor Keeling is an epidemiologist at the University of Warwick who is in fact coming to give evidence later this week. What we're looking at is a response that he provided at an early stage of our own processes, a questionnaire response, but he does make an interesting observation which we will ask him about when he comes, but let's ask you about it now.

So if we can go to page 39, please, and perhaps zoom in on the whole of that paragraph numbered 2 , so from the -- yes. He makes the point -- which no doubt we will hear from him and his fellow modellers in due course -- that models are only as good as the data that feeds into them and modern models are often data-hungry.

There is then a section of this paragraph which I can summarise as him explaining that the data flow that they received from the NHS during the pandemic was not exactly as they would have wished, they were given some data but not all.

Then importantly for our purposes, there is the passage starting:
"I had hoped that many of these difficulties ..." 194

## it.

Q. Without asking you to solve the entire problems of data in government, what would be your immediate suggestions as to how we can stop these advantages gained over the pandemic being lost?
A. I think the meta answer -- and it goes back to the very first set of questions -- is learning from not just the pandemic but looking at all of those different recommendations that have been made over the last few decades, understanding why those that have stuck have stuck, and why those that keep being made over and over again have not actually been successfully operationalised.

I think -- we were talking about the chief data officer earlier; I think having those sort of leadership positions which are able to keep a focus on these sorts of issues and have the power and the levers to make a change, having those positions would be hugely helpful.

We've seen already development in the civil service of sort of greater skills in all civil servants -- not just those working in the data profession, so senior leaders as well -- giving them a sense of data literacy. You don't need to know exactly how to write these algorithms and understand how to build these pipelines, 196
but you need to have sense of what is being done to do it, and what can work and what can't.

And I think just ensuring that, you know, these questions about data are built into the design of policies and operational systems from the start to ensure that, you know, what we might need at some point will be available whenever it's built.

MR O'CONNOR: Thank you very much, Mr Freeguard, that's been very helpful.

My Lady, those are all my questions, and I don't believe there are any Rule 10 questions.

## Questions from THE CHAIR

LADY HALLETT: And I listen to the voices in the wilderness, Mr Freeguard. I hope you don't feel as if you're like that, because certainly what you've said has been extremely interesting, and I'm very sorry to hear that you think that we're not making the same kind of progress or we're going back; the opposite, in fact, we're deteriorating again. I think that would be extraordinary.
A. I think it's worth saying there are definitely lots of initiatives going on at the moment which I think give me more cause for hope, and there are -- there is now a generation who takes this really seriously because of what's happened, but hopefully the work of the Inquiry

## INDEX

## PAGE

LORD GUS O'DONNELL (sworn) $\qquad$ 1

Questions from THE CHAIR 63

PROFESSOR SIR IAN DIAMOND (sworn) ............... 69

Questions from LEAD COUNSEL TO THE INQUIRY .. 69

Questions from MR WEATHERBY KC126

Questions from MS SHEPHERD .................. 134

MR GAVIN FREEGUARD (affirmed) ................... 136

Questions from COUNSEL TO THE INQUIRY ...... 136

Questions from THE CHAIR 197
will stop it sliding any further.
LADY HALLETT: We'll do our very best, but just one last final question, therefore, from me: if a pandemic hit tomorrow -- and I have been told in another module that it's not a question of if, but when -- would we revert to the CRIP situation or would we have in place the ability to have the dashboard? In other words, do we have those, that capability still that could be put in place immediately? Because the CRIP thing seemed to me to be a complete waste of everyone's time.
A. I would very much hope the latter. I think, you know, the dashboard team and others who were supporting them did an excellent job, and I think in a sense that has become one of the success stories of the government response. If we can't learn from that, then I think we're in real trouble.
LADY HALLETT: Thank you very much indeed.
THE WITNESS: Thank you.
(The witness withdrew)
LADY HALLETT: Thank you. 10 o'clock tomorrow, please. ( 4.17 pm )
(The hearing adjourned until 10 am
on Wednesday, 11 October 2023)

LADY HALLETT:
[47] $1 / 345 / 5$ 50/10 51/3 51/8 56/8 64/1 65/7 65/10 66/15 67/12 67/14 69/1 69/4 81/25 82/12 83/6 104/3 104/9 123/4 123/9 125/24 132/15 132/21 133/8 133/11 134/11 134/14 135/19 136/1 136/6 136/8 145/12 150/5 154/21 155/1 168/24 169/4 169/6 169/13 174/15 192/5 192/8 197/13 198/2 198/17 198/20
MR DAYLE: [1]
134/13
MR KEITH: [18] 1/4 1/7 45/4 45/9 51/9 57/9 63/24 67/15 67/18 69/2 69/8 69/14 83/7 104/1 104/10 123/15 125/21 132/22 MR O'CONNOR: [13] 136/9 136/13 146/3 150/12 155/2 169/2 169/5 169/8 169/14 175/4 192/7 192/10 197/8

## MR WEATHERBY:

[2] 126/3 132/13
MS SHEPHERD: [3] 132/17 134/17 135/17
THE WITNESS: [4] 69/6 135/24 136/4 198/18
'
'90s [1] 141/23
'process [1] 162/25
'were [1] 163/2
0
0.3 [1] 111/24

1
1.45 [1] 104/5
1.45 pm [1] 104/8

10 [18] 7/14 11/24
12/18 14/10 16/9 17/6
26/18 30/2 91/25
115/7 120/21 121/1
133/5 169/16 169/19
171/18 177/5 197/11
10 am [1] 198/22
10 million [2] 57/25
58/1
10 o'clock [1] 198/20 10 October 2023 [1] 1/1
10,000 [5] 112/2

166/18 166/21 166/24 167/9
10.00 am [1] $1 / 2$

100 years [1] 115/7 100,000 [4] 103/6 111/24 112/1 127/7 10DS [2] 176/6 177/8 11 [1] 174/8
11 May [1] 127/2
11 November 2020 [1] 14/8
11 October 2023 [1] 198/23
11 September [1] 70/10
11.02 am [1] 45/6 11.15 [1] 45/5
11.15 am [1] 45/8

111 [1] 168/5
12 [3] 110/21 174/8 174/13
12 different [1]
146/10
12 March 2020 [1] 155/15
12 weeks [2] 125/13 125/16
12-hour [1] 80/4 12.46 pm [1] 104/6

126 fixed [1] 63/14
13 [4] 111/24 152/21
174/9 174/14
13 March 2020 [1] 78/13
130.7 [1] 112/17 138,909 excess [1] 105/7
13th [1] 165/7
14 [1] 152/23
143.2 [1] 112/14
144.6 [1] 112/17

145 [1] 112/15
15 [1] 112/11
150,000 [1] 91/14
151.4 [1] 112/25

15th meeting [1] 78/12
16 [1] $1 / 20$
17 [1] 158/8
18 March [1] 165/3
186,668 [1] 104/23
19 [31] 3/13 46/22
46/23 76/21 78/14
80/21 82/22 88/20
89/22 89/24 92/23
95/7 95/8 104/14
104/23 106/2 106/13
115/7 128/12 134/18
134/23 138/7 165/24
168/13 176/7 187/20 187/22 188/17 189/3 191/5 191/9
192.1 [1] 112/24

1993 [1] 79/20


2005 [1] 2/1
2011 [4] 2/1 2/9
116/13 118/19
2011 census [1] 86/9
2012 [2] 85/22 86/9
2014 [1] 86/10
2015 [1] 146/11
2016 [1] 162/23
2017 [3] 146/17
152/21 153/6
2018 [1] $2 / 4$
2019 [1] 85/23
2020 [33] 2/5 2/5
14/8 17/24 23/23 26/9 32/18 46/21 58/24 73/12 74/4 78/13 81/19 87/3 91/11 92/1 92/12 103/3 104/24 105/2 114/16 124/1
124/3 124/9 126/14
127/2 152/1 152/4 155/15 158/18 159/1 187/19 189/3
2021 [12] 85/18
109/6 109/7 109/7 109/13 109/24 109/24 114/17 124/1 124/3 189/5 189/16
2022 [6] 48/6 87/3 104/24 109/7 151/1 195/3
2023 [5] 1/1 1/16 3/7
70/1 198/23
20s [1] 107/5
22.2 [1] 119/19

24 March [1] 173/24
25 March [2] 169/24 174/3
26 June [1] $1 / 22$
26 June 2023 [1] 1/16
27 [1] 169/7
27 May [1] 128/10
28 [4] 158/8 158/25 165/14 169/4

3
3.00 pm [1] 154/23
3.15 [1] 154/22
3.15 pm [1] 154/25

30 [1] 106/3
30 different [1]

95 [1] 190/4
96 [1] 190/15
98 [1] 190/24
9am [1] 170/14
A
abide [1] 64/22
abiding [1] 64/23
ability [13] 5/1 10/1
14/24 25/16 25/17
26/23 32/24 55/1 61/19 62/14 63/12 154/2 198/7
able [69] 1/24 7/11 13/13 27/10 28/14
31/23 31/25 33/8
38/25 38/25 41/14 45/14 49/3 52/23 53/2
53/15 57/18 57/18
58/12 59/8 60/22
62/14 74/20 75/10
75/25 77/15 78/2 78/6
80/5 81/3 81/20 82/21
89/16 90/24 92/12
92/22 94/15 97/22
98/24 100/10 100/19
100/20 101/15 116/13 116/15 116/24 122/11
122/21 143/12 145/16 149/3 151/8 151/20
153/11 157/20 158/2
160/19 161/1 163/11
164/8 171/22 174/25
177/21 180/3 183/13 184/5 188/6 195/25 196/16
about [174] 5/12 5/16
5/17 5/23 6/12 7/21
8/1 8/4 9/10 10/19
11/14 11/16 13/22
15/7 15/11 15/22
17/12 18/10 18/11 18/14 18/18 18/25 20/4 25/20 26/12 27/3 27/12 27/18 28/24 33/5 34/14 35/9 35/10 $36 / 1737 / 537 / 838 / 4$ 39/10 39/11 39/13 39/13 39/14 39/17 40/8 41/8 42/5 43/18 46/4 47/14 47/24 50/14 50/17 50/20 51/11 52/9 53/18 55/14 55/17 56/10 56/14 58/5 58/14 58/15 58/16 60/8 60/13 60/14 61/25 61/25 62/19 62/20 63/2 63/23 64/9 65/19 66/5 66/8 67/6 67/15 68/3 72/16 75/7 75/15 82/1 85/7 89/4 95/6 100/17 100/18 101/8 101/25 103/4 103/12

| A | account [5] 13/3 | 16 | 43/16 89/13 137/10 | $108$ |
| :---: | :---: | :---: | :---: | :---: |
| about... [81] 105/24 |  | [8] 49/1 | isers [8] 14/13 | 12/24 115/6 |
| 106/2 119/6 119/7 | 176/19 | 81/11 109/2 113/4 | 39/21 42/4 43/23 | 119 |
| 119/12 120/7 122/10 | ng | 117/24 118/17 134/8 | 61/13 65/14 65/23 | [3] 10 /7 |
| 124/7 127/12 133/25 |  | added [3] 92/23 93/4 |  | /12 115/7 |
| 134/21 134/23 135/6 | accrue [1] 145/9 | addition [4] 71/16 | advisory [5] 20/16 <br> 41/14 41/24 42/9 46/9 | agency [2] 11/ |
| 135/7 140/20 141/19 | $\begin{aligned} & \text { accumulating [1] } \\ & \text { 100/4 } \end{aligned}$ | addition [4] 71/16 $111 / 10114 / 22117 / 11$ | 41/14 41/24 42/9 46/9 <br> advocacy [1] 137/4 | 178/25 <br> agile [1] 74/15 |
| 142/10 142/11 143/21 | 100/4 accuracy [3] 84/5 | additional [2] 104/10 | advocacy [1] 137/4 advocate [1] 99/3 | agile [1] 74/15 agility [1] 89/6 |
| $144 / 11145 / 1145 / 2$ $146 / 21146 / 22147 / 5$ | accuracy [3] 84/5 84/8 86/3 | $\begin{array}{\|c} \text { additio } \\ 112 / 6 \end{array}$ | affairs [1] 59/11 | ago [4] 2/23 15 |
| 147/23 148/11 148/23 | accurate [8] 84/7 | additions [1] 128/11 | affected [4] 4/9 4/1 | 170/21 195/3 |
| 150/12 150/14 150/21 | 84/12 86/5 86/22 95/1 | address [7] 33/7 | 117/2 137/21 | agree [8] 12/22 39/5 |
| 150/25 151/14 151/23 | 95/11 102/18 | 38/23 69/20 118/1 | affecting [1] 188 | 46/25 102/4 |
| 152/20 153/13 154/16 | achieve [2] 39/9 | /3 181/20 186/8 | affects [1] 29/1 | 129/22 132/7 |
| 154/18 155/4 159/25 | achieving [1] 39/12 | addressed [3] 138/7 | affiliated [1] 195/ | agreed [2] 103/23 |
| 160/5 160/16 163/3 | acknowledge [1] | 138/11 188 | affirmed [2] 136/1 |  |
| 163/16 163/21 163/24 |  | addressees [1] |  | Ah [1] |
| 164/2 164/4 164/7 | acknowledged [1] | addressing [5] 138/8 | afraid [2] 49/21 | ahead [2] 64/10 |
| 165/7 169/2 169/16 |  | 18 163/5 187/19 | 128/13 |  |
| 169/20 169/23 170/1 | acquired |  | African [1] | aim [1] |
| 170/11 172/23 175/4 | across [27] 3/25 4/6 | adds [2] 130/2 | after [6] 81/13 106/18 | alas [2] 29/13 |
| 175/22 176/1 176/5 | 9/18 37/6 57/22 63/12 | 130/13 | 108/9 169/25 170/22 | albeit [3] 57/9 173/13 |
| 176/9 176/15 177/13 | 71/17 71/24 76/1 76/3 | adduce | 189/6 | 187/25 |
| 178/23 179/16 180/22 | 76/4 76/5 110/25 | adequacy [1] 138/9 | afterthought [2] | algorithms [1] |
| 183/4 184/21 187/5 | 112/7 123/19 123/20 | adequate [2] 4/24 | 182/19 182/23 | 196/25 |
| 188/9 188/11 189/16 | 124/8 124/11 126/6 |  | afterwards [2] | Alison [1] 102/5 |
| 189/23 190/9 190/13 | 144/1 151/16 153/2 | adjourned [1] 198/ |  | Alison Pritchard |
| 194/2 194/10 194/11 | 157/19 173/22 179/1 | adjournment [1] | again [48] 37/10 | 102/5 |
| 196/14 197/4 | 188/10 |  | 24 | all [125] 2/19 4/9 5/2 |
| above [6] 41/20 43/9 | act [12] 143/16 | adjudicate [1] 71/6 | 102/7 106/15 110/15 | 6/1 9/14 9/17 10/19 |
| 105/5 105/8 114/2 | 152/14 152/21 152/24 | adjust [1] 13/5 | 112/9 121/10 127/6 | 11/10 11/12 11/13 |
| 136/19 | 153/4 153/6 153/20 | adjusted [1] 61/6 | 141/17 142/6 146/18 | 12/18 12/24 14/1 |
|  | 154/1 156/22 157/8 | administration [6] | 149/1 149/21 152/4 | 14/15 14/22 16/22 |
|  | 157/15 157/24 | 19/11 24/3 24/18 | 156/19 158/10 159/2 | 16/24 17/9 20/9 22/9 |
| 107/19 111/15 114/16 | acting [1] 18/12 | 24/25 108/4 135/11 | 159/7 159/9 159/14 | 22/22 25/22 28/4 30/6 |
| 115/11 125/7 | action [6] 31/6 32/3 | administrations [13] | 163/23 164/5 167/24 | 31/7 31/11 35/2 35/6 |
|  | 150/6 150/7 150/7 | 49/9 49/18 50/6 89/15 | 176/25 178/24 179/14 | 35/13 38/16 39/2 |
| 8/4 9/13 9/19 10/16 | 150/13 | 91/6 98/1 98/4 98/7 | 181/9 181/14 183/3 | 41/6 41/21 42/3 44/3 |
| 12/18 23/2 25/15 37/1 | activities [2] 148/19 | 99/16 99/18 99/19 | 184/2 184/8 184/18 | 46/15 48/18 48/23 |
| 42/10 44/25 48/15 | 148/20 | 134/22 135/1 | 185/6 185/25 186/22 | 49/15 50/18 51/9 |
| 49/5 50/14 50/18 51/1 | activity [1] 169 | administrative [ | 188/4 188/9 189/22 | 52/16 57/13 58/14 |
| 51/24 52/14 53/4 62/8 | acts [1] 20/16 | 20/19 137/22 | 190/4 191/11 191/25 | 60/7 61/9 61/25 61/25 |
| 63/19 81/9 99/6 99/11 | actual [2] 93/16 | admission [1] 178/15 | 192/18 193/10 195/13 | 63/22 68/2 68/18 |
| 101/24 115/18 131/9 | 131/1 | Admittedly [1] 195/9 | 196/12 197/19 | 68/21 71/11 72/23 |
| 132/10 133/25 | actually [50] 3/7 5/25 | adult [1] 153/18 | age [37] 68/19 80/15 | 81/10 81/15 81/18 |
|  | 6/7 8/7 11/1 12/8 | adults [1] 108/12 | 82/14 82/25 105/17 | 84/13 87/6 94/20 97/1 |
| demic [2] 3/14 | 13/14 14/21 17/13 | advance [2] 22/9 | 105/19 106/16 106/17 | 97/24 97/24 99/2 |
| $195 / 10$ | 24/20 27/8 27/25 | 175/8 | 107/3 107/7 107/9 | 100/12 102/18 103/4 |
|  | 30/12 32/10 47/13 | advantage [4] 35/12 | 107/10 107/13 107/22 | 105/8 105/16 107/5 |
| $\begin{gathered} \text { acaaem } \\ 195 / 24 \end{gathered}$ | 47/19 48/2 48/22 | 35/13 68/22 117/8 | 107/22 107/24 107/25 | 107/6 108/18 114/9 |
| accept [3] 16/21 39/4 | 52/13 54/17 54/20 | advantages [2] | 108/1 110/23 111/9 | 114/9 115/4 115/13 |
|  | 56/6 60/12 62/1 62/5 | 193/16 196/4 | 111/10 111/14 111/2 | 121/5 121/5 122/2 |
|  | 67/4 72/4 75/2 81/3 | advert [1] 136/6 | 112/1 112/9 112/13 | 122/20 123/11 123/13 |
| access [13] 25/8 | 86/18 102/10 109/4 | advice [13] 9/5 20/22 | 112/24 113/7 115/6 | 125/22 132/13 137/23 |
| 78/17 80/18 100/23 | 112/15 114/13 115/19 | 26/6 26/25 27/2 36/5 | 115/10 115/12 117/9 | 138/10 139/12 139/18 |
| 101/20 102/3 102/9 | 163/16 163/18 164/7 | 36/13 36/16 36/21 | 118/8 119/1 119/21 | 140/11 141/2 141/8 |
| 138/4 138/5 143/13 | 166/4 168/4 168/20 | 41/21 43/15 44/10 | 122/25 123/3 | 142/11 146/2 147/1 |
| 189/10 195/8 195/25 | 172/18 174/1 183/25 | 44/17 | age distribution [1] | 147/2 148/2 150/15 |
| accessible [4] 78/21 | 184/22 187/2 188/22 | advise [2] 112/19 | 68/19 | 150/16 150/18 151/4 |
| 78/24 139/9 174/7 | 190/22 193/18 196/12 | 177/21 | age-specific [2] | 52/12 160/10 161/11 |
| accessing [2] 140/15 | actuaries [1] 71/22 | advised [2] 35/20 | 107/22 111/10 | 161/20 162/3 162/6 |
| $148 / 25$ | ad [2] 31/21 160/7 | adviser [9] 8/9 14/4 | $\begin{gathered} \text { age-st } \\ 113 / 7 \end{gathered}$ | 171/25 173/7 173/19 |
| diently [1] 144/20 | ad hoc [2] 31/21 | 23/7 26/11 36/7 37/22 | age-standardised [7] | 175/7 176/6 177/25 |

A
all...[10] 179/16
180/14 182/11 182/17 192/8 194/22 195/15 196/8 196/21 197/10
all right [9] 46/15
61/9 72/23 81/10 81/15 97/1 115/4 148/2 192/8
all-cause [3] 121/5
123/11 123/13
All-Party [1] 2/19 allow [7] 23/9 30/12 57/17 102/9 143/20 159/18 162/5
allowed [3] 35/5 63/17 175/22
allowing [2] 56/10 188/17
allows [1] 13/11
almost [6] 100/13
101/3 122/2 141/14 173/25 187/8
along [4] 66/21 68/24 96/10 168/9
alongside [5] 93/7 128/19 140/17 176/24 177/4
Alpha [4] 109/5 109/6 109/9 116/5
already [17] 36/12
76/22 93/21 95/24 97/5 98/22 100/10 125/4 134/20 153/13 155/7 161/2 162/9 165/4 172/16 187/4 196/20
also [85] 1/11 2/17 3/11 3/15 5/7 6/6 6/9 7/8 8/10 10/3 16/18 22/19 23/17 35/17 45/24 53/1 59/9 64/17 65/23 70/5 70/12 73/8 73/11 73/17 75/14 76/3 76/11 76/23 78/6 78/14 82/24 83/1 89/11 92/20 96/3 99/7 99/15 107/12 108/13 108/13 109/2 109/21 115/25 116/6 117/8 118/11 121/6 124/2 125/11 129/7 136/1 137/4 137/10 137/13 140/6 140/22 142/2 142/25 145/23 147/7 152/14 157/21 159/4 163/24 165/14 166/3 168/9 168/23 178/16 180/6 180/14 180/18 180/19 180/24 181/6 181/13 181/15 183/5 183/10 183/18 184/11 186/24 189/22 190/25

191/24
although [13] 10/22 17/24 36/9 71/19 94/23 100/22 109/11 148/6 149/9 157/8 163/14 182/8 189/9
always [29] 6/19 10/6 11/6 13/12 16/8 16/11 16/12 17/12 18/8 21/13 21/14 28/23 30/15 34/21 37/24 43/20 47/12 47/18 49/13 57/23 65/12 84/14 85/14 87/14 96/1 96/6 97/19
123/11 136/4 am [16] 1/2 45/6 45/8 67/17 69/17 69/17 71/8 71/16 71/20 128/13 130/11 132/6 133/18 134/2 170/24 198/22
amalgamate [1] 162/2
amalgamation [1] 47/5
amazed [1] 170/22
ameliorate [1] 25/5 among [3] 23/18 106/14 160/16 amongst [12] $12 / 4$ 16/8 16/21 24/12 57/17 108/2 108/12 108/13 108/14 120/10 187/8 187/13
amorphous [1] 28/19 amount [10] 28/10 50/7 96/10 96/18 102/13 109/14 109/15 139/11 187/4 195/25
amounting [1] 73/20 amounts [1] 87/13 analogy [2] 59/6 102/6
analysed [1] 129/3 analyses [4] 73/22 74/11 74/14 89/17 Analysing [2] 3/17 58/23
analysis [18] 27/14 52/20 54/9 60/6 71/20 75/19 75/21 75/23 76/24 87/18 116/9 116/11 129/9 176/13 176/15 176/25 187/15 188/17
analysts [1] 102/2 analytical [2] 73/17 177/18
angle [1] 177/16 annex [1] 184/13 announced [2] 152/8 169/25
announcement [1]

103/5
annoyed [1] 26/10 annual [1] 3/5 another [28] 14/11 47/10 54/25 58/2 60/20 66/25 91/21 96/22 107/5 110/2 117/1 120/16 129/18 144/10 146/15 149/17 152/20 153/11 156/18 159/9 160/18 161/25 162/6 169/18 179/21 185/14 186/18 198/4 answer [21] 22/3 22/7 23/13 26/3 27/10 29/8 33/8 39/14 39/15 $146 / 18$ 150/17 151/10 41/11 42/13 75/8 90/4 152/8 95/5 133/15 135/2 140/10 164/18 169/9 169/10 196/6
answer's [1] 42/7
answered [2] 75/24 168/6
answering [1] 75/11
answers [6] 16/14
17/1 48/3 78/3 89/7 134/12
antibodies [2] 75/14 91/1
any [39] $3 / 822 / 9$
23/19 24/4 24/21
25/16 26/17 28/18
29/13 31/25 41/16 53/12 57/11 57/15 59/1 59/4 62/12 68/23 89/17 97/3 99/4 105/4 116/24 122/22 124/18 134/25 139/16 150/5 152/18 155/25 162/1 172/20 175/23 177/11 178/12 183/2 186/17 197/11 198/1
anyone [1] 17/16
anything [8] 14/17
15/22 17/5 50/13
118/17 145/10 151/20
195/8
anyway [2] 76/7 114/24
anywhere [1] 15/3
apart [1] 22/7
APIs [2] 160/18 161/22
apologise [2] 120/2 120/23
apparent [7] 33/12
33/20 33/25 34/9 46/5 55/8 165/9
appear [4] 19/18
134/18 162/22 195/25
appears [2] 28/11
102/14
apples [2] 107/2
107/3
application [5] 54/23 100/6 100/7 133/5 162/4
applied [2] 106/22 158/19
applies [1] 82/15
apply [10] $5 / 5$ 11/22
23/10 60/16 107/12
107/12 110/23 111/14 115/9 154/5
Applying [1] 119/1
appointed [1] 151/6 appointees [2] 14/13 15/21
appointment [4]
approach [11] 6/24
52/16 55/11 58/11
106/22 107/12 108/1
110/23 111/14 115/10 119/2
approached [1]
132/22
appropriate [6] 4/18
4/24 92/22 92/24 96/7 100/1
April [5] 58/24 90/2
94/18 127/8 159/1
April 2020 [2] 58/24 159/1
are [233]
area [6] 73/2 91/21
118/1 143/13 168/11 179/13
areas [29] 38/16
38/18 40/18 50/22
64/21 67/19 70/7 73/5
74/17 76/13 85/14
90/23 108/14 117/24
118/4 118/5 118/9
122/8 122/12 122/14
124/5 142/15 152/24
178/3 182/7 182/7
183/17 184/3 186/8
aren't [4] 49/25 57/11
62/21 145/5
arguably [1] 82/14 argue [6] 37/24 58/15 58/16 101/13 109/21 115/20
arguing [1] 172/1
arise [1] 41/23
arising [2] 26/3
150/13
arithmetic [1] 131/7
arithmetic's [1]
131/9
arm [2] 71/14 72/17
arm's [1] 71/20
arose [3] 34/2 155/4 155/5
around [38] 21/4
22/1 32/11 43/6 50/23 associated [3] 98/12

A
associated... [2]
108/2 151/18
association [1] 106/16
assume [4] 24/22
60/18 63/8 139/17
assumed [1] 163/20
assumes [1] 131/2
assuming [1] 169/6
assumption [1]
131/6
assurance [2] 88/1 167/18
at [223]
at 1.45 [1] 104/5
at-risk [1] 138/8
attempt [3] 33/7
164/25 176/10
attempts [1] 152/3
attend [1] 78/11
attendance [1]
181/10
attended [2] 78/12
89/10
attention [4] 10/9
91/21 166/15 193/22
attitudes [7] 75/15
77/5 77/8 77/8 77/16 89/4 95/23
authoritative [1] 115/1
authorities [8] 47/23
50/22 181/22 182/18 183/20 183/21 183/22 185/5
authority [8] 70/20
70/23 71/9 71/10 71/15 72/4 72/10 102/25
automated [4]
172/15 173/2 174/17 175/3
automatic [4] 80/24 81/3 161/16 166/6
automatically [4]
80/1 161/18 161/24 162/3
automating [1]
181/13
automation [2]
172/23 173/5
autumn [3] 109/13 109/24 124/9
availability [4]
140/17 148/24 171/18 178/15
available [22] 54/14
56/5 57/24 93/18 97/9 97/12 135/8 138/1 145/6 155/11 155/23 156/15 156/21 164/4 168/4 170/12 174/12

174/18 178/1 195/12 195/15 197/7
avenues [1] 65/17 average [3] 105/5 121/16 123/18
avoid [2] 57/13 172/15
aware [8] 23/4 46/16 48/6 126/16 127/20 137/23 152/6 192/24 away [7] 31/19 35/17 47/10 56/21 64/16 113/21 171/12
awful [3] 26/15 82/19 146/14
axiomatic [2] 29/22 102/14

## B

babies' [1] 58/2
back [46] 7/7 14/21
27/3 27/13 35/17 36/11 37/18 39/20 54/10 61/24 80/8 85/7 85/22 87/20 88/4 92/8 103/23 108/5 112/5 115/5 117/17 118/21 119/17 132/23 144/7 146/22 148/18 150/25 152/1 156/19 156/22 159/15 160/1 166/18 168/24 170/1 170/6 183/14 189/23 190/5 190/25 191/1 195/2 195/20 196/6 197/18 background [1] 21/22
backgrounds [1] 115/20
backward [2] 85/19 85/22
bad [5] 10/5 10/15 55/15 61/2 65/23 badge [1] 158/1 balance [1] 41/6 Balls [2] 65/13 66/5 Bangladeshi [2] 115/16 116/3 Bank [1] 64/14 bar [4] 87/20 111/14 111/16 111/18 barrier [2] 120/7 146/3
barriers [16] 101/11
142/8 142/11 143/8 143/9 144/5 144/6 144/8 144/15 144/25 146/25 147/11 155/8 156/19 159/16 193/23 based [13] 3/5 43/3 53/13 54/8 55/20 85/24 93/25 94/8 94/15 101/7 148/17 164/2 177/22
basic [3] 21/25 152/16 170/23 basically [5] 29/14 32/4 55/16 66/17 91/13
basis [7] 38/24 80/6 80/18 86/25 135/5 139/7 139/18
batten [1] 57/13
battle [1] 30/15 be [276]
bear [3] 41/10 165/18 166/21
bearing [1] 168/13
bearings [1] $1 / 25$
became [14] 2/2 24/20 33/25 46/5 73/6 74/3 74/10 89/2 165/9 172/14 175/12 175/13 175/16 175/20
because [75] $8 / 2$
9/23 11/9 13/6 20/8 21/10 21/13 21/17 22/1 26/1 27/16 28/8 31/21 33/1 33/8 34/1 35/21 38/23 39/17 39/22 43/18 44/1 44/14 44/25 46/25 47/15 49/10 49/19 49/22 51/2 51/24 54/4 54/16 54/18 55/13 59/19 62/3 62/16 62/21 70/17 82/9 86/16 86/23 89/7 91/7 92/25 94/10 101/5 101/6 101/12 102/8 103/10 103/16 107/4 107/13 110/4 110/6 111/23 114/5 118/18 120/19 123/6 130/13 137/23 143/25 164/17 168/16 179/3 183/21 192/22 193/3 193/13 197/15 197/24 198/9 Beckett [1] 73/13 become [12] 12/21 26/10 33/12 33/20 50/12 86/25 88/23 98/23 99/17 106/8 118/20 198/14 becomes [8] 24/2 50/13 56/4 57/24 125/16 143/3 143/6 172/21
bedded [1] 152/25 bedding [1] 145/24 beds [6] 168/12 168/13 168/21 170/11 174/11 178/15
been [99] $1 / 157 / 1$ 7/3 15/7 18/1 19/25 23/17 24/17 24/25 25/14 25/19 28/23 32/23 33/14 34/19
$34 / 2134 / 2234 / 24$ 36/8 38/18 41/3 45/11 52/18 55/6 63/5 63/11 69/21 74/2 82/21
82/22 83/1 83/3 83/4 90/23 94/21 103/13 103/17 104/3 105/14 109/20 116/23 122/21 131/19 134/20 138/25 141/17 141/18 143/2 143/3 143/15 146/8
146/17 146/18 146/21 148/7 148/8 148/9 149/17 150/8 151/15 151/24 152/2 152/3 152/6 152/8 156/9 159/24 160/12 162/9 162/22 163/19 164/2 164/3 165/15 168/10 168/15 168/18 168/22 169/25 175/8 178/4 183/2 185/8 186/4 186/19 188/6 188/15 189/24 192/8 192/15 193/9 195/6 195/11 195/19 196/9 196/12 197/8 197/15 198/4
before [25] 27/15 27/24 50/10 86/24 93/16 97/14 100/21 106/8 109/25 126/9 132/17 133/25 139/12 151/1 151/10 151/15 155/9 165/8 165/11 165/17 173/25 175/11 183/10 185/1 193/9
began [1] 91/4
Begg [2] 3/15 4/2
begin [2] 172/1
174/25
beginning [3] 99/11
99/14 162/18
begins [2] 140/18
189/20
behalf [3] 126/4
134/18 177/19
behaving [2] 18/12 64/18
behaviour [10] 6/8
10/17 20/13 36/24
53/11 55/7 61/18
61/22 62/3 62/13
behavioural [8]
37/10 38/8 62/17 63/2
63/13 78/6 78/8 78/9
behaviours [2] 62/9 62/11
behind [5] 35/19
54/22 140/25 172/20 193/12
being [80] 2/10 2/14 2/22 16/16 17/23 25/24 27/5 40/10 40/17 42/6 43/3 43/15

48/18 50/19 52/16 55/2 55/3 57/18 59/8 60/21 80/21 85/24 90/24 96/2 97/8 100/9 103/11 105/9 114/1 114/19 116/19 128/24 129/1 129/17 129/18
130/12 133/19 139/12 140/5 143/12 143/19 144/14 145/25 146/11 147/18 148/10 148/17 148/19 153/22 157/3 158/2 160/8 160/19 161/1 161/17 165/22 167/10 167/17 168/16 170/24 171/6 171/21 171/22 172/8 172/24 173/18 174/1 174/4 174/12 175/22 179/5 180/23 184/5 184/24 185/11 190/7 193/18 196/5 196/11 197/1 Belfast [1] 123/17 belief [2] 1/19 136/23 believe [11] 23/21
37/11 37/23 62/9 63/14 82/20 94/12 102/20 129/7 134/13 197/11
Bell [1] 103/24
below [3] 50/16 114/16 131/14
Ben [2] 176/22 177/5
Ben Warner [2] 176/22 177/5
Ben's [1] 177/3 benefit [7] 54/9 58/9 59/4 59/9 60/5 68/6 134/24
benefits [10] 3/17 35/25 36/1 55/19 58/23 59/15 59/18 145/8 183/8 192/25 bereaved [3] 126/5 126/6 134/19
Bergamo [1] 122/1
beside [1] 162/17
besieged [1] 167/19
best [29] 1/18 4/19
7/12 8/16 13/10 13/16 15/11 16/22 19/16 20/21 28/5 31/3 35/6 37/5 37/8 57/5 57/6 62/4 64/11 67/4 67/8 67/10 67/10 136/23 162/22 163/1 176/14 183/17 198/2
Beta [1] 109/11
better [26] 18/14
19/23 22/10 22/19
22/22 22/24 25/21
37/3 53/14 56/6 58/11 68/2 92/25 93/1
101/16 120/4 122/15
better... [9] 123/5 134/5 145/13 148/14 148/17 155/25 163/15 185/23 193/9
between [41] $1 / 25$
2/4 11/19 11/21 12/14 12/16 12/17 13/24 16/1 20/15 28/15 30/15 75/17 86/9 90/16 104/24 105/12 106/16 106/17 112/19 112/23 113/9 116/1 116/4 116/7 116/25 118/3 118/8 121/3 121/6 123/13 124/3 125/15 126/10 131/20 142/15 148/9 156/8 168/11 174/2 181/21
beyond [3] 17/2 44/4 153/6
big [8] 11/14 11/17 32/10 35/1 48/17 51/4 113/18 180/12
bigger [2] 44/20 121/15
biggest [1] 5/16
billions [2] 48/20 48/21
Biosecurity [3] 98/16 177/12 177/17
Birmingham [1]
124/4
bit [14] 18/7 25/2
28/10 45/24 49/21
64/20 73/10 73/11
100/17 156/11 157/22
161/3 171/4 190/22
black [4] 115/19 115/20 187/10 187/22
Blair [4] 13/1 17/12
23/25 24/1
blame [2] 44/14 44/14
blanket [3] 158/2 158/5 159/10
Blavatnik [2] $4 / 3$ 22/14
blessed [1] 14/21
blocks [1] 70/17
blood [1] 90/20
blue [2] 113/14
121/13
bluntly [2] 16/6 186/14
board [3] 2/17 2/23 72/7
boards [1] 65/18
bodies [10] 30/18
36/9 38/19 51/2 64/4
64/16 93/23 94/2 96/10 98/20
body [15] 30/24 36/2

36/10 39/2 41/24 47/3

49/8 49/12 50/11
50/20 51/5 71/10 71/20 72/4 72/7
bold [1] 128/2
Bono [1] 2/25
Book [1] 52/19
boss [1] 171/11 both [11] 8/6 8/12 12/2 16/17 71/11 95/9 95/10 111/12 171/16 177/4 187/24
bottom [3] 112/18 123/24 171/5
boundaries [3] 9/19 30/10 30/12
box [2] 166/23 167/2 breaches [2] 61/12 61/15
break [7] 12/20 45/7
104/4 104/4 154/20
154/24 155/9
breakdown [2] 15/25 19/12
breaks [2] 13/17 62/25
Brent [1] 122/14 Brexit [1] 146/13 Briefing [1] 30/22 briefly [6] $38 / 2$ 115/17 133/7 142/10 152/10 191/10
brilliant [1] 120/3
bring [20] 5/2 11/12 28/13 30/13 41/10 48/23 65/4 75/4 78/23 133/20 134/8 143/6 146/19 166/9 171/22 175/3 176/10 177/20 190/25 195/24
bringing [9] 11/9 11/17 20/9 28/5 46/1 61/7 140/4 161/1 164/22
brings [2] 71/21 151/12
British [3] 76/4
115/14 146/9
British Government [1] 146/9
broad [4] 3/18
123/23 139/23 155/21
broadband [1] 153/8
broader [1] 6/9
broadly [4] 37/25
73/3 104/16 193/8
broke [2] 9/23 19/19
broken [1] 18/7
broker [2] 9/23 28/14
broking [1] 11/21
brother [1] 177/3
brought [10] 34/20 71/2 77/24 91/9
143/17 161/17 172/18

| $174 / 21$ | $174 / 24$ | $186 / 25$ | $8 / 2$ | $8 / 8$ | $8 / 20$ | $8 / 23$ | $9 / 16$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | $174 / 8$ 174/13 176/6



45/22 65/15
build [4] 44/19 53/9 57/7 196/25
building [4] 37/5 62/1
70/17 185/12
built [3] 33/24 197/4 197/7
bullet [5] 130/1
130/17 131/15 166/5 166/16
bunch [1] 66/7
burden [1] 136/3
buried [1] 61/17
bus [1] 119/7
business [6] 74/18 76/4 76/20 89/21 147/19 193/24
but [247]
buy [2] 5/23 174/18
buying [1] 5/24
bypasses [1] 161/25
C
Cabinet [97] 1/24
1/25 2/10 7/14 7/14
7/17 7/20 8/2 8/5 8/6
8/8 8/10 8/10 8/20 8/23 9/1 9/3 9/4 9/9 9/10 9/16 9/22 10/4 10/12 10/21 10/21 10/25 11/2 11/3 11/5 11/7 11/8 11/11 11/15 11/20 12/5 12/5 12/7 12/9 12/15 12/15 12/16 12/17 12/18 13/5 13/11 13/24 14/9 14/16 15/6 15/22 16/9 17/23 18/3 18/5 18/8 18/20 18/23 19/3 19/14 19/25 20/5 20/8 23/15 24/20 26/19 28/9 28/11 28/19 29/1 29/3 29/23 30/2 30/8 30/21 45/18 48/22 49/2 49/3 51/4 51/6 65/3 66/14 75/9 77/22 78/2 88/13 88/14 146/10 149/25 150/8 153/21 160/14 160/16 169/1 176/14 177/22
Cabinet Office [25]
7/14 10/21 11/3 11/5
11/7 11/8 12/15 12/18 28/11 28/19 29/1 29/3 29/23 30/2 48/22 49/3 75/9 77/22 78/2 88/13 88/14 146/10 149/25
150/8 153/21
Cabinet Office-led [1] 49/2
Cabinet Secretary
[29] 1/24 1/25 2/10

11/11 $12 / 7$ 12/17 13/5 $186 / 25$ 188/14 188/22 13/11 13/24 14/9 14/16 15/6 17/23 18/3 18/8 19/3 20/5 20/8 45/18 160/16
calculate [1] 105/3
calculated [3] 111/20 134/3 170/16
calibration [1] 10/8
call [12] 1/4 10/23
23/3 34/16 34/23
69/18 85/6 86/23
107/9 107/21 136/9 158/6
called [11] 45/23
64/19 84/15 88/10 92/7 105/3 114/21
122/9 176/22 183/19 188/19
calls [5] 102/5 160/9 160/21 168/5 190/16 came [15] 60/17 92/5 94/2 94/14 103/23 109/13 109/17 122/6 124/14 132/17 148/12 153/9 164/1 164/5 186/3
Cameron [2] 13/1 25/8
camp [1] 25/25
can [121] 5/4 7/23
8/20 12/19 13/22 16/4 16/17 16/23 17/9 18/6 19/1 19/2 20/5 20/5 21/3 21/4 23/9 24/6 25/1 27/22 30/19 31/1 31/9 31/10 35/15 35/16 35/17 35/22 39/11 41/8 41/20 42/3 42/4 44/16 47/9 51/6 53/5 54/14 55/23 57/1 57/7 58/10 58/15 58/16 59/5 59/23 63/4 68/17 68/25 79/21 28/23
80/8 81/13 92/4 93/14 carefully [1] 3/18 101/1 101/12 101/23 Caribbean [1] 115/20 107/21 111/25 112/22 Carrie [1] 14/10 113/14 115/5 116/6 118/2 121/2 123/12 123/25 128/1 128/5 133/8 133/23 134/9 135/21 136/18 136/19 141/7 141/8 141/9 141/12 143/20 144/1 146/5 147/3 148/3 148/4 152/12 152/23 154/9 155/12 155/14 155/25 160/3 160/15 162/14 165/14 165/19 166/22 168/24 169/12 163/22 166/4 189/18 169/22 170/10 170/25 cases [4] 156/8 172/11 172/17 173/23 156/9 163/25 179/6

## C

cast [1] 170/7
categories [1]
107/13
categorisations [1] 133/21
category [1] 157/7
Cathie [1] 101/10
caught [1] 14/15
causation [1] 34/1
cause [21] 79/20
79/22 79/23 79/25
80/2 80/10 80/15
80/19 80/19 80/21
80/22 80/25 81/5 82/1
82/4 103/1 109/19 121/5 123/11 123/13 197/23
caused [1] 103/8 causes [2] 114/9 115/3
causing [1] 114/1 caution [4] 145/13
145/18 157/23 195/22
caveats [1] 172/20
ceased [1] 2/9
census [9] 85/18
86/9 86/19 116/13
118/19 133/21 133/21
191/15 191/21
central [11] 28/21 30/16 121/16 141/11
149/25 181/21 182/20
183/6 183/12 183/19 186/5
centrally [2] 78/19 163/7
centre [7] 11/24
98/16 99/7 174/22
176/25 177/12 177/17
centres [2] 97/9
179/1
century [1] 124/24
certain [16] 5/19
12/10 16/19 34/6
37/11 40/21 55/6 56/4 87/13 102/9 102/10 103/6 153/20 186/22 187/4 187/6
certainly [30] 14/20
19/22 38/9 42/7 45/5 78/1 89/6 91/15 96/21
96/23 97/25 106/11
109/1 120/9 135/22
141/1 145/19 151/12 154/21 160/15 165/4 166/2 169/9 169/12 172/14 173/5 173/19 175/15 187/9 197/15 certificate [4] 81/1 82/3 82/13 133/13 certificates [11]
79/20 82/24 94/16

94/25 95/6 95/7
104/22 105/10 133/1 188/12 192/1 cetera [2] 40/4 52/4 chain [2] 76/18 127/1 chair [14] 2/14 2/16 2/17 2/23 2/25 63/25 102/25 126/11 126/19 127/16 162/11 197/12 199/7 199/21
challenge [3] 13/13
156/17 156/18
challenges [6] 98/21
100/5 143/19 145/22 192/14 193/4
challenging [2] 143/7 144/2
chance [3] 25/12 25/13 27/17
Chancellor [2] 17/14 65/18
Chancellors [1] 64/10
chances [1] 67/11 change [19] 6/9 10/17 15/20 18/3 24/3 24/18 24/25 36/23 53/10 55/22 55/23 56/3 60/10 86/21 88/22 89/1 141/20 148/13 196/18 changed [3] 46/17 56/1 141/19
changes [6] 55/21 63/3 64/15 74/23 76/23 123/18 channel [1] 102/6 chaos [1] 17/5 chaps [1] 64/19 chapter [1] 189/19 characteristics [5] 106/20 107/23 128/20 186/16 188/18
charged [2] 71/10 79/19
chart [17] 59/2 59/23 107/16 108/22 108/23 110/7 111/15 111/16 111/18 111/22 112/5 112/18 113/11 121/3 122/19 123/22 123/25 charts [8] 70/6 74/11 93/16 97/15 104/17 108/18 166/5 172/18 chasing [1] 62/22 check [1] 74/21 chief [29] 14/4 23/6 23/7 26/10 26/11 36/6 36/6 37/22 37/22 43/15 43/16 71/8 72/6 89/11 89/13 99/23 126/12 126/12 146/16 146/23 150/19 150/23 150/25 151/4 151/5

151/10 151/18 151/23 clinical [2] 54/13 196/14
Chief Scientific [1] 89/13
children [3] 6/15 41/1 52/3
CHIME [1] 189/7
choice [1] 26/13
chose [1] 56/7
Chris [6] 15/16 34/13
89/12 101/9 187/12
188/24
Chris Whitty [3]
15/16 89/12 187/12
chronology [2] 2/7
143/14
Churchill [1] 71/3
churn [4] 23/14
23/17 24/12 25/11
circulated [1] 165/22
circumstances [1]
63/20
CIS [5] 76/22 87/7
90/25 135/5 188/19
citizen [1] 83/25
citizens [1] 100/12
civil [30] 2/9 9/2 9/5
9/14 11/2 11/18 14/13
20/15 20/21 23/18
24/12 26/6 26/14
26/18 26/25 28/23
30/3 65/10 65/16
65/17 66/19 66/23
67/3 67/7 88/13
146/14 149/6 150/22 196/20 196/21
civil service [14] 2/9
9/2 9/5 9/14 11/18
20/15 23/18 26/14
26/25 28/23 65/17
146/14 149/6 196/20
clarify [1] 162/25
clarity [6] 103/11
103/15 134/2 143/17
143/21 153/13
clash [1] 18/12
class [1] 134/1
classic [3] 10/10
29/9 48/18
classifies [1] 178/6
clear [19] 15/15 26/5
40/7 42/10 43/3 53/4
83/2 122/18 129/14
129/20 131/19 131/25
138/14 139/4 143/11
147/12 149/16 172/18 193/10
clearer [1] 176/16
clearly [9] 15/2 15/5
40/23 55/4 111/12
116/17 151/2 172/22 195/22
Clegg [1] 13/1
clients [1] $8 / 13$
46/9 173/11
COBRA [1] 170/5
Code [1] 131/17
coherent [2] 31/23
31/24
cohort [2] 96/17
107/18
cold [1] 54/16
cold-hearted [1] 54/16
collaborate [1] 191/14
collapse [1] 168/16
collate [1] 142/23
collated [1] 78/18
collating [1] 161/19
collation [1] 160/7
collations [1] 164/10
colleague [1] 102/5
colleagues [2] 78/7 80/2
collect [1] 76/10
collected [6] 135/4
135/7 135/10 142/24 186/21 186/23
collecting [5] 10/20
22/6 92/3 92/10
191/25
collection [5] 85/2
93/3 96/6 138/6 160/6
collective [1] 147/12
College [3] 3/15 4/3
76/16
columns [2] 168/3
combat [1] 182/6
combatting [1]
192/25
combination [1] 6/22
combined [1] 40/13
combining [1]
191/20
come [40] 3/24 3/25

7/7 8/18 19/4 27/17 35/10 36/11 37/18 38/20 41/11 47/16 67/2 70/9 79/20 85/7 89/5 93/23 108/5
115/2 116/12 118/22 120/22 132/20 142/6
146/22 147/5 148/18
150/25 156/6 156/22
160/1 165/5 166/2
168/23 170/1 171/20
171/23 172/24 183/14
comes [15] 16/25
18/19 23/2 23/25 27/2
61/24 105/19 113/22
140/5 140/8 144/17
183/24 185/10 194/10 195/20
31/15 31/19 32/5 32/6 comfortable [2] 32/21 33/1 33/3 33/5 86/11 86/22
$33 / 1033 / 1834 / 134 / 8$ coming [12] $4 / 13$

16/13 29/15 45/17
71/4 81/25 133/16 161/9 163/20 167/18 175/1 194/6
comitology [1] 34/16
CoMix [2] 96/17
180/13
commence [3] 1/7
4/20 93/3
commenced [1] 91/3
commencement [1]
3/2
comment [1] 155/19
commission [2]
38/24 95/17
commissioned [3]
40/16 141/11 148/7
Commissioner [4]
158/6 158/9 158/15 158/18
commitment [1]
163/15
committee [11]
12/10 31/21 32/19
32/20 34/16 39/2
41/19 42/11 43/5 47/2 102/1
committees [3]
30/11 46/1 47/8
Commonly [1]
164/16
communicate [3]
51/18 51/21 97/22
communication [4]
53/6 53/8 53/8 79/5
communications [1] 152/15
communities [3]
187/22 188/8 190/8
community [5] 38/11
155/16 155/23 190/14
195/11
commuting [1] 59/22
(56) cast - commuting

C
companies [2] 74/22 174/24
company [1] 84/22
comparative [4]
23/21 67/16 67/23 122/19
comparatively [2] 23/16 68/3
compare [3] 107/23
123/4 142/22
compared [1] 111/25 comparing [2] 107/2 107/25
comparisons [3]
120/25 121/3 121/21 competing [2] 16/12 16/12
compiled [1] 70/8
compiling [1] 161/13
complete [3] 53/19
128/14 198/10
completed [2] 130/8
168/4
completely [4] 19/19 44/15 116/8 133/18
completeness [1]
132/4
complex [3] 20/18
41/22 48/11
complexity [1]
145/20
compliance [5] 53/1
59/20 61/19 63/3 63/7
complicated [7] 6/23
21/19 21/24 23/5
31/18 49/21 145/17
comply [1] 63/10
complying [1] 62/18
composition [1] 38/5
comprehensible [3]
128/15 129/15 129/20
comprised [1] 38/6
computer [2] 79/21
143/1
computer-wise [1] 79/21
computers [1] 162/5 concentrate [1]
121/12
conceptual [4] 20/19 84/21 84/25 100/2
concern [4] 28/18
144/11 193/20 195/17
concerned [3] 72/16
88/15 132/5
concerning [3] 3/4
69/22 96/13
concerns [2] 127/12 190/9
concisely [1] 1/12 conclude [1] 96/15 concluded [1] 187/25
concludes [1] 69/2 concluding [1] 45/9 conclusion [2] 27/7 54/6
conclusions [1] 116/24
concrete [1] 195/16 condition [1] 92/2
conditions [6] 89/21
117/1 117/4 117/7 123/1 189/11 conducted [1] 148/20
conduit [1] 43/14 conference [2] 130/5 130/9
conferences [3] 79/2 79/2 97/17
confidence [5] 13/17
15/25 52/25 59/17 84/16
confines [1] 41/24 confirm [1] 125/24 confronting [1] 58/5 connectivity [1] 153/8
cons [1] 35/7
consequence [2]
130/18 155/17
consequences [3]
41/15 130/19 130/25
conservative [1] 100/17
consider [2] 44/8 191/14
considerable [3] 28/10 124/2 139/10 considerably [1] 111/5
consideration [1] 45/19 considerations [1] 59/3
considered [2] 27/15 148/10
consistency [2]
55/11 58/11
consistent [6] 16/15
52/11 52/13 54/22
58/18 170/6
consistently [1]
16/17
constituted [2] 16/4 41/14
consultant [1] 137/2 Contact [1] 180/13 contacts [1] 180/16 containing [1] 132/8 contemporaneous [1] $14 / 6$
content [1] 96/7
contents [1] 70/4
context [7] 41/18
127/6 127/9 152/16

159/15 163/7 177/14 Contingencies [2] 30/3 88/13 contingency [1] 164/21
continue [4] 17/25 32/21 53/23 57/17 continued [2] 33/10 33/18
continues [1] 150/3
continuing [2]
125/19 191/8
contracted [1] 106/7
contracting [1]
119/25
contrast [1] 119/17
contribution [1] 96/5
control [22] 11/22
23/24 24/16 28/20
29/24 30/16 38/11
51/12 53/19 100/7
100/21 101/6 101/21
107/1 107/9 118/7
121/11 133/17 134/10
151/9 154/12 157/2
controlled [1] 123/2
controlling [1] 68/18
convened [7] 30/23
32/17 32/21 32/22
33/10 33/14 33/18
convenes [1] 31/22
convenient [3] 45/4
104/2 154/19
COPI [3] 154/17
157/3 157/18
COPI notice [1]
157/3
COPI notices [1]
157/18
COPI regulations [1] 154/17
copy [1] 161/11
copying [2] 162/7 167/17
core [3] 67/18 81/6 137/21
coronavirus [4]
76/20 91/1 135/5
178/18
coroner [1] 80/12
coroner's [2] 80/12
81/12
correct [6] 2/8 93/9
136/25 139/20 175/10
192/10
correlation [1]
123/13
correspondence [8]
126/9 127/1 127/2
127/6 127/11 128/3
131/18 187/11
CORSAIR [1] 180/13
cost [6] 54/9 57/15
58/9 59/4 59/9 60/5
cost-benefit [2] 54/9 60/5
costs [6] 3/17 54/18
55/18 57/13 58/23 59/15
could [91] 1/7 1/10
6/12 14/23 21/11
25/10 28/2 28/3 28/5
28/8 33/4 38/18 39/3
40/3 42/20 44/2 44/3
47/19 47/20 49/14
49/15 49/15 55/14
56/13 57/4 58/1 58/20 60/11 60/18 64/15 65/5 67/13 68/20 69/16 70/11 73/25 78/10 80/18 80/22 80/22 81/16 82/5 82/18 83/4 88/8 88/16 91/11 92/24 95/5 96/2 102/2 102/12 104/15 106/7 106/7 107/1 108/19 110/4 110/21 115/21 116/16 117/17 118/21 119/9 120/21 121/2 135/13 136/13 140/10 141/23 146/19 148/1 148/14 164/11 165/25 167/9 167/23 175/6 175/8 176/15 180/16 180/23 181/14 181/23 183/16 184/22 188/1 189/24 191/15 195/24 198/8
couldn't [3] 49/11 76/9 85/3
council [11] 29/11
29/21 34/23 35/5 42/2
45/12 45/13 45/23 47/2 49/7 50/11
Council-type [1] 47/2
COUNSEL [7] 1/6
69/13 134/20 136/12 199/5 199/11 199/19 count [1] 24/19
countries [10] 68/14
68/17 91/19 96/21
110/19 121/4 121/23
122/20 123/5 123/6
country [30] 15/12 40/2 50/4 50/23 52/23 53/16 57/12 59/13 61/20 67/4 67/8 68/10 68/23 75/14 96/22 109/13 112/8 112/14 121/15 122/6 122/22 125/1 165/9 167/7 168/2 168/8 179/1 181/3 186/2 186/7 couple [7] 64/1 77/11 86/14 106/11 141/24 156/7 177/6
course [41] 4/11 5/4 6/17 7/5 7/16 7/24 8/3 168/13 187/20 187/22

C
Covid-19... [4]
188/17 189/3 191/5 191/9
Covid-19 Taskforce
[3] 47/7 77/23 77/23
Covid-O [4] 32/19
34/19 47/4 47/8
Covid-S [4] 32/18
34/18 47/4 47/8
crash [1] 19/14
create [5] 7/23 48/23
64/7 78/14 164/25
created [2] 149/12 185/13
creates [1] 51/5
creating [2] 34/11 185/18
crescent [2] 124/12 124/17
Crime [1] 85/5
CRIP [11] 164/9
164/13 165/3 165/14
165/15 171/16 172/8 174/11 174/16 198/6 198/9
CRIPS [2] 164/21
169/11
crises [2] 10/8 25/21
crisis [60] 5/1 5/10
5/15 5/16 5/17 5/21
6/20 7/1 7/2 7/25 9/21
10/2 10/4 10/13 12/20
14/7 16/4 20/20 22/8
22/11 22/15 22/20
23/1 23/3 23/3 23/15
25/20 30/4 30/19
30/23 31/1 31/2 31/5
31/19 32/1 32/8 32/13
34/22 36/14 36/18
36/18 36/22 42/9
42/12 43/2 43/14 46/7 46/10 49/14 49/17
49/20 51/17 51/21
55/12 73/25 87/11
99/4 140/2 165/9
165/13
crisis-specific [1] 42/9
criteria [1] 55/2
critical [2] 164/23 165/5
critically [1] 101/14
criticised [2] 5/24 131/23
cross [7] 29/16 30/12 35/15 35/16 42/5 147/14 162/24
cross-departmental [1] 29/16
cross-examine [1] 42/5
cross-government [1] 147/14
cross-question [2] 35/15 35/16 crossbench [1] 2/12 crosses [2] 30/9 48/17
crystallise [1] 142/5 CTF [1] 47/2
culminated [1]
127/11
cultural [4] 100/16
144/5 144/15 144/24
Culture [1] 149/15
Cummings [6]
169/19 171/19 172/4 174/2 177/3 177/4
current [1] 133/19 currently [2] 129/4 137/1
curve [2] 51/14 111/20
Customs [1] 102/6
cut [1] 64/10
cuts [1] 185/7
Cygnus [5] 160/1
162/10 162/23 163/9 163/19
Cymru [1] 134/19
D
daily [12] 79/1 93/19
94/20 97/18 109/1
109/8 109/10 110/1
130/4 130/9 164/22 170/4
dairies [1] 14/7
damage [3] 20/1 20/6
20/12
damaging [4] 13/18
63/11 63/11 66/13
dare [1] 37/12
dashboard [15]
88/15 165/24 166/8 170/1 172/6 173/1 173/13 173/20 174/4 174/10 174/16 175/6 175/12 198/7 198/12
data [353]
data governance [1] 73/4
data-hungry [1] 194/17
dataset [5] 85/20
85/24 144/9 145/8 177/25
datasets [30] 74/12 74/13 75/18 75/22 77/2 78/19 81/6 81/18 83/10 83/12 83/14 83/15 89/20 93/7 104/11 140/16 140/17 144/13 178/6 178/13 178/21 178/23 179/13 184/3 186/1 186/22 188/11 189/10 189/17

195/14
date [6] 3/8 36/15 130/10 136/20 173/23 175/13
dated [6] 1/16 70/1
70/9 128/4 165/3 195/3
dating [2] 54/10 152/1
David [18] 13/1 25/8 103/1 103/8 103/10 103/14 103/19 103/21 103/23 126/10 126/11 127/19 128/2 129/12 129/21 130/15 131/12 131/25
David Cameron [2] 13/1 25/8
David's [1] 129/14 day [11] 4/25 5/14 10/5 79/17 84/10 94/9 127/7 127/8 170/14 170/17 173/20
days [12] 10/15 23/23 31/2 31/10 88/6 94/11 94/18 110/9 159/5 165/8 165/10 186/3
deal [10] 6/25 10/1
30/23 31/10 31/22 46/10 57/19 68/2 74/13 84/8
dealing [11] 7/1 13/4 17/20 22/2 22/2 31/4 70/22 84/4 104/12 145/15 183/24
dealt [4] 5/21 31/9 34/22 186/4
Dear [1] 128/9
death [55] 57/13
79/19 79/20 79/20 79/22 79/23 79/25 80/2 80/2 80/9 80/10 80/11 80/15 80/19 80/20 80/21 80/22 81/1 81/1 81/5 81/6 81/7 82/1 82/3 82/5 82/5 82/13 86/16 86/19 93/19 94/15 94/22 94/25 95/6 95/6 104/22 105/1 105/10 106/17 107/17 109/19 111/8 111/23 112/7 113/9 116/12 117/25 118/2 119/4 122/20 133/1 133/13 133/23 188/11 192/1 deaths [64] 42/21 52/2 59/19 59/21 59/21 68/13 81/12 93/18 93/23 94/1 94/7 94/8 94/10 94/18 94/20 94/21 95/1 95/7 95/8 95/13 95/14

95/16 95/16 95/18 104/13 104/23 105/3 105/4 105/7 105/7 105/21 105/25 106/3 106/4 106/13 106/25 109/1 109/8 109/10
109/22 110/1 110/24
111/13 111/18 113/13
113/23 114/2 114/6
114/7 114/8 114/9
114/10 115/7 121/6
121/7 122/19 123/7
123/11 123/13 123/14 155/21 170/13 178/15 179/17
debate [18] 17/3 17/3 17/8 17/10 17/24 48/8 51/11 53/16 53/18 54/1 54/16 54/17 56/13 57/8 57/20 58/19 60/1 86/2
decade [3] 140/14 143/15 185/8
decades [3] 140/13
143/3 196/10
deceased [2] 80/16 105/11
December [2] 26/9 48/6
December 2020 [1] 26/9
December 2022 [1] 48/6
decide [5] 12/12 39/4 62/20 64/10 168/7
decided [5] 19/7 21/1 35/20 55/2 71/5
decision [49] 4/24
5/3 7/6 7/11 7/18 8/11 16/3 16/25 18/2 19/3 20/17 21/2 21/8 21/13 21/16 23/11 23/23 24/10 24/14 27/18 28/17 31/18 34/15 34/24 35/10 36/15 43/24 54/25 55/8 55/23 58/12 58/13 59/4 60/2 60/3 60/3 60/17 63/8 63/8 73/16 138/1 138/4 155/15 156/4 156/4 164/23 165/1 165/11 167/25 decision-makers [15] 5/3 7/6 7/11 20/17 21/2 21/8 34/24 36/15 58/12 73/16 138/1 138/4 156/4 164/23 165/1
decision-making [16] 4/24 7/18 8/11 16/3 16/25 18/2 21/13 21/16 23/11 24/10 24/14 28/17 31/18
34/15 54/25 167/25
decisions [40] 4/19 4/22 6/1 7/12 13/19 14/25 15/11 16/5 16/16 16/19 20/24 26/23 27/23 30/8 35/2 35/18 44/1 44/9 44/16 44/23 51/24 53/3 54/8 54/20 55/3 55/17 56/24 57/10 58/4 58/5 58/9 60/23 65/21 67/24 68/4 137/22 155/11 164/24 165/8 167/11
decisions' [1] 163/2
declaration [1] 70/4
declare [1] 44/9
declared [1] 1/18 deem [1] 53/18
defence [1] 21/11 define [2] 44/25 79/24
defined [1] 115/12 definitely [6] 89/1 142/24 147/9 147/18 150/7 197/21
definition [2] 96/24 133/21
definitional [1] 186/24 definitions [1] 188/10
degradation [1] 16/3
degraded [1] 12/21
degree [11] 7/15 7/16 55/6 57/13 86/2 86/3
107/17 116/22 117/21
145/18 169/20
deleterious [1] 13/18 deliberate [1] 171/10 deliberately [2] 51/7 148/15
delighted [1] 86/12
deliver [1] 80/5
delivering [1] 79/12
delivery [1] 153/17
Delta [4] 109/5 109/7
109/13 109/19
deluge [1] 75/4
DELVE [1] 102/1
delving [1] 20/18
demands [1] 9/21
democracy [2] 20/25
24/5
democracy's [1] 25/17
demographic [2] 106/19 189/25
demonstrate [5]
52/24 62/8 105/13
108/1 113/11
demonstrates [1] 55/4
department [19]
10/22 10/23 30/4

## D

department... [16] 46/11 48/5 48/14 48/16 48/25 48/25 71/19 103/2 145/7 145/9 149/11 149/14 151/11 151/13 181/11 186/6
departmental [3] 9/18 29/16 30/9
departments [24]
9/15 9/17 11/10 11/13 11/21 16/1 28/14 28/15 28/25 29/7 29/10 29/14 29/25 30/7 48/17 48/23 87/5 89/14 145/3 145/5 148/9 149/7 150/18 151/3
depend [5] 25/17 42/11 64/18 82/12 122/22
depending [4] 13/8 50/22 179/9 191/18 depends [1] 40/21 deprivation [4] 117/4 117/19 117/21 188/21 deprived [3] 108/14 118/4 118/5
Deputy [5] 72/24 73/1 73/7 103/24 192/21
describe [9] 25/24 108/25 144/5 146/4 178/12 179/15 179/21 192/14 193/5
described [19] 36/3
42/2 45/20 46/24 47/1 50/5 55/6 64/5 72/12 85/24 85/25 87/4 89/11 89/19 91/2 109/4 128/11 130/6 173/18
describes [1] 192/21 describing [5] 108/5 118/12 161/7 190/6 191/19
descriptions [1] 178/12
design [6] 76/17
90/22 92/7 92/7 92/11 197/4
designed [9] 30/25
31/23 38/23 90/10
90/20 98/6 148/15
172/7 177/18
desire [1] 140/15
despite [3] 151/25
185/6 192/14
destroys [1] 62/7
destructive [2] 62/15 62/16
detail [14] 37/18 81/4

115/3 136/22 140/23 147/3 152/18 161/23 162/21 165/5 165/17 166/7 175/24 188/7
detailed [3] 39/7 136/15 173/14 details [1] 178/14 deteriorating [1] 197/19
determined [1] 46/6 develop [4] 31/23 103/24 175/2 176/16 developed [3] 88/23 146/1 160/5
developing [1] 172/6 development [1] 196/20

## devolution [1]

 138/18devolved [21] 49/8
49/18 49/25 50/6 50/16 50/22 89/15 91/5 98/1 98/3 98/7 98/10 98/20 99/16 99/18 99/18 134/22 134/25 135/10 138/21 177/15
devolveds [4] 49/12 49/15 50/15 50/15
DHSC [7] 93/19 93/23 93/24 94/6 94/12 94/17 94/23
diagnoses [1] 131/1
diagnosis [1] 130/22 Diamond [14] 69/9 69/12 69/17 69/18 69/19 134/18 154/16 157/4 178/4 188/19 191/1 191/12 192/2 199/9

## Diamond's [1]

 132/24diaries [1] $14 / 5$
diary [1] 26/8
did [100] 2/9 7/25
11/1 26/2 32/21 33/7
33/13 33/14 34/4
35/21 37/21 38/19
41/25 45/3 45/18
45/22 47/25 49/12
53/15 53/25 56/20
68/11 68/11 68/15
73/23 74/10 74/12
75/1 76/11 76/19
76/23 78/11 78/14
78/21 79/8 80/20
85/12 86/18 87/3
87/12 88/12 88/21
88/22 89/1 89/9 89/11
89/13 91/2 91/16 92/3 93/23 94/13 95/13
95/20 96/3 96/21 97/2
97/3 97/3 97/10 97/15
97/19 98/1 98/14

98/25 99/16 102/24 $\quad$ 184/2 184/3 184/3 105/21 105/23 106/13 $184 / 4$ 184/5 184/17 107/12 108/1 108/11 $\quad 186 / 1$ 186/1 186/25 110/23 111/14 116/11 $187 / 2$ 187/3 188/8 116/11 117/17 118/11 $188 / 10$ 191/20 196/8 118/16 120/24 122/1 differentials [1] 147/22 153/9 154/5 157/24 159/4 159/7 | $163 / 17$ | $168 / 24$ | $174 / 15$ |
| :--- | :--- | :--- | difficult [20] 13/25 174/18 174/18 174/19 17/20 18/22 19/2 178/17 179/8 182/4 19/10 20/10 23/5

185/22 192/3 198/13 didn't [19] 3/24 33/3 38/16 38/17 38/25 56/5 80/24 88/6 96/21 97/19 109/12 114/20 151/4 159/22 163/21 179/14 182/12 183/6 189/10
died [6] 2/3 10/7 106/5 111/24 114/23 114/24
dies [1] 82/15
differ [1] 77/1
difference [8] 107/8 112/20 112/21 112/23 116/4 116/7 121/6 125/15
differences [7] 16/8 16/9 107/10 116/1 116/16 117/14 118/7 different [119] 2/13 5/15 5/20 6/3 6/7 9/15 13/7 13/8 16/13 16/22 16/24 28/15 28/15 28/24 29/10 31/14 34/6 34/14 35/8 35/9 35/25 41/11 44/17 44/17 46/6 48/3 50/23 50/24 52/12 59/12 68/15 68/16 68/17 71/4 73/2 73/5 74/16 74/16 76/10 76/19 83/9 84/21 89/1 89/19 98/7 98/7 107/11 109/17 110/19 116/16 121/4 123/19 130/13 140/19 141/8 142/3 harged [1] 73/15 142/14 142/19 142/21 discrepancy [1] 142/23 143/12 143/20 156/8
143/25 143/25 144/2 discuss [3] 12/6 145/5 145/9 145/21 171/25 178/18 146/10 147/13 148/19 discussed [5] 90/1 148/20 150/9 150/12 $\quad 94 / 16$ 155/8 172/16 151/19 153/10 156/18 195/21 159/14 161/9 161/21 discussing [7] 162/5 164/3 167/3 167/4 170/14 171/13 171/21 171/21 172/10 192/15 172/13 173/12 173/20 discussion [5] 47/15 173/22 174/7 175/1 $\quad$ 47/16 54/6 106/10 177/20 177/25 178/9 149/6
178/10 179/4 179/18 disease [9] 56/11
183/22 183/23 183/23 $82 / 19$ 84/3 101/4

124/19 180/17 185/11 188/7 189/21
dismantled [1] 47/24
disparate [1] 189/15 disparities [6]
186/10 187/20 189/4
189/8 189/9 189/20
Disparity [2] 190/21 191/4
disposal [1] 16/23
disproportionate [3]
26/22 187/5 187/9
disputes [1] 60/8 disseminated' [1] 163/4
distancing [4] 39/14
39/15 39/16 63/22
distill [1] 23/8
distinct [3] 48/12 115/25 116/7
distinction [6] 75/16
75/17 82/6 102/22 113/9 130/3
distribution [5] 68/19
107/4 107/7 107/10 118/8
distributions [3]
107/24 107/25 123/3
dive [1] 175/23
divide [2] 20/19 122/8
divided [2] 106/25 112/8
division [2] 20/15 20/19
do [128] 2/13 5/7 5/7 11/15 13/12 13/15 13/15 15/11 15/22 19/16 20/11 21/17 21/21 22/14 22/16 22/23 23/21 27/12 27/13 29/17 30/17 34/18 35/11 35/20 37/5 37/20 38/21 39/13 40/17 40/17 41/7 41/25 44/7 47/21 49/9 50/8 50/11 50/13 52/5 52/6 52/6 52/6 52/20 54/3 55/23 57/5 57/12 57/12 57/13 57/15 60/21 61/4 61/6 62/10 62/20 62/22 62/23 63/1 63/6 64/13 64/20 64/25 68/24 75/21 76/7 76/12 80/2 80/4 80/6 80/22 84/17 84/23 84/24 88/11 90/8 90/9 90/18 95/6 96/22 99/3 99/14
99/24 100/9 100/19 101/1 101/3 101/4 101/11 101/12 101/15 102/20 105/10 105/13
106/24 117/23 119/21

## D

do... [32] 120/23
122/7 122/10 123/15 123/22 125/5 125/10 130/9 132/5 134/5 135/15 137/20 138/14 143/9 144/23 148/14 151/20 152/19 159/12 161/6 163/18 167/7 172/7 180/5 183/19 188/16 189/15 190/21 192/17 197/1 198/2 198/7
document [32] 48/7
48/10 80/13 80/13
81/25 83/8 108/20
110/4 111/7 115/5
117/17 118/11 120/21
120/22 120/23 121/1
123/15 125/5 159/1 164/9 165/18 165/19 166/3 166/6 166/12 167/4 167/6 167/10 167/23 169/18 175/15 194/3
documents [8] 80/19 81/5 139/16 160/8 160/21 162/2 167/16 168/25
does [55] 4/21 19/18 20/19 24/15 26/5 26/16 40/3 43/7 47/10 47/11 48/9 55/10 61/21 64/18 65/11 66/19 70/17 72/20 75/23 77/1 83/14 86/17 100/13 101/1 104/17 107/12 108/24 110/7 111/8 111/10 111/22 112/6 112/12 113/5 113/10 113/17 114/15 115/9 134/13 141/20 143/10 144/4 149/9 150/17 151/21 153/17 153/18 160/12 162/2 164/15 189/22 190/25 194/9 195/16 195/20
doesn't [13] 17/3
20/6 29/13 39/7 50/12 50/13 82/12 86/21 94/7 138/20 141/25 166/6 169/9
doing [20] 1/13 27/20 28/3 36/25 37/7 41/2 42/8 43/20 48/4 54/15 68/25 86/15 86/24 87/20 91/14 123/5 133/4 142/20 150/8 150/10
domestic [1] 84/23 dominated [1] 38/9 Dominic [6] 169/19

171/19 172/4 174/2 177/3 177/4 Dominic Cummings [6] 169/19 171/19 172/4 174/2 177/3 177/4
don't [31] 7/22 17/16 22/4 24/15 31/13 33/5 38/11 44/13 48/15 51/10 60/12 62/6 62/7 81/11 123/6 126/23 132/21 137/7 145/3 149/16 152/7 155/21 157/10 161/22 169/10 178/19 183/13 195/1 196/24 197/10 197/14 done [18] 19/8 21/25 54/10 57/4 74/2 84/8 85/14 86/4 106/5 136/2 136/6 141/20 147/17 154/9 170/17 175/8 182/13 197/1
dots [1] 121/13 dotted [2] 111/17 111/19
doubled [1] 175/15 doubling [1] 88/5 doubt [6] 13/21 62/16 74/2 151/6 188/1 194/14
Dowden [1] 192/20 down [33] 12/20 13/17 18/7 19/19 21/1 25/1 29/2 43/5 44/2 44/3 55/18 57/14 62/25 66/1 73/10 73/11 124/13 153/1 155/14 160/10 162/15 each [11] 5/15 17/15 166/10 166/16 166/23 168/8 169/17 169/23 170/5 170/8 182/13 184/23 189/5 191/24 Downing [11] 17/24 61/14 63/15 63/18 91/25 92/6 160/4 160/13 160/23 176/13 176/17
Downing Street [11] 17/24 61/14 63/15 63/18 91/25 92/6 160/4 160/13 160/23 176/13 176/17
draw [4] 116/24 122/21 166/15 182/15 drawn [5] 38/3 75/19 85/18 87/6 98/3
dreadful [1] $84 / 3$
drew [2] 97/25
177/14
drills [1] 162/23
driven [1] 111/20
drivers [6] 108/3
118/25 119/7 119/8
119/10 119/16
dropping [2] 189/5 191/24
drug [2] 54/14 57/24
drugs [1] 6/5
DS [1] 176/8
DSIT [2] 149/15
149/19
dual [1] $8 / 8$
due [7] $3 / 236 / 17$
7/16 106/15 115/21
194/15 195/21
during [45] 5/16 7/5 14/7 17/9 21/5 28/18 43/14 70/21 73/14 81/19 83/12 93/17 100/19 105/6 106/9 108/20 108/23 110/9 121/7 124/2 130/4 132/23 136/17 137/22 138/6 138/10 147/5 147/7 147/19 148/6 148/9 151/3 159/3 159/5 175/17 176/2 178/1 182/2 184/13 188/14 193/17 194/20 66/5

185/23 186/10 187/19 Ed Balls [2] 65/13
duties [1] 136/21 Ed Miliband [1]
65/14
Edinburgh [1] 123/17 educate [2] 78/17 161/3
education [4] 6/15 52/4 84/24 181/11
educational [3] 40/25 59/18 181/7
effect [15] 6/11 8/23
13/19 24/14 25/5 39/1 40/25 41/1 41/1 52/3
111/4 157/6 159/8 185/18 189/15
effective [4] 29/6 29/20 36/21 110/5
effectively [5] 29/19 32/14 128/24 128/25 145/4
effects [8] 60/13
60/14 61/1 61/2 61/3
131/10 183/3 193/2
efficacy [1] 48/13
efficiency [1] 48/13
efficient [1] 101/18
efficiently [3] 12/22
87/10 141/12
effort [3] 160/25
161/19 171/23
efforts [1] 186/5
eight [1] 166/13
eight pages [1]
166/13
either [8] 19/7 82/5 82/22 106/5 106/8 107/21 129/17 191/17
elected [3] 21/2
23/11 66/19
election [2] 24/17 24/17
elections [1] 64/11
electorate [2] 19/7 66/22
electronic [1] 152/15
element [2] 5/12
38/22
elementary [1] 108/4
elided [1] 130/4
else [7] 18/20 27/19
63/21 66/10 100/13
145/11 180/20
elsewhere [2] 122/8 159/3
email [6] 169/18
169/24 171/4 171/19
172/3 174/2
emailed [1] 160/8
emailing [2] 160/7
161/4
emails [7] 160/20
161/15 167/15 167/19
169/16 171/17 172/25
emanations [1]
184/25
embedded [4] 75/8
78/2 79/5 97/21
emerged [1] 146/25
emergence [1] 109/5
emergency [3] 31/22
64/4 174/19
emerges [1] 4/16
emissions [1] 59/22
emphasise [3] 66/25
114/6 172/23
emphasised [1]
187/7
emphasising [1]
162/13
employed [3] 65/25
71/19 137/14
enable [11] $7 / 11$
58/11 77/18 80/5 87/9
87/25 92/25 101/18
102/3 111/22 179/8
enabled [1] 36/3
enables [3] 75/22
75/24 180/9
enabling [2] 88/8 105/11
enact [1] 161/2 encapsulates [1] 104/17
encourage [1]
150/17
encouraging [1] 158/15
end [11] 60/24 65/25
81/19 82/2 84/10 96/9
96/19 127/7 127/9
144/13 191/21
ended [1] 167/3
endless [1] 60/25

(61) enforcement - extent

| E | 142 |  | five years [3] 21 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | fair [7] 9/7 44/8 96/9 | field [7] 59/12 75/17 |  | fortnight [1] 91/14 |
| 116/15 134/21 138/6 | 129/23 169/8 175/5 | 90/17 91/4 91/5 | five-bar [1] 87/20 | fortunate [1] 14/1 |
| 147/1 152/13 180/15 | 19 | 138/15 142/7 | five-year [2] 111/9 | forum [2] 39/2 |
| 185/24 | fairly [8] | field work [2] 91/ |  | 184/15 |
|  |  |  | fix [1] 171/7 | forward [6] |
| extracted [1] 98/3 | 152/7 16 | fields [1] | fixed [2] 63/14 77/6 | 118/10 |
| extracts [1] 98/15 | fall [2] 131/21 164/24 | fifth [1] | Fixing [2] 193/6 | 174/13 193/17 |
| extraordinary [2] | fal | fight [2] |  | found [2] |
| 169/13 197/20 |  |  |  |  |
| extreme [2] 26/22 | 31/4 108/22 152/12 | 130/23 166/17 166/21 | flat [1] 79/15 | four [9] |
| 161/20 | 162/11 164/13 | figures [10] 94/ | flattening [1] | 92/13 125/11 |
| ex | families [3] 126/5 | 104/21 111/17 122/20 | flexed [1] 73/6 | 146/24 147/6 |
| 69/5 69/23 73/15 | 126/6 134/19 | 123/16 124/4 125/6 | flexibility [1] 15 | 162/15 |
| 83/18 90/22 90/23 | far [17] 3 | 128 | flicking [1] 184 | four lines [1] |
| 95/21 135/23 138/24 | 19/23 20/ | files [1] | flip [3] | four weeks [3] 92/13 |
| 145/16 157/18 157/20 | 23/14 24/8 30/10 33/6 | fill [3] 152/4 152/5 | 55/15 | 125/11 125/15 |
|  | 44/23 53/11 53/1 | 181/12 | lop | fragmented [1] |
| eyes [1] 170/8 | 67/23 128/14 152/5 | fill | flopping [2] |  |
| F | fast [4] 42/25 | final [7] | flop |  |
|  | 81/23 94/13 | 132/4 143/24 146 | flopping [2] 55 | 52/22 55/15 5 |
| 56/23 68/5 89/4 132/6 | faster [1] 90/18 | 191/4 198/3 | 55/14 | 5/25 58/7 58/15 |
| faced [3] 64/9 132/6 | favour [2] 102/7 | finally [10] 4 | flow [3] 26/24 101/18 | 58/18 58/22 60/11 |
| 156/17 | 134/2 | 85/11 86/24 123/15 | 194/19 | 148/15 149/1 149/22 |
| facilitate [1] 182/22 | fear [1] | 125/3 131/13 132 | flowing [1] | France [1] 122/3 |
| facing [7] 116/22 | fearful [1] | 138/8 139/3 190/24 | flows [9] 99/10 99 | frankly [2] 19/14 27 |
| 117/10 119/5 159/3 | feature [1] 19/21 | financial [3] 5/17 7/2 | 159/24 160/23 163/11 | frantic [1] 169/16 |
| 165/9 173/13 175/20 | February [3] 104/24 | 7/25 | 163/12 163/20 164/7 | free [1] 170/11 |
| fact [57] $2 / 253 / 3$ | 105/2 124/1 | fin | 177/21 | eed [1] 156/23 |
| 14/7 16/21 32/22 33/8 | February 2020 | 22/19 23/5 29/14 | flu [3] | eedom [1] 30/1 |
| 38/3 40/6 45/17 47/5 | 105/2 | 68/10 141/23 144/10 | 162/23 | Freeguard [29] |
| 49/12 52/24 56/23 | February 2021 [1] | 151/16 | flying [2] 75/2 116/18 | 136/10 136/11 13 |
| 57/4 57/23 68/5 69/19 | 124/1 | finding [3] | focus [10] 11/22 | 136/15 137/1 137/1 |
| 78/11 85/19 88/23 | February 2022 | 104/21 148/25 | 14/25 46/2 137/4 | 139/22 141/3 141/10 |
| 91/25 103/6 107/17 | 104/24 | Fine [1] 8/19 | 137/18 146/19 148/13 | 146/3 147/22 148/4 |
| 117/3 117/18 120/24 | fed [2] 17 | finished [1] 2/22 | 151/12 154/4 196/16 | 152/9 155/3 161/3 |
| 130/8 130/11 137/14 | feed [4] 35/3 43/21 | finishing [1] 146/23 | focused [7] 8/20 | 164/13 165/17 169/8 |
| 141/2 142/13 144/8 | 161/24 180/23 | firm [1] 77/7 | 83/16 91/21 138/16 | 169/14 175/5 177/24 |
| 144/13 145/2 147/11 | feeds [2] 43/4 194/17 | first [48] 12/4 22/20 | 138/25 154/14 155/4 | 182/1 184/25 186/9 |
| 147/23 148/5 149/22 | feel [11] 4/9 4/12 | 22/24 23/1 27/14 31/1 | focusing [3] 28/9 | 189/12 192/12 197/8 |
| 153/11 154/15 156/11 | 38/25 75/1 79/8 | 38/9 56/7 70/15 71/2 | 85/15 89/23 | 197/14 199/17 |
| 157/10 160/17 162/8 | 141/20 149/9 158/2 | 106/11 108/19 109/1 | follow [8] 3/13 26/16 | freeing [1] 154/1 |
| 163/21 169/10 171/3 | 161/5 183/13 197/14 | 110/9 113/18 115/18 | 43/7 62/7 62/11 | freelance [2] 137/1 |
| 173/24 174/1 175/12 | FEHMO [2] 132/18 | 115/22 116/4 116/11 | 104/18 131/10 140/22 | 137/14 |
| 177/9 177/14 178/3 | 187/7 | 121/24 122/4 122/13 | followed [4] 92/11 | French [1] 122/4 |
| 192/2 194/6 195/3 | F | 12 | 112/17 125/25 187/18 | Friday [3] 87/18 88/3 |
| 197/18 | fellow [2] 100 | 128/18 129/4 130/1 | following [9] 3/1 | 165 |
|  | 194/15 | 132/19 136/18 142/ | 35/22 37/16 44/1 | front [3] 47/7 109/9 |
| factional [1] 15/24 | felt [4] 13/23 14/2 | 145/14 150/15 150/15 | 44/18 66/16 90/17 | 164/18 |
| factions [2] 16/12 | 183/1 184/7 | 150/18 155/10 15 | 91/22 176/1 | ier [1] 2/ |
|  | female [1] 116 | 165/11 173/7 173/24 | foot [1] 31/11 | ustration [1] |
| facto [1] 133/5 | females [2] 111/1 | 176/6 182/11 182/11 | forecast [1] 1 | 169/20 |
| factor [1] 180/23 | 11 | 5/22 186/9 | foreseen [1] 189/24 | fulfilled [1] 176 |
| factors [5] 68/18 | ferocious [1] 17/3 | 191/2 196/7 | forever [3] 44/3 58/2 | fulfilling [1] 129/17 |
| 106/19 120/6 122/23 | Ferris [1] 101/9 | firstly [8] | 89/6 | full [10] 1/8 2/21 $2 / 2$ |
| 162 | few [20] 10/14 10/15 | 45/12 64/2 70/22 | foreword [2] 192/18 | 69/16 110/10 133/21 |
| failed [1] 28/12 | 24/2 31/1 31/10 87/20 | 74/18 84/21 115/13 | 192/19 | 136/13 139/6 168/9 |
| failing [2] 17/8 | 121/23 126/6 129/25 | Fiscal [3] 2/16 3/6 | form [2] 5/4 11/2 | 169/11 |
| 141/14 | 143/9 152/2 152/3 | 3/23 | formal [1] 80/13 | fully [3] 127/20 |
| failure [3] 15/23 | 154/18 165/8 165/10 | five [11] | formatting [1] 159/23 | 152/25 153/1 |
| 39/18 82/14 | 170/21 172/11 174/23 | 61/1 61/2 61/3 87/20 | former [2] 53/6 75/21 | function [8] 20/15 |
| failures [2] 142/3 | 189/1 196/9 | 105/5 111/9 111/19 | forms [2] $157 / 7$ | 20/20 53/2 71/21 72/7 |
|  | fewer [3] 59/19 59/21 | 114/11 162/15 | 181/12 | 72/17 177/19 180/7 |

(62) extent... - function

| F | $10$ | 19 |  | 16 |
| :---: | :---: | :---: | :---: | :---: |
| 9 |  | go |  | GPs [1] 90/4 |
| functions [3] 2/1 |  | go |  | gradient [1] 118/3 |
| 73/16 153/2 |  | 47/10 58/15 87/21 |  | grant [1] 154/13 |
| fundamental [2] 37/4 | 39/14 39/15 51/10 | 124/13 156/19 196/6 | 11/24 12/19 12/21 | grants [1] 153/3 |
|  | 56/8 56/9 57/2 57/2 | going [71] 6/4 8/18 | 13/20 14/6 16/3 16/18 | granular [1] 182 |
| funding [2] 14 | 63/12 64/23 |  |  |  |
| 185/7 | 66/19 66/20 75/10 | 18/15 21/14 29/10 | 19/12 19/20 19/2 | 22/11 122/15 |
| furlough [1] 48/20 | 77/8 77/19 78/6 81/12 | 30/1 30/15 31/1 | 22/13 24/10 24/19 | 4] |
| furloughed [2] 74/ | 83 |  | 24/20 24/24 28/21 | 118/16 123/23 171/12 |
| 84/22 | 113/11 116/13 118/2 | 38/17 43/21 43/24 | 29/6 29/12 30/4 30/1 | graphs [4] 97/21 |
| further [7] 88/1 | 118/18 121/2 125/14 | 53/14 55/1 56/8 56 | 30/25 31/25 32/3 | 97/25 172/18 173 |
| 129/24 158/5 184 | 13 | 56 | 32 | gras |
| 185/13 188/22 198/1 | 147/16 158/20 161/22 | 61/1 61/2 61/18 62/5 | 37/15 40/7 43/17 44/8 | great [13] 35/4 35/12 |
| future [7] 20/5 41/19 | 163/11 163/17 164/8 | 62/21 62/25 68/14 | 44/23 46/10 46/17 | 35/13 48/8 60/16 |
| 60/17 63/12 99/4 | 17 | 68/20 69/18 70/15 | 47/6 48/5 48/12 48 | 67/21 68/2 |
| 101/13 101/17 | 185/15 185/23 | 73/21 76/14 77/15 | 48/16 48/25 51/20 | 84/8 85/13 |
|  | gets [6] | 84/18 94/13 97/23 | 52/24 53/12 53/15 | 136/3 |
| G | 32/8 54/6 | 104/3 113/8 126/8 | 53/25 54/25 59/18 | ater [17] 9/22 |
| ga | 170/25 | 126/22 128/6 128/7 | 60/12 61/10 61/22 | 26/4 44/23 52/25 |
|  | getting [9] | 133/16 133/16 141 | 66/13 66/14 67/24 | 11/5 111/23 |
| 196/4 | 29/6 37/4 56/22 82/ | 141/9 144/7 146/22 | 68/3 71/4 71/16 71/18 | 115/3 117/21 117/21 |
| ga | 83/1 176/14 184/8 | 147/4 152/9 152/18 | 71/24 72/11 72/12 | 120/19 144/22 147/1 |
| gateways [1] | give [26] 1/7 1/10 | 154/10 159/14 160/ | 73/16 73/24 77/17 | 152/13 176/11 |
| gateway [1] | 3/24 9/5 25/10 27/2 | 163/18 167/25 169/17 | 78/5 79/5 82/18 83/12 | 196/ |
| gathering [1] | 29/5 35/6 39/10 45/18 | 170/7 181/18 185/1 | 87/10 88/9 89/1 | greatest [ |
| gave [7] | 52/12 60/4 68/25 | 187/16 193/16 194/2 | 97/16 97/18 98/1 | 102/16 |
| 17/22 60/15 89/1 | 69/16 70/11 79/18 | 195/7 197/18 197/2 | 98/25 99/2 103/5 | tly [1] |
| 91/18 152/10 | 84/14 114/25 126/23 | gold [1] 65/13 | 136/17 137/5 137/10 | green [2] 52/19 102 |
| Gavin [4] 136 | 133/25 136/13 157/23 | gone [1] 106/6 | 137/16 138/10 138/17 | Green Book [1] |
| 136/11 136/14 199 | 172/11 180/3 194/6 | good [42] 1/4 1/15 | 140/7 140/15 140/20 | /19 |
| Gavin Freeguard [1] | 197 | 10/25 16/25 21/9 21/9 | 141/11 141/25 142/9 | rew [1] |
|  | given [14] 5/6 20 | 21/12 22/16 36/25 | 142/13 142/14 142/16 | grey [1] 113/15 |
| GDPR [2] 152/14 | 33/4 38/15 39/1 | 39 | 142/20 143/2 143/12 | grip [1] 15/24 |
|  | 64/13 100/10 102/3 | 53/13 54/21 55/14 | 143/25 144/10 144/18 | gross [2] 84/23 |
| general [18] | 105/19 122/22 131/22 | 56/18 61/2 64/19 | 145/2 145/3 146/2 | 166/19 |
| 37/13 41/1 46/8 63/16 | 132/21 154/4 194/21 | 65/12 65/17 66/4 | 146/9 146/12 146/1 | ground [2] 93/15 |
| 66/14 73/23 97/2 | gives [4] 109/1 115/6 | 68/20 69/14 69/15 | 147/13 147/14 147/20 | 159/7 |
| 100/4 109/8 116/24 | 129/4 130/20 | 69/21 82/10 85/9 | 148/9 148/13 148/14 | group [20] 2/19 |
| 123/22 143/17 144/11 | giving [9] 20/21 | 86/17 99/8 99/22 | 148/17 148/21 149/3 | 41/14 42/9 46/9 46 |
| 153/25 154/5 157/14 | 21/19 40/22 84/12 | 102/12 103/20 132/7 | 149/18 150/2 150/10 | 47/9 111/9 111/19 |
|  | 90/19 90/20 177/6 | 132/25 133/11 136/6 | 150/18 150/20 150/24 | 115/8 115/12 115/14 |
|  | 191 | 136/6 144/17 164/17 | 151/17 151/2 | 15/19 116/17 116/ |
| $143$ | glad [1] | 185/15 194/16 | 153/10 153/23 15 | 18/23 126/5 |
| generally [8] 28/10 | glancing [1] | goodness [1] 5/25 | 156/20 156/24 15 | 162/25 190/18 191/9 |
| 93/19 94/24 105/24 | Glasgow [1] 123/16 | Google [4] 179/25 | 159 | 8 |
| 109/6 149/1 150/20 | global [6] 5/17 5/18 | 180/2 180/6 180/10 | 168/15 173/9 173/15 | 32/17 35/18 46/18 |
| 150/21 | 7/2 7/25 67/16 67/23 | Google Maps [1] | 176/2 176/18 178 | 47/18 83/1 |
|  | go [52] | 180/10 | 181/21 182/1 | 2/21 104/14 105/17 |
| generation [1] | 19/3 19/6 21/1 22/20 | Gordon [4] 1 | 182/4 182/19 182/22 | 107/13 107/13 108/2 |
| 197/24 | 35/17 40/2 42/20 49/2 | 17/12 45/22 65/15 | 183/1 183/6 183/ | 115/14 116/17 138/8 |
| generic [3] 1 | 74/21 77/12 77 | Gordon Brown [4] | 183/12 183/19 | 9187 |
| 146/25 155/8 | 85/3 88/4 88/12 92/8 | 13/1 17/12 45/22 | 5/6 186 | 187/6 188/5 |
| Generically [1] | 114/15 115/5 117/17 | 65/15 | 188/10 190/8 192/23 | groupthink [1] 16/11 |
| genesis [2] 81/6 | 118/10 118/21 119/9 | got [28] 2 | 196/ | Wn [3] 58/1 |
| 111/3 | 119/17 120/21 123/2 | 11/7 12/12 15/4 24/23 | government's [12] | 56/ |
| - | 127/25 132/19 132/23 | 27/4 27/4 27/21 32/9 | 3/4 3/19 10/1 14/4 | rowth [1] 65/8 |
| 71/23 | 139/4 141/3 148/3 | 35/2 47/13 53/4 53/4 | 32/24 39/8 40/8 48/6 | ardian [1] 158/22 |
|  | 152/18 160/3 160/24 | 58/18 66/7 66/9 66/1 | 61/19 62/14 127/1 | guidance [3] 52/19 |
| 117/24 117/25 | 162/14 163/9 166/22 | 118/1 132/20 135/21 | 182/ | 144/22 159/11 |
|  | 167/23 168 | 166 | governmental [ | e [1] 101/20 |
| 115/21 124/7 124/23 | 170/25 174/8 180/11 | 17 |  | [4] 1/5 1/9 25/10 |
| get [56] 1/25 4/6 5/3 | $\begin{aligned} & \text { 181/23 182/8 189/1 } \\ & 190 / 24191 / 10194 / 3 \end{aligned}$ | Gove [1] 14/11 governance [1] 73/4 | governments [4] <br> 54/7 63/12 68/4 | 199/3 <br> Gus O'Donnell [1] |

(63) functioning - Gus O'Donnell

| G | 17 | 194/10 194/14 195/1 | Hennessey [1] 64/19 | $11$ |
| :---: | :---: | :---: | :---: | :---: |
|  | happy [3] 132/19 |  | her |  |
| $1 / 9$ |  |  |  | 114/2 |
|  |  |  | herd immunit |  |
| H | 21/23 32/25 39/21 | he | 53/2 | 190 |
| had [99] 7/12 13/23 | 41/7 68/23 74/20 | 9/4 9/13 10/21 | here [12] 24/24 47/22 | honest [5] 16/10 22/2 |
| 14/22 17/21 21/5 | 74/21 75/5 75/5 75/18 | 11/7 12/5 69/10 71/12 | 55/16 60/25 111/19 | 22/3 33/2 90/8 |
| 21/15 21/16 23/17 | 79/12 84/20 97/6 | 71/16 71/20 | 131/25 161/7 173/2 | honour [1] 158/1 |
| 23/19 23/19 23/22 | 97/20 114/25 129/7 | headings [1] | 185/17 186/13 186/24 | hope [8] 65/4 68/24 |
| 24/1 24/1 24/4 24/13 | 170/23 | headline [2] 10/6 | 188/23 | 134/12 136/2 163/11 |
| 24/14 24/21 25/8 | harder [2] 34/15 40/9 | 130/2 | here's [2] 48/4 55/17 | 197/14 197/23 198/1 |
| 25/20 26/10 26/11 | Harry [2] 3/15 4/2 | headlin | heritages [1] 117/12 | hoped [2] 194/25 |
| 26/13 28/19 28/20 | Harry Begg [2] | heads [2] | hermetically [2] |  |
| 32/3 33/11 33/14 | 4/2 | 11/14 | 53/24 57/16 | hopefully [1] 197/25 |
| 33/19 35/12 36/24 | has [41] 14/15 14/16 | health [56] 5/21 5/22 | heterogenity [1] | hospital [8] 94/18 |
| 63/17 64/2 65/6 67/25 | 17/4 17/16 30/1 34/21 | 6/17 6/21 6/22 6/22 | 116/18 | 94/22 105/22 106/6 |
| 68/6 68/16 74/2 74/23 | 35/12 48/17 52/7 | 21/11 40/4 41/23 | Heywood [1] 2/2 | 106/9 113/15 114/1 |
| 76/8 78/2 78/17 80/25 | 52/19 53/1 54/10 55/6 | 42/17 44/4 59/17 | hiding [1] 56/21 | 114/24 |
| 82/7 82/8 82/8 82/21 | 63/11 67/21 72/7 | 60/14 73/3 76/3 78/5 | high [10] 36/20 | hospitalisations [1] |
| 82/22 83/1 83/4 83/8 | 80/11 82/11 90/23 | 79/24 94/3 94/3 98/10 | 113/23 114/1 119/24 | 155/20 |
| 83/25 85/11 92/6 | 95/7 100/11 112/13 | 98/11 98/16 98/17 | 120/10 120/12 16 | hospitals |
| 92/11 92/13 92/22 | 134/6 138/25 139/15 | 101/11 103/3 119/1 | 192/15 192/15 192/22 | 113/10 113/1 |
| 92/25 94/19 94/21 | 140/16 145/8 146/8 | 119/18 119/22 120/11 | high-level [1] 163/15 | 178/14 |
| 94/22 103/5 103/13 | 146/17 146/21 149/16 | 123/1 125/1 125/2 | high-quality [1] | hostile [1] |
| 103/13 103/15 109/9 | 152/6 152/8 165/15 | 126/13 133/22 133/23 | 36/20 | hour [4] 11/12 80/4 |
| 109/20 109/21 109/25 | 169/25 180/6 185/8 | 153/17 154/6 154/11 | higher [13] 37/3 | 104/3 186/19 |
| 116/9 117/12 119/2 | 192/8 195/11 197/15 | 157/16 157/21 158/3 | 106/22 108/2 109/25 | House [3] 2/12 2/22 |
| 119/19 119/21 119/24 | 198/13 | 158/23 159/5 161/9 | 115/13 116/23 117/9 | 21 |
| 121/25 131/19 138/4 | hasn't [4] | 161/13 168/1 177/19 | 119/3 119/4 120/4 | household [2] 90/21 |
| 139/12 145/14 146/10 | 151/24 152/25 195/18 | 177/20 178/25 179/15 | 121/18 122/1 124/4 | 117/12 |
| 147/7 148/7 148/8 | hat [1] 80/6 | 185 | highest [14] 19/12 | housing [1] 117/4 |
| 148/8 151/3 156/9 | hatches [1] | 191/5 191/7 191/ | 19/19 55/4 79/4 84/11 | how [85] 5/23 6/8 |
| 156/11 156/23 157/10 | hats [1] 71/25 | healthcare [10] | 97/22 105/17 108/11 | 7/18 10/6 11/19 15/8 |
| 160/25 164/2 168/15 | have [280] | 140/8 154/15 156/2 | 112/14 115/15 115/19 | 15/11 17/25 18/15 |
| 176/17 179/16 183/5 | have stuck | 157/6 164/5 178/13 | 118/4 119/14 122/13 | 18/17 21/21 22/21 |
| 184/25 193/9 194/25 | 196 | 187/9 187/10 187/13 | highlight [1] 148/1 | 25/20 27/22 33/16 |
| 195/5 | hav |  | highlighted [2] | 50/1 |
| hadn't [3] |  | healthy [3] 16 | 5 | 2/5 52/6 52/9 52/19 |
| 192/23 192/23 | 126/25 136/3 147/1 | 17/10 114/19 | highlighting [2] | 55/19 56/8 56/9 59/5 |
|  | 147/19 158/9 177/ | hear [7] 165/5 | 119/14 129/12 | 61/4 65/11 65/19 66/9 |
| 156/13 171/3 171/5 | having [30] 12/25 | 169/2 175/4 180/2 | highly [2] 44/22 86/5 | 66/19 67/6 68/3 69/20 |
| halfway [1] 169/23 | 23/6 35/2 44/1 47/14 | 194/15 197/16 | him [6] 25/9 71/5 | 70/19 74/22 77/1 77/6 |
| Hancock [8] 103/3 | 47/18 50/21 57/5 63/4 | heard [13] 16/24 | 171/12 194/10 194/15 | 77/8 82/18 84/22 |
| 103/9 103/10 103/19 | 66/15 84/13 93/2 | 18/25 85/17 136/1 | 194/19 | 4/24 90/19 91/3 |
| 103/22 126/10 126/12 | 97/20 106/5 106/22 | 154/15 156/7 157/3 | his [6] 14/5 14/15 | 123/6 127/17 128/19 |
| 171/11 | 116/18 118/4 118/5 | 157/17 165/4 177/13 | 160/24 160/25 167/1 | 128/25 130/7 132/1 |
|  | 124/15 132/25 134/3 | 187/4 187/6 188/5 | 194/15 | 137/20 140/20 140/21 |
| hand [7] 18/5 28/24 | 159/24 160/4 160/23 | hearing [1] 198/22 | historical [1] 88/7 | 141/12 141/15 143/21 |
| 29/2 30/1 47/20 | 161/11 161/19 171/25 | heart [1] 82/14 | hit [2] 5/1 198/3 | 50/10 155/21 156/3 |
| 130/23 156/23 | 188/20 196/15 196/18 | hearted [1] 54/16 | hits [1] 28/7 | 158/19 160/17 163/3 |
| handle [1] 32/12 | he [53] 2/3 2/5 $2 / 5$ | heavy [1] 72/20 | hoc [2] 31/21 160/7 | 163/6 163/18 164/7 |
| handling [1] 171/18 | 8/23 9/1 12/3 12/4 | held [2] 90/16 97/17 | hold [6] 27/13 48/22 | 167/6 172/12 174/11 |
| hands [1] 170/23 | 14/5 14/8 14/15 14/19 | help [10] 27/22 60/19 | 80/6 109/12 161/11 | 174/12 174/15 174/19 |
| happen [9] 15/17 | 17/25 24/2 25/9 25/9 | 65/20 79/6 100/1 | 176/18 | 22 180/11 180/15 |
| 29/13 45/22 107/14 | 26/1 26/2 26/12 26/13 | 128/18 128/21 139/1 | holders [1] 152/2 | 181/3 181/14 181/15 |
| 157/16 166/6 167/21 | 45/23 67/21 71/3 71/5 | 151/8 195/11 | holding [1] 137/15 | 183/7 186/23 188/7 |
| 175/7 182/12 | 71/5 71/6 85/24 85/25 | helped [1] 147/10 | home [9] 76/18 84/25 | 191/15 196/4 196/24 |
| happened [5] 82/11 | 86/11 132/24 133/1 | helpful [8] 65/15 | 85/12 95/17 95/23 | 196/25 |
| 147/14 175/6 183/10 | 133/4 169/8 169/25 | 90/23 92/9 100/22 | 105/22 106/6 106/9 | however [1] 51/15 |
| 197/25 | 170/3 170/8 170/10 | 101/1 122/17 196/19 | 113/14 | Hub [2] 190/16 |
| happening [2] 15/10 | 170/12 170/25 171/9 | 197/9 | homes [18] 56/11 | 190/20 |
| 130/11 | 172/4 191/19 192/3 | helpfully [1] 127/3 | 76/9 76/15 76/18 85 | huge [3] 84/5 135/24 |
| happens [2] 147/24 | $\begin{array}{lll} 192 / 20 & 192 / 21 & 192 / 21 \\ 193 / 25 & 194 / 7 & 194 / 9 \end{array}$ | helping [1] 150/9 hence [2] 6/25 23/6 | $\begin{aligned} & 94 / 795 / 1395 / 14 \\ & 105 / 24105 / 25106 / 3 \end{aligned}$ | $195 / 24$ <br> hugely [1] 196/18 |

(64) Gus O'Donnell... - hugely

Humber [1] 112/25
humour [1] 93/12
hundreds [2] 161/9 167/14
hungry [1] 194/17

## I

I accept [1] 54/19
I actually [2] 11/1 14/21
I also [2] 99/7 157/21 I always [2] 6/19 47/12
I am [9] 69/17 69/17 71/8 71/16 71/20 128/13 132/6 133/18 134/2
I apologise [1] 120/2 I ask [2] 126/4 193/13
I asked [1] 103/23
I assist [1] 132/22
I be [1] $81 / 20$
I being [1] 170/24
I believe [2] 63/14
94/12
I call [2] 23/3 34/16
I can [6] 13/22 17/9 19/1 152/12 155/25 194/19
I can't [2] 33/16 96/22
I chair [1] 2/25
I commence [1] 1/7
I completely [1] 116/8
I confirm [1] 125/24
I could [5] 14/23
25/10 28/2 28/8 88/16
I did [3] 75/1 79/8 147/22
I do [10] 27/12 60/21 63/1 64/20 99/24 100/9 100/19 122/7 132/5 152/19
I do apologise [1] 120/23
I don't [10] 17/16 33/5 38/11 126/23 132/21 149/16 152/7 157/10 169/10 197/10 I emphasise [1] 114/6
I ever [2] 17/21 53/11 I exaggerate [1] 107/6
I fear [1] 4/3
I feel [2] $4 / 94 / 12$
I felt [1] 14/2
I finished [1] 2/22
I follow [1] 131/10
I found [1] 22/18

I go [1] 132/23
I got [1] 135/21
I grew [1] 21/21
I had [7] 13/23 21/5
21/15 25/8 83/8 194/25 195/5
I have [7] 64/20 80/3 82/24 99/22 125/22 125/24 198/4
I haven't [1] 177/11
I head [1] 71/12
I heard [1] 136/1 I hope [3] 65/4 134/12 197/14 I indicated [6] 78/1 92/6 106/15 117/8 120/9 133/3
I introduced [1] 108/23
I just [9] 4/8 4/11
38/2 67/13 68/24
134/5 166/15 168/24 176/4
I knew [1] 49/23
I know [3] 77/8 79/8 92/16
I listen [1] 197/13
I lived [1] 5/10
I look [3] 14/21 170/4 170/6
I made [1] 124/6 I make [2] 68/7 68/8
I may [8] 41/13 45/10
51/23 69/18 69/20 70/15 79/18 115/17
I mean [30] 13/21
19/5 19/22 21/3 21/6
29/5 32/2 36/8 40/20
42/7 44/13 44/15
56/13 56/18 63/1
63/19 64/19 74/3
82/13 92/8 114/22
116/17 120/1 124/22 127/19 131/2 145/14 151/5 161/4 185/6
I mention [1] 173/11 I mentioned [1] 148/22
I might [1] 147/22
I note [1] 193/24
I occasionally [1] 138/23
I pause [1] 24/6
I personally [2] 6/1 78/12
I please [1] 1/4
I probably [1] 133/3
I produced [1]
108/20
I promise [1] 108/17
I provide [1] 71/18
I pushed [1] 75/4
I put [1] 83/9
I really [2] 51/10 80/6

I refer [2] 6/19 184/12
I referred [1] 111/11
I remain [1] 90/22
I remember [3] 25/7 75/3 145/14
I repeat [1] 102/10
I right [1] 130/11
I said [2] 25/11 75/3 I say [7] 14/20 17/9 23/3 37/12 40/20 53/6 127/10
I scribble [1] 170/5
I shall [2] 104/5 154/22
I should [6] 3/22 4/5 23/24 81/11 137/19 195/1
I stepped [1] 3/25
I stress [1] 43/25
I suppose [1] 9/25
I suspect [1] 133/4
I take [1] 71/7
I talk [1] 102/7
I tend [1] 137/3
I think [146] 1/19
3/15 4/13 5/25 5/25
6/6 8/6 10/10 13/14
13/14 14/23 16/20
22/22 25/14 25/24
39/5 39/9 39/18 40/20 43/1 44/13 44/18 45/25 47/21 48/24 $\quad$ I wonder [3] 145/12 50/ 148/1 154/19 50/19 50/25 54/3 54/3 I work [1] 65/13 55/13 56/2 56/22 57/7 I worked [2] 14/1 58/23 60/7 60/7 63/11 14/23
68/21 70/2 70/3 74/3 I would [51] 7/21 9/8 74/4 74/15 80/15 85/20 86/7 91/17 92/18 93/24 96/20 99/6 99/13 101/15 102/22 104/4 113/4 113/6 113/19 121/20 125/25 129/23 137/2 140/3 140/7 140/19 141/4 141/6 141/17 142/2 142/8 142/12 143/13 143/24 143/24 144/4 144/18 144/24 145/19 145/23 146/7 146/9 147/9 148/8 148/13 149/21 150/15 151/12 151/16 152/3 152/6 152/24 153/11 157/9 157/13 158/10 158/18 160/24 163/13 164/25 166/15 168/19 169/8 171/19 172/19 173/12 173/24 174/3 I'm [41] 3/7 8/1 24/15 174/17 174/23 174/25 $25 / 3$ 28/2 49/21 52/18 175/14 176/17 176/20 177/2 179/11 179/12 179/21 180/13 180/21 181/11 181/13 182/23

10/3 10/3 13/2 19/22 25/16 25/22 28/2 28/22 29/19 31/13 31/19 34/23 36/9 37/24 38/14 38/14 39/5 39/19 42/13 43/1 43/2 48/15 49/2 49/12 50/7 65/2 66/2 74/15 74/17 78/25 79/8 86/12 87/19 88/11 100/22 107/20 109/2 109/21 110/18 112/19 113/25 115/17 115/20 118/16 121/12 124/25 125/13 129/14 163/11 I wouldn't [1] 42/12 I'd [5] 4/20 65/12 73/4 84/20 90/8 II [6] 126/22 127/10 129/11 129/24 148/18 150/25 69/18 70/15 83/7 90/8 100/17 120/1 126/8 126/22 128/6 128/7 132/19 133/7 141/1

146/22 150/15 152/6 152/9 152/18 154/10 155/25 159/14 160/1 169/17 170/7 170/22 175/4 179/12 181/18 188/25 189/13 192/1 192/7 193/24 197/16 I'm afraid [1] 49/21

| I thought [1] $11 / 4$ | I've [25] 34/19 48/5 |
| :--- | :--- | :--- | | I turn [1] 93/14 | $60 / 24$ 65/7 65/12 |
| :--- | :--- | 65/23 82/13 87/8 95/21 97/20 99/21 100/10 104/25 125/4 132/21 133/24 137/18 149/20 157/17 177/10 178/7 183/10 186/8 188/4 193/19

lain [1] 103/24
lain Bell [1] 103/24 Ian [16] 69/9 69/12 69/17 69/19 135/20 154/16 157/4 178/4 178/17 179/14 191/1 191/12 192/2 192/6 192/9 199/9
Ian Diamond [2] 69/17 69/19 iceberg [3] 155/20 155/21 156/11
ICU [4] 168/12 168/12 174/11 178/15 idea [2] 46/3 161/4 ideal [1] 25/7 ideas [2] 17/15 141/18
identified [6] 82/5
82/6 83/5 168/15 179/9 182/18
identifies [1] 99/9 identify [3] 59/15 82/21 190/1 identifying [2] 82/11 137/25
if [177] $5 / 158 / 48 / 7$ 12/20 13/16 13/21 13/22 16/5 16/6 18/7 18/9 18/15 18/23
19/23 21/15 22/16
24/16 24/18 24/19 25/18 26/16 27/4 27/9 28/24 29/23 29/23
29/25 31/11 32/23 33/2 38/24 39/6 39/10 39/12 40/22 41/13 42/15 43/7 43/7 43/8 44/13 44/25 45/10 46/25 48/3 48/24 49/17 51/23 52/7 53/1 53/4 53/8 53/21 54/4 54/21 55/15 55/21 55/24 56/4 57/4 58/7 58/18 62/4 63/5 64/2 64/22 66/6 68/10 69/18 69/20 70/15
if... [106] 71/13 74/20
74/21 79/18 82/21 83/23 84/1 84/22 84/24 86/12 86/24 87/6 87/16 88/4 88/6 91/8 91/11 92/16 93/10 93/25 97/25 100/16 101/1 102/2 102/9 107/2 107/4 107/15 107/19 107/22 111/24 112/22 115/17 118/10 118/17 118/21 119/17 120/2 121/2 121/24 123/4 123/24 124/20 124/22 124/22 126/19 127/25 128/1 128/5 132/20 135/13 135/15 140/10 141/3 141/7 141/9 142/8 144/8 145/13 148/1 152/12 152/23 153/2 153/4 154/19 155/12 155/19 157/11 157/21 158/5 159/16 159/17 160/3 162/14 164/11 165/19 166/13 166/21 166/21 167/6 167/23 168/14 169/22 170/7 170/10 170/25 174/1 174/13 176/6 177/10 178/6 179/2 181/23
184/16 184/22 188/22 189/13 191/10 193/15 194/3 194/12 195/8 197/14 198/3 198/5 198/15
IFG [1] 137/15
IFS [1] 3/9
ill [3] 2/2 125/1 125/2 ill health [1] 125/1 illness [1] 114/1 imagine [6] 23/25 24/17 24/18 52/1 63/4 167/19
immediate [3] 31/6 187/8 196/3
immediately [4] 27/6 80/1 174/6 198/9 immunity [1] 53/21 impact [39] 6/9 6/13 6/14 6/16 6/16 18/2 23/22 26/22 32/23 40/1 40/14 40/24 41/4 42/16 48/18 48/19 52/2 52/4 59/16 59/17 59/22 61/15 67/24 68/9 76/20 83/16 96/13 109/8 109/22 110/2 110/16 116/1 116/10 117/13 120/9 138/7 187/5 187/10 187/21
impacted [2] 105/14 inadequacy [1] 111/4
impacting [1] 107/8 impacts [7] 42/17 42/18 42/19 42/19 42/21 104/14 191/9 impediment [1] 100/15

## imperative [2]

147/16 193/7
implement [1]
165/11
implementation [2]
32/17 46/18
implemented [1]
140/6
implication [4] 44/13 53/22 54/5 119/4 implications [4] 44/4 47/11 67/1 67/3 implicit [4] 33/11 33/19 34/2 34/5 implicitly [2] 54/20 54/21
implied [1] 56/19 implying [1] 34/1 importance [9] 23/6 36/13 42/5 57/10 65/8 84/6 90/15 101/18 190/13
important [54] 4/13 4/16 5/1 5/7 7/18 7/21 8/7 10/9 11/19 12/5 12/6 15/25 20/9 22/5 22/18 36/19 36/22 47/12 55/13 60/21 66/6 69/23 73/6 73/15 75/16 78/20 84/16 87/24 89/2 90/7 99/6 101/2 102/23 103/15 113/4 113/19 113/25 120/6 121/20 127/18 127/20 132/1 138/24 139/3 139/25 153/25 154/3 157/18 157/20 163/10 165/18 167/6 167/24 168/7
importantly [1] 194/23
imposed [1] 136/3 impossible [1] 47/17 impression [2] 130/21 131/1
improve [5] 100/12 140/20 149/8 176/3 176/12
improved [2] 79/9 191/16
improvements [1] 185/25
improving [2] 191/6 193/11
inability [2] 55/8 156/20
inadequate [2] 174/16 189/13 inappropriately [1] 195/23
inaudible [1] 67/9 inauguration [1] 46/21
incentives [1] 145/5 include [7] 38/1 80/20 81/11 86/17 87/17 94/7 191/6
included [9] 45/24 85/18 85/19 85/21 126/25 136/20 157/17 183/2 189/9
including [11] 2/14 2/19 2/24 3/5 78/5 128/12 137/9 140/11 157/16 178/18 185/10 inclusivity [2] 83/23 85/8
income [2] 59/16 60/13
inconsistencies [1] 186/23
incorporated [3]
135/1 135/3 189/4
increase [2] 52/25 91/12
increasing [2] 95/20 105/19
incredibly [10] 4/14 29/6 32/25 62/15 78/20 84/16 90/6 94/12 99/6 103/15 incumbent [1] 2/6 indeed [13] 3/2 20/3 56/20 69/4 75/13 78/1 90/3 92/19 103/14 105/17 124/12 168/19 198/17
independence [1] 66/20
independent [3] 64/8
71/10 72/4
independently [1] 185/4
INDEX [1] 198/24
indicate [2] 82/3 179/6
indicated [13] 38/22
78/1 92/6 97/20 104/25 106/15 117/8 118/1 120/9 133/3
136/22 137/13 185/21
indicates [2] 17/4 128/3
indication [1] 180/3
indications [1]
180/14
indicative [2] 94/24 151/9
indicator [2] 93/25 181/14
indicators [2] 94/13 117/23
indirectly [1] 10/24
individual [8] 4/10
30/16 60/4 66/8 68/9
68/23 161/15 167/15
individuals [3] 15/25 16/2 63/15
individuals' [1] 62/4
inefficient [1] 160/11
inequalities [3] 84/2
189/22 191/5
inequality [1] 186/10
inertia [2] 144/12
145/12
infant [1] 124/23
infected [6] 106/8
128/20 156/14 166/17
166/24 179/3
infection [25] 38/11
75/12 76/21 76/22
87/15 89/22 89/24
89/25 91/23 93/5 95/8
98/5 106/12 108/10
110/3 110/6 110/8
110/9 110/11 110/13
110/14 120/12 135/5
178/19 188/20
infections [3] 91/1 104/13 124/19
infectious [1] 189/20
infer [2] 33/16 68/18
inferring [1] 56/19
infighting [1] 15/24
inflated [1] 130/23
inflation [1] 74/20
inform [1] 156/15
information [61] 5/2
5/5 7/4 7/6 7/10 11/23
15/1 26/21 26/25
28/16 31/8 32/9 40/8
42/6 43/10 43/15
43/22 50/25 55/21
55/21 56/4 65/21 78/7
78/18 80/14 82/17
84/6 85/21 87/4 87/6
88/7 88/10 88/12
88/21 88/22 94/2
96/18 97/16 97/19
98/2 100/4 100/7
100/21 101/6 101/21
118/12 134/7 134/24
154/12 157/2 158/6
158/9 158/15 163/3
164/16 164/23 173/2
173/14 174/10 177/22
183/16
Information
Commissioner [2]
158/6 158/9
informative [2] 97/7
135/23
informed [1] 68/2
informing [4] 26/19 26/20 73/16 73/18 infrastructure [1] 159/18
infrastructures [1] 183/23
inherent [1] 100/16
initial [1] 92/12
initially [3] 86/23
92/10 115/24
initiative [2] 155/16 176/9
initiatives [4] 149/13
176/2 176/23 197/22
innovation [3]
149/12 153/4 182/10
innovative [8] 86/1
86/16 86/21 86/23
176/15 178/24 191/17
191/17
input [1] 85/10
INQ000 [1] 173/6
INQ000048313 [1]
171/1
INQ000056187 [1]
164/12
INQ000056476 [1]
194/4
INQ000174715 [1] 169/22
INQ000189725 [1]
58/20
INQ000215548 [1] 1/17
INQ000237314 [1]
126/24
INQ000252620 [2]
81/16 81/24
INQ000268012 [1]
70/2
INQ000271436 [3]
70/10 110/22 118/22
INQ000283367 [1]
108/21
INQ000292765 [2] 113/8 120/23
inquest [2] 81/12 81/13
inquiries [1] 68/9
inquiry [22] 1/6 1/16
4/14 69/13 69/16
69/24 108/20 120/24
134/21 136/12 136/16
137/25 139/15 148/23
153/7 162/11 162/12
177/6 197/25 199/5
199/11 199/19
inside [1] 75/9
insight [8] 75/1 75/4
88/22 96/2 153/21
164/8 180/25 195/25
insights [13] 73/17
73/19 74/4 75/18

1
insights... [9] 75/25
77/19 78/15 78/22 88/20 89/21 91/20 134/23 135/12
instance [4] 149/25
150/8 161/12 165/24
instantly [1] 193/22
instead [5] 75/6
160/7 160/20 166/24 172/24
Institute [8] 2/16 3/6 3/22 22/13 54/13 137/10 137/11 157/25
institution [2] 30/21 98/12
institutional [4] 28/12 29/25 32/12 64/15
institutions [2]
138/17 182/20
instructed [2] 139/6 139/12
instructions [1]
137/24
insufficient [2] 28/20 38/10
integrity [1] 131/19
intended [1] 164/21
intensive [1] 38/13
intentions [1] 20/21
inter [1] 12/4
interactive [2]
165/24 175/21
interest [8] 2/17 2/23
64/10 67/21 91/19
101/15 148/23 153/7
interested [1] 135/13
interesting [7] 69/5
75/7 135/23 141/18
178/10 194/9 197/16
interests [3] 62/4
62/6 64/11
interface [1] 11/19
interfaces [1] 162/4
interim [2] 118/20
152/2
interlinked [1]
105/20
internal [5] 34/10
85/12 165/25 173/7 173/15
international [4]
95/22 120/25 121/3 121/21
internecine [1] 17/6 internet [1] 180/6 interoperability [2]
142/12 142/22
interpret [2] 35/23 37/25
interrupt [2] 51/8 114/5
interval [1] 84/16 interventions [2] 6/22 40/14 interviewed [1] 157/25
interviewers [1] 76/9 interviewing [1] 85/4 into [49] $4 / 2$ 13/3 20/18 23/15 24/1 28/14 33/10 33/18 34/20 40/3 51/11 52/15 54/6 58/16 69/24 71/2 74/21 76/9 77/18 77/24 78/2 79/22 80/25 85/3 87/21 106/6 117/14 122/8 132/17 133/17 133/22 133/23 135/1 144/4 153/22 157/7 160/25 161/23 164/8 167/2 173/3 174/22 175/23 179/14 180/23 180/25 185/15 194/17 197/4
introduce [2] 76/19 76/23
introduced [3] 85/6
108/23 153/15
introduction [1]
139/3
introductions [1] 109/12
intuitively [1] 170/18
invest [1] 145/8
involve [3] 36/23 49/12 51/25
involved [11] 22/6 62/13 74/5 74/8 74/10 99/4 99/13 99/17 99/22 99/25 195/10 involving [7] 9/10 95/1 104/23 105/1 105/21 110/24 115/7 Ireland [5] 91/9 98/13 99/24 112/17 138/22 is [483]
isn't [17] 12/13 37/19 39/16 87/19 126/15 127/16 142/24 146/1 150/16 159/18 166/4 166/19 167/12 174/17 175/11 180/24 183/18 issue [22] 6/21 9/18 15/5 15/5 19/6 21/7 33/7 36/17 53/20 54/2 67/15 69/23 85/17 103/4 118/23 125/3 126/19 132/23 133/2 143/24 186/24 191/24
issued [4] 63/14 157/3 157/5 158/15 issues [37] 5/18 11/14 11/16 12/6 15/20 22/21 23/5

25/14 34/10 38/25 $\quad 185 / 14$ 185/21 188/4 41/23 45/11 50/2 52/10 57/9 59/3 63/13 $\quad 192 / 8$ 192/17 197/7 66/6 78/3 83/19 84/25 197/21 198/5 85/2 100/17 104/12 Italy [5] 121/17 129/25 137/24 142/6 $121 / 25$ 121/25 122/2 142/25 146/20 147/6 153/6 155/4 159/23 171/20 172/20 195/8 196/17

## it [469]

it's [177] 4/13 5/7
6/21 8/5 8/7 9/8 9/11 11/11 12/5 12/13 12/24 15/12 16/5 17/22 18/7 19/16 19/22 21/6 21/18 21/23 24/16 27/9 29/22 30/2 30/2 30/7 30/9 30/14 30/17 30/19 30/20 31/5 31/9 31/11 31/15 31/22 32/4 34/1 34/15 36/14 37/3 37/10 37/17 38/5 40/20 47/12 47/15 48/16 49/1 49/11 49/17 49/19 49/21 51/22 53/13 54/16 54/17 56/2 56/21 57/24 58/14 59/19 60/21 61/25 61/25 62/20 62/22 64/11 66/15 67/1 67/3 68/23 74/21 77/6 82/7 84/15 84/16 86/5 86/22 86/23 87/18 96/20 99/6 101/7 101/17 101/25 107/16 108/22 109/23 114/22 114/25 120/25 121/13 126/15 joined [1] 78/7 127/16 128/3 128/3 Joint [4] 98/16 129/16 129/23 131/14 135/20 137/19 138/14 138/24 139/3 139/25 141/4 141/9 141/17 141/18 144/25 145/1 147/9 147/24 147/25 149/10 149/10 149/16 149/19 149/22 149/23 150/16 151/1 153/1 154/11 157/1 157/11 157/13 159/9 159/20 159/23 159/23 161/9 161/10 161/24 164/20 165/12 165/14 166/2 166/3 166/12 166/16 166/25 167/12 167/16 168/3 169/12 170/2 171/2 172/16 172/21 173/6 173/7 173/11 174/6 175/5 175/11 175/15 176/20 180/24 9/11 12/11 22/7 24/17 181/6 181/24 183/9 25/1 25/1 28/9 29/22 183/15 183/24 183/25 35/24 38/2 41/20

44/21 45/9 66/16 67/13 68/24 73/10 77/21 79/16 79/18 80/8 80/20 81/11 82/18 86/11 87/20 88/17 88/25 91/7 93/10 94/8 94/10 94/22 97/14 99/21 101/12 101/25 104/20 108/17 111/18 113/4 115/17 118/16 121/6 126/6 126/22 127/3 127/25 128/1 128/6 129/24 129/25 130/1 130/17 131/13 132/4 134/2 134/5 136/19 139/3 141/1 141/4 141/7 141/9 141/25 142/10 143/24 146/23 148/1 161/1 163/5 163/19 166/13 166/15 166/22 168/20 168/24 169/25 172/11 172/17 172/23 174/13 175/11 176/1 176/2 176/4 177/24 180/5 180/11 182/15 183/25 184/9 184/22 186/8 188/15 191/10 192/12 192/16 194/3 196/7 196/22 197/3 198/2
Justice [3] 96/4 126/5 134/19 Justice Cymru [1] 134/19
Justice group [1] 126/5

## K

KC [3] 126/2 132/22 199/13
Keeling [2] 193/25 194/4
keen [4] 47/18 98/23 102/8 102/9
keener [1] 192/3 keep [7] 1/11 70/12 141/9 161/11 192/5 196/11 196/16
Keith [5] 1/3 104/9 126/9 126/14 136/2
Keith's [1] 156/7
kept [2] 14/4 51/7
key [17] 15/15 16/20
34/24 34/25 56/2 78/3
87/5 87/5 127/10
127/25 138/1 142/6
167/25 172/19 185/20
190/16 191/6
Khunti [2] 92/17 92/20
kicked [1] 46/11
killing [1] 56/11
kind [26] 10/11 18/21
kind... [24] 23/2
31/17 32/7 32/13
34/21 37/4 39/6 39/18
39/20 40/23 42/11
42/22 42/23 52/20
56/14 60/24 64/2 64/3
64/4 65/3 65/21 75/10
135/20 197/17
kindly [2] 104/11
136/15
kinds [2] 45/1 133/24
King's [2] 3/15 4/3
King's College [2] 3/15 4/3
Kingdom [14] 24/10 80/10 96/15 97/17 102/15 102/25 110/25 112/8 112/13 112/15 121/4 123/17 123/20 124/21
knew [4] 49/23 66/5 159/10 184/16
knots [1] 161/10
know [116] 5/25 7/7 9/11 12/25 13/6 13/15 14/20 15/14 15/21 17/11 18/24 19/24 20/4 20/25 21/5 21/10 21/15 21/19 21/20 21/21 21/22 22/4 22/5 22/22 22/23 23/25 26/14 27/4 30/7 30/7 30/11 30/14 32/3 32/16 33/5 35/14 36/19 36/22 38/11 39/7 40/21 42/7 42/20 43/25 44/2 44/20 47/21 47/23 47/25 48/19 48/19 51/1 51/4 53/7 54/7 54/9 55/16 55/18 56/20 57/3 57/23 58/3 58/17 60/9 60/12 60/25 61/4 62/2 62/16 63/1 63/4 63/5 65/2 65/20 66/4 68/11 68/19 74/7 74/22 77/5 77/6 77/7 77/8 79/8 79/21 82/10 82/18 82/25 84/22 87/18 87/19 90/14 92/16 94/10 100/17 102/1 103/17 105/16 123/6 124/8 138/17 141/24 145/1 155/21 157/11 161/12 163/14 166/18 169/9 169/9 169/10 184/8 196/24 197/3 197/6 198/11
knowing [3] 11/15 39/21 180/7
knowledge [3] 1/19 120/2 136/23
known [20] 14/3 20/14 30/21 38/6 61/11 63/17 76/24 78/8 78/14 91/23 108/10 154/16 155/15 156/9 162/22 164/9 176/6 180/7 189/7 189/15

## L

labs [2] 47/25 47/25 lack [20] 23/22 25/5 26/3 26/16 30/5 30/5 40/6 40/8 103/10 141/17 141/18 142/18 143/21 146/15 151/9 153/13 155/10 160/5 164/6 187/14
lacked [1] 182/20
lacking [1] 146/21 Lady [20] 43/8 45/4 48/8 51/9 67/18 69/2 69/6 69/8 85/16 104/2 132/17 132/22 134/13 134/17 135/18 136/9 154/19 155/2 170/21 197/10
laid [2] 39/24 57/6
language [1] 141/22
lapses [1] 63/5
laptop [1] 195/13
large [9] 56/12 68/17 70/6 83/11 125/7 140/16 141/10 151/3 173/14
largely [5] 38/6 59/20
119/13 121/18 122/4
larger [1] 91/13
largest [5] 90/25
91/15 91/16 129/5 129/19
last [29] 1/19 5/8 65/7 66/15 85/17 87/16 87/17 104/4 130/17 140/14 141/24 143/15 146/7 149/5 149/10 151/2 151/5 165/10 171/4 181/4 185/8 186/19 187/7 188/16 189/1 192/12 194/3 196/9 198/2
lasting [1] 125/1
lastly [2] 44/7 184/21 late [6] 46/21 77/24 91/10 92/12 141/23 189/16
later [18] 2/2 2/4 3/1 5/24 81/4 92/18 94/19 108/5 117/14 134/8 156/8 165/23 169/25 173/12 178/25 187/21 189/3 194/6
latest [2] 78/15 88/20 latter [2] 89/23

| $198 / 11$ | $98 / 22162 / 9191 / 6$ |
| :--- | :--- | latterly [4] 110/11 Let [1] 150/12

110/17 137/15 139/14 let's [17] 27/13 27/14
Laura [1] 76/15
Laureate [1] 3/23
law [2] 72/5 143/10
lawyers [1] 145/16
layer [1] 40/3
lead [12] 1/6 30/3
46/10 48/5 48/13
48/16 48/25 69/13
96/15 144/4 199/5 199/11
Leader [1] 25/9
leaders [1] 196/23
leadership [7] 51/17 56/22 58/4 61/21 71/18 146/20 196/15 leading [1] 96/24 leads [2] 52/15 192/12
learn [3] 4/14 65/5 198/15
learned [1] 98/22 earning [4] 3/13 24/9 Leveling [1] 186/6 142/2 196/7
learnt [2] 162/9 186/3 levels [14] 29/24
least [14] 58/18 $\quad$ 63/6 109/16 110/8
67/19 118/5 125/11
125/13 142/15 144/6
146/17 165/1 171/17
172/5 176/20 179/21 191/12
leave [2] 2/9 175/11
leaving [2] 20/22 179/15
lecture [5] 3/5 3/8 3/9 liberalisation [1] 3/24 4/1
led [6] 49/2 75/11
96/16 96/20 145/17 145/21
left [1] 110/18
legacy [1] 142/25
legal [10] 100/15 101/19 143/8 143/24 144/1 144/8 145/21 145/25 153/13 157/24
legality [2] 144/9 144/11
legislation [3] 133/20 143/20 145/24
Leicester [2] 124/10 124/14
length [2] 71/20 178/3
lengthy [1] 137/19
less [11] 12/22 12/22 109/18 114/13 115/23 124/12 149/10 173/14 178/11 180/7 181/3 lesser [5] 7/15 7/16 147/1 152/13 185/24 lesson [1] 190/17
lessons [4] 4/15

38/2 42/9 42/13 42/14 52/1 63/8 64/12 68/13 90/9 127/25 141/1 144/9 173/6 194/3 194/10
letter [8] 126/14 126/16 126/20 127/1 127/12 128/7 128/10 129/14
letters [1] 127/3
letting [1] 171/11 Letwin [1] 25/25
level [23] 11/22 17/4 19/12 19/20 26/17 30/4 49/11 49/25 53/17 55/5 55/5 57/11 57/20 68/6 75/13 79/4 limited [8] 23/16 109/23 110/14 122/15 65/19 80/14 118/13 124/16 163/15 182/5 $118 / 14$ 128/11 129/4 183/21
Levelling [1] 186/6 157/9
limits [1] 54/1
line [13] 28/14
111/17 111/19 113/14
113/15 113/15 114/15
114/16 123/23 161/13
161/14 178/14 189/5
lines [2] 155/14 162/15
link [9] 37/19 37/20
86/19 100/10 106/17
116/25 117/25 135/12 135/14
linkage [1] 133/24
linked [2] 86/8
116/14
linking [3] 116/12
116/12 191/15
list [11] $2 / 212 / 24$
60/25 81/18 83/10
83/14 88/16 95/20
137/24 141/10 149/16
Lifestyle [6] 76/25
77/3 77/21 89/3 89/20 listen [2] 191/18 98/9
lifetime [1] 65/7
lifted [1] 133/23
lifting [1] 72/20
light [1] 67/22
like [78] 4/20 5/11
7/25 14/17 14/20 15/9 15/13 15/15 15/18 17/5 17/9 17/17 18/8 22/13 22/15 22/21 23/3 23/6 25/20 32/5 32/5 33/2 34/22 38/24 39/23 42/1 42/22 42/22 45/22 45/24 46/3 48/20 52/10 54/15 56/21 58/14 64/3 65/10 65/13 68/18 71/13 83/23 84/1 86/25 87/16 88/6

197/13
listens [1] 158/23
listing [1] 141/5 lists [1] 161/14
literacy [1] 196/23
little [15] 22/25 25/1
29/5 42/1 66/11 73/10 73/11 108/5 118/14 148/11 157/22 161/3 165/15 176/9 195/3
live [5] 22/17 23/20 24/5 24/22 88/21
lived [2] 5/10 83/24
Liverpool [2] 95/24 124/13
lives [2] 58/2 100/12
living [5] 15/19
108/13 116/19 117/12 149/24
local [19] 47/23
49/15 50/17 50/21 181/22 182/2 182/3 182/7 182/13 182/18 182/21 183/1 183/11 183/17 183/20 184/4 184/14 185/5 185/6
location [2] 80/16 180/2
lock [3] 44/3 55/18 168/8
lockdown [7] 3/16 55/19 58/22 68/11 110/25 165/12 169/25 lockdowns [2] 60/10 182/8
locus [1] 143/11
logical [2] 16/16 54/5
London [9] 3/15
76/16 112/24 115/24
122/13 124/1 124/5
124/8 124/15
long [35] 17/25 21/6
24/25 28/22 30/25
31/24 32/11 32/22
33/14 67/9 90/14
90/24 91/22 91/23
92/2 92/4 92/21 93/3
93/4 93/7 104/13
108/10 108/12 125/1
125/4 125/7 125/9
125/17 125/18 137/20
141/9 166/13 175/15
183/14 184/24
Long Covid [14]
90/24 91/23 92/2 92/4
92/21 93/3 93/4 93/7
104/13 108/10 125/4
125/7 125/9 125/17
long-lasting [1]
125/1
long-standing [1] 184/24
long-term [2] 31/24 91/22
longer [8] 25/12
31/10 31/17 100/23
133/15 134/6 159/1
184/9
longer-term [2]
31/10 31/17
longitudinal [3]
90/21 90/21 92/7
look [46] 2/21 14/21
35/19 38/2 39/20
47/22 55/16 64/24
68/9 68/21 73/21 80/8
81/4 83/20 93/16
101/3 105/4 106/24
107/19 112/22 115/2
121/25 122/15 124/20
124/22 124/22 124/24

137/7 139/15 147/3 155/12 162/1 165/17 166/2 166/14 167/8 169/12 170/4 170/6 172/12 173/6 173/20 174/8 184/22 188/22 190/22
looked [6] 3/18 45/2 85/22 140/23 147/2 167/20
looking [15] 16/13 43/19 45/11 68/16 85/19 85/22 140/18 147/4 149/7 164/9 166/18 167/11 169/15 194/7 196/8
looks [1] 194/1
Lord [28] $1 / 41 / 51 / 10$ 1/15 1/23 2/2 2/4 4/17 14/18 17/2 17/22 22/8 24/6 25/2 36/12 43/7 45/9 49/23 51/19
55/10 58/21 64/1 67/15 67/21 68/1 69/3 69/4 199/3
Lord Heywood [1] 2/2
Lord O'Donnell [23]
1/4 1/10 1/15 1/23
4/17 14/18 17/2 22/8 24/6 25/2 36/12 43/7 45/9 49/23 51/19 55/10 58/21 64/1 67/15 67/21 68/1 69/3 69/4
Lord Sedwill [2] 2/4 17/22
Lords [3] 2/12 2/22 21/4
lose [1] 50/25
loss [3] 13/17 15/24 53/17
lost [2] 193/18 196/5 lot [31] 5/8 5/12 12/7
15/20 17/11 47/9 66/2 66/5 87/18 87/21 91/18 106/10 118/13 140/23 143/20 145/20 146/8 146/14 150/21 158/3 158/23 161/15 161/19 164/1 172/14 183/10 184/11 185/9 185/9 186/18 190/13 lots [16] 6/19 37/2 37/3 44/21 48/1 63/5 68/8 68/14 68/17 68/19 148/19 149/7 175/21 184/17 185/15 197/21
love [1] 25/22
loved [1] 61/17
low [6] 37/14 110/8
120/18 130/20 130/25
190/8

Iower [12] 109/3
109/16 117/7 117/8 119/19 119/22 120/1
120/17 121/19 124/16 183/21 183/21
lowest [2] 112/18 118/6
lunch [2] 126/9
132/23
lunchtime [1] 77/14
M
machine [9] 8/24 11/18 27/22 28/1 28/3 108/3 118/25 119/10 119/15
machinery [4] 30/11
32/14 148/12 149/18
made [35] 4/19 6/2 13/25 15/12 16/16 16/19 34/14 35/1 35/19 35/22 39/20 39/23 40/9 54/14 55/3 59/25 63/7 68/4 97/12 98/22 101/22 124/6 131/19 133/19 135/8 135/22 139/1 139/18 150/14 158/2 162/21 165/12 181/10 196/9 196/11
main [4] 74/17 93/4 93/18 128/16 mainly [1] 60/9
maintain [6] 55/23
66/20 74/18 74/24 79/12 84/20
maintained [1] 195/19
Major [1] 12/25
majority [4] 83/3 106/13 111/13 113/12 make [94] $4 / 87 / 12$ 8/5 8/12 8/13 9/16 13/7 13/20 15/1 16/5 16/14 16/23 18/13 19/16 20/1 20/6 20/12 20/23 26/23 27/14 27/23 30/8 39/3 41/12 43/24 44/2 44/5 44/16 47/12 50/7 50/11 51/15 53/25 54/8 55/8 58/4 58/12 60/23 65/1 65/20 66/18 68/7 68/8 74/23 75/5 76/10 76/23 78/9 78/19 83/25 85/7 85/8 86/11 92/12 92/22 92/25 96/6 97/6 97/21
100/19 100/20 102/12 107/2 122/18 124/23 125/13 138/14 139/4 139/24 143/21 144/1 144/7 144/14 145/6 148/6 151/21 154/1

155/11 163/2 163/9
181/15 182/3 192/22 164/24 166/20 167/11 194/25 195/5
170/8 174/15 174/19 map [2] 124/22 176/13 182/16 183/13 124/23
183/18 193/7 193/14 194/9 196/17
makers [15] 5/3 7/6
7/11 20/17 21/2 21/8 34/24 36/15 58/12 73/16 138/1 138/4 156/4 164/23 165/1 makes [9] 27/8 41/9 53/5 53/7 55/22 91/24 140/21 142/21 194/14 March 2020 [3] 74/4 making [37] 4/22 4/24 7/18 8/11 16/3 16/25 18/2 21/13 21/16 23/11 23/23 24/10 24/14 28/17 31/18 34/15 51/25 52/11 53/3 54/20 54/25 55/17 66/3 77/7 77/20 84/17 87/22 131/25 133/5 140/1 140/3 155/19 160/8 167/25 188/11 195/18 197/17
male [1] 116/7
males [2] 111/1
111/5
man [1] 176/22
manage [8] 12/2 18/6
18/15 25/21 26/15
62/14 65/20 128/21
managed [1] 129/1
management [8]
22/8 22/11 22/16 41/22 87/4 87/9 88/9 145/15
managing [2] 36/18 53/21
Manchester [1]
124/5
mandatory [2] 59/20 188/11
manipulates [1]
161/24
manipulating [1]
140/16
manner [1] 77/17
Manual [1] 65/3
manually [2] 81/2 172/25
many [37] 10/7 11/4 26/1 28/20 48/17
50/12 61/24 74/13 82/18 82/24 87/6
96/21 99/2 101/12
104/5 108/9 115/1
120/3 126/6 128/19
130/7 141/15 143/3
147/1 147/23 150/3
153/12 167/7 174/12
174/12 178/7 180/15

Maps [1] 180/10
Marc [2] 169/23
177/3
Marc Warner [1] 177/3
March [9] 74/4 78/13 104/24 155/15 158/18
165/3 169/24 173/24 174/3

104/24 158/18
mark [7] 2/4 19/25
20/4 20/11 49/4
192/16 192/22
Mark Sedwill [1] 19/25
marked [2] 105/13 172/22
markedly [2] 113/2
119/3
mask [1] 89/4
mass [1] 95/24
massive [4] 4/7
48/19 68/22 110/16
massively [2] 36/22 60/14
masters [1] 9/12
material [6] 17/2 42/3
45/3 55/3 98/15
139/19
materials [1] 139/8
mathematical [2]
97/8 97/10
mathematics [1] 87/21
Matt [6] 103/3 103/19
103/22 126/10 126/12
171/11

## Matt Hancock [6]

103/3 103/19 103/22
126/10 126/12 171/11
matter [11] 4/21
17/22 21/10 24/16
30/20 55/11 61/23
132/1 144/8 155/24 174/19
mattered [1] 24/13 matters [15] 59/10
59/16 71/11 137/20
137/25 138/11 138/16 138/18 138/19 138/21
139/2 139/8 169/21 174/14 187/19
maturity [3] 150/9 183/24 184/5 maximum [1] 63/10 may [65] 1/4 1/13 2/25 4/17 5/25 10/23
12/3 15/17 20/23
22/25 27/7 27/23

| M | media [2] 5 | 148/2 | /23 | Mc |
| :---: | :---: | :---: | :---: | :---: |
| may... [53] 32/18 |  |  | 5/13 |  |
| 32/22 33/10 33/18 |  |  |  |  |
| 34/12 34/19 40/15 |  | 19/1 25/24 27/13 32/5 |  | moment [30] 7/7 7/8 |
| 41/13 45/10 46/21 | 6 82/10 82/12 | 32/6 34/7 41/3 41/4 | 44/15 44/16 60/22 | 8/18 8/21 36/11 38/20 |
| 51/23 55/10 6 | 82/16 82/20 83/2 | 41/16 41/23 44/3 | 61/13 61/23 66/14 | 45/4 52/22 70/9 73/22 |
| 69/18 69/20 70/15 | 89/11 101/20 | 52/11 52/20 59/5 | 87/5 146/10 | 0/9 81/21 86/11 |
| 79/18 83/9 87/3 90/3 | medicinal [2] 54/1 | 65/20 67/5 67/6 72/11 | Ministry [1] 96/4 | 89/23 104/2 126/22 |
| 96/14 102/18 115/17 | 60/3 | 114/13 114/23 115/2 | minor [1] 82/7 | 127/11 129/12 137/9 |
| 118/8 118/20 124/9 | medicine [2] | 118/17 140/20 141/19 | minorities [2] 186/25 | 146/23 147/25 148/18 |
| 124/10 127/2 127/9 | 54/1 | 142/20 144/10 144/13 | 190/18 | 152/25 160/2 161/20 |
| 127/25 128/10 130/5 | meet [3] 32/6 33/4 | 144/20 145/4 145/7 | minority [3] | 165/5 165/13 167/8 |
| 132/22 136/9 145/17 | 89/ | 145/9 145/13 147/2 | 187/10 1871 | 172/12 197/22 |
| 151/15 151/17 151/19 | meeting [9] 11/15 | 149/3 161/3 161/5 | minute [1] | momentous [6] 4/22 |
| 151/19 155/7 162/12 | 29/11 34/2 78/12 90/2 | 163/24 163/25 167/5 | minutes [2] 40/11 | 16/5 44/9 55/3 57/10 |
| 163/19 164/3 164/8 | 90/16 103/20 103/20 | 167/24 168/6 178/12 |  | 60/2 |
| 169/8 174/24 177/11 | 165/7 | 179/6 181/15 182/5 | m | moments [2] 154/18 |
| 180/22 185/15 186/4 | meetings [2] 89/9 | 182/13 183/7 183/7 |  | 184 |
| 189/5 193/23 195/21 | 165 | 183/8 187/2 189/2 | mislea | Monday |
| May 2021 [1] 189/5 |  | 190/22 192/10 192/25 |  |  |
| May 2022 [1] 87/3 |  | 16 |  | ney [1] 54/18 |
| maybe [1] 3 |  | M | adingly | onitor [3] 90/24 |
| mayors [3] 49/15 |  |  |  |  |
| 50/22 |  |  | $\begin{gathered} \text { missir } \\ 168 / 2 \end{gathered}$ | monitoring [2] 189/8 |
| me [20] 5/16 13 | membership [1] 64/4 | $39 / 2441 / 2541 / 2$ | missions [2] 14 | eypox [4] |
| 24/15 25/9 32/25 65/7 | men [2] 105/12 | 56/1 165/18 166/2 | 149/20 | 95/6 195/10 195 |
| 75/6 90/9 93/12 101/1 | $105 / 13$ | $16$ | take | 95/6 195/10 |
| $\begin{array}{lll} 103 / 23 & 132 / 20 & 132 / 22 \\ 150 / 12 & 171 / 2 & 189 / 13 \end{array}$ | men | minimise | mistaken [1] | monthly [3] 74/ |
| 192/12 197/22 198/3 | mental [3] 6/16 59/17 | 52/1 52/2 52/3 52/4 | mistakes [1] 167/21 | 93/6 93/7 |
| 19 | 60/1 |  | mistrusted [1] | onths [7] |
|  |  | m |  | 77/4 77/11 100 |
| 19/22 21/3 21/6 | 129/25 147/22 173/11 | 42/16 | mitigate [1] 67/7 | 57/11 157/11 |
| 29/5 32/2 33/15 34/4 | 176/4 181 | minister | mitigating [2] 53 | ore [98] 1/13 9/10 |
| 36/8 40/3 40/20 42/7 | mentioned [ | 8/25 9/6 9/8 9/10 | 193/2 | 10/20 17/20 20/23 |
| 44/13 44/15 | 17/19 48/5 61/24 | 11/25 12/3 12/8 12/9 | mitigation [2] 51/13 | 22/6 25/12 25/13 |
|  | 67/21 76/6 76/21 | 12/11 12/17 13/4 13/6 | 53/20 | 27/10 29/3 29/4 29 |
| 64/19 74/3 79/16 | 88/20 95/21 95/24 | 13/1 | mixed [2] | /6 31 |
| 82/13 82/15 82/24 | 148/22 149/23 152/10 | 17/15 18/6 18/9 18/20 | mixing [1] 180/15 | 40/14 48/1 48/11 49/1 |
| 92 | 152/20 152/25 158/9 | 18/23 19/13 24/2 26/1 | Mm [1] 65/9 | 49/2 49/21 50/21 |
| 124/22 127/19 | 161/22 188/9 | 26/11 26/20 27/5 | mobile [4] 108/3 | 53/2 53/11 57/1 |
| 131/2 131/2 142/12 | merely [1] | 27/16 27/17 28/7 30/8 | 118/25 119/10 119/1 | 57/18 58/13 67/23 |
| 143 | merge [1] 8 | 53/7 65/25 66/1 66/9 | mobilisation [1] | 73/6 75/14 81/4 87 |
| 161/4 165/20 1 | merits [1] 51 | 66/9 66/12 67/9 |  | 92/14 95/1 95/11 |
| 185/6 192/17 | mess [2] 170/4 171/6 | 167/10 168/25 173/8 | mobility [3] 179/ | 108/13 109/18 |
| meaning [1] | messengers [1] 37/8 | 176/14 177/21 192/20 | 180/1 180/20 | 13/2 114/12 114 |
|  | met [2] 31/7 103 |  | model [7] 46/11 | 115/23 116/19 116/19 |
| 15/14 17/19 57/6 | meta [1] | Ministe | 46/17 48/5 48/14 49 | 116/20 116/21 120/7 |
| 110/5 114/10 144/12 | methodological [ | 27 | 50/4 50/6 | 124/12 141/12 142/2 |
| 145/25 149/23 151/ | 85/10 96/5 100/2 | ministerial [16] 24/1 | modeller [2] 155/19 | 143/3 143/4 143/6 |
| 178/5 195/24 | meth | 24/21 25/5 25/22 26/4 | 156/1 | 144/2 144/22 147/3 |
| meant [9] 33/3 | 77/10 | 26/17 32/16 32/1 | modellers [3] 38 | 148/25 150/11 151/12 |
| 36/24 103/16 14 | method | 32/20 46/18 46/20 | 180/22 194/15 | 51/21 155/3 156/5 |
|  | 86/6 | 47/3 47/3 47/8 55/5 | modelling [8] 21/20 | 160/19 160/19 161/10 |
|  | methods [1] | 192/19 | 21/22 40/13 179/24 | 1/ |
|  | metric [3] 59/2 59/7 | ministers [50] | 180/17 181/9 188 | 165/5 165/23 166/1 |
| $1494 / 24$ | 59/7 | 6/13 14/1 14/22 14/25 | 195/10 | 167/2 172/15 172/16 |
| measurement | MH [1] 171/11 | 18/18 19/6 20/16 | models [5] 9 | 172/21 173/5 174 |
| measureme | Microsoft [1] 167/1 | 20/22 21/5 21/16 22/9 | 97/10 194/16 | 174/21 175/3 175/4 |
|  | Microsoft Word [1] | 22/15 22/19 23/9 | modern [1] 194/1 | 175/14 175/16 175/17 |
|  | 167/16 | 23/11 23/19 23/22 | modify [1] 49/13 | 175/21 175/23 176/15 |
|  | mid [1] 140/20 | 24/3 24/12 24/22 25 | module [5] 48/9 | 180/22 186/8 186/16 |
| $31 / 15$ | mid-90s [1] 140/20 | 25/11 25/12 25/18 | 137/24 162/12 185/1 | 188/3 189/4 190/19 |
|  | middle [2] 14/15 | 25/19 26/19 26/23 | 198/4 | 191/8 191/20 193/8 |

(70) may... - more
more... [1] 197/23 morning [7] 1/4 67/20 69/14 69/15 77/14 154/15 178/4 mortality [42] 76/3 86/9 87/8 93/14 98/14 104/12 105/11 105/16 106/24 108/2 109/3 109/16 110/24 111/11 112/10 112/13 112/24 115/6 115/12 117/2 117/16 117/18 117/22 118/4 118/14 119/1 119/3 119/19 119/22 120/1 120/17 121/5 121/14 122/1 122/11 122/22 123/18 123/19 124/17 124/24 134/3 135/11
most [29] 14/20
19/20 19/22 21/23
22/3 22/18 29/19 42/7
57/1 57/10 62/19
72/15 97/25 100/25 106/4 118/3 133/14 139/25 140/21 143/21 146/11 148/23 156/24 158/10 167/6 168/7 170/22 178/13 183/13
mostly [7] 5/21 21/3 22/2 22/6 45/2 45/3 65/24
motion [1] 39/1
mouth [1] 31/11
move [14] 21/4 21/11 31/19 46/5 50/10 81/3 86/24 91/11 117/14 152/9 155/3 159/14 177/24 181/18
moved [4] 60/20
74/25 75/7 91/13
movement [1] 181/3
moves [1] 113/21
moving [8] 16/6
28/20 87/24 108/17 149/14 168/9 180/4 181/15
MP [1] 103/3
Mr [48] 1/3 23/15 103/9 103/10 104/9 125/25 126/1 126/2 126/9 126/14 127/7 132/15 132/22 136/2 136/8 136/11 136/15 137/1 137/18 139/22 141/3 141/10 145/12 146/3 147/22 148/4 152/9 154/21 155/1 155/3 156/7 161/3 164/13 165/17 168/24 169/8 169/14 175/5 177/24 182/1 184/25

186/9 189/12 192/12 197/8 197/14 199/13 199/17

## Mr Freeguard [25]

 136/15 137/1 137/18 139/22 141/3 141/10 146/3 147/22 148/4 152/9 155/3 161/3 164/13 165/17 169/8 169/14 175/5 177/24 182/1 184/25 186/9 189/12 192/12 197/8 197/14
## Mr Hancock [2]

103/9 103/10
Mr Hancock's [1] 127/7
Mr Johnson's [1] 23/15
Mr Keith [5] 1/3
104/9 126/9 126/14 136/2
Mr Keith's [1] 156/7 Mr O'Connor [5] 136/8 145/12 154/21 155/1 168/24
Mr Thomas KC [1] 132/22
Mr Weatherby [3]
125/25 126/1 132/15 Ms [6] 126/1 132/16 134/15 134/16 135/19 199/15
Ms Shepherd [3] 126/1 132/16 135/19 much [85] 5/17 5/23 5/24 22/24 27/10 29/1 31/8 37/12 39/1 40/9 44/20 49/1 49/2 50/21 54/18 55/11 60/13 61/23 65/3 69/4 72/22 76/6 77/6 82/7 83/22 84/11 90/18 96/1 102/7 104/1 105/18 109/3 109/16 109/24 113/3 115/3 115/22 116/21 120/3 120/4 121/17 121/18 121/19 121/25 122/11 122/15 124/4 124/7 124/14 125/21 126/17 132/13 134/2 134/4 134/14 135/20 138/16 142/21 143/5 147/21 149/2 153/12 156/5 158/2 160/25 161/10 161/16 161/18 162/20 163/13 170/18 172/15 172/16 172/21 173/5 174/7 175/3 175/13 175/21 181/3 183/15 192/3 197/8 198/11 198/17 multi [1] 117/12 multidisciplinary [2]

6/24 36/10
multiple [1] 109/12 multitude [1] 122/23
must [3] 36/15 52/24 102/14
mutual [2] 13/23 14/24
my [65] $2 / 214 / 85 / 10$ 5/14 5/16 5/25 10/6 13/21 13/22 13/22 17/13 17/19 18/8 18/16 21/5 24/18 27/3 28/22 29/20 34/21 36/9 39/24 43/8 45/4 48/8 51/9 52/15 58/14 necessarily [7] 7/22 65/2 65/7 66/15 67/18 $9 / 2$ 34/15 56/3 123/6 69/2 69/6 69/8 74/5 78/7 80/2 80/6 81/20 85/16 96/24 100/18 102/4 103/23 104/2 120/2 132/17 132/22 133/12 134/13 134/17 135/18 136/9 138/23
138/25 140/10 140/18 154/19 155/2 157/17 170/21 174/21 197/10 197/10
my Lady [16] 43/8 45/4 48/8 51/9 69/2 69/6 69/8 85/16 104/2 132/22 135/18 136/9 154/19 155/2 170/21 197/10
myself [1] 101/10
N
name [7] 1/8 8/7 42/8
69/16 136/13 136/19 173/1
namely [2] 47/6
72/17
names [2] 151/19 178/11
narrow [2] 41/23 43/13
narrowly [1] 45/1
nation [2] 50/16 122/16
national [46] 5/13
29/21 34/23 35/5 42/2
45/12 45/13 45/23
47/1 49/7 49/10 50/2
54/13 69/9 69/10
69/17 70/8 70/20
70/24 71/1 71/2 71/13
72/6 72/8 72/17 72/25
73/1 73/8 73/15 83/23
84/7 87/1 91/11 98/20
99/7 99/9 103/24
121/24 133/22 133/23
136/5 147/25 150/16
158/22 165/11 192/19
National Statistician
[5] 70/24 71/1 71/2

72/6 103/24
National Statisticians
[3] 72/25 73/1 73/8
nations [3] 112/11
138/22 177/15
nature [15] 13/19
21/17 42/12 46/7
49/10 49/14 54/1
70/22 108/24 140/17
144/16 154/9 157/12
166/13 180/19
Nazroo [3] 85/16
86/8 86/10
near [1] 15/3

145/10 183/6
necessary [2] 51/20 57/12
need [91] 5/7 6/23
6/25 7/22 8/13 10/7 10/9 10/20 13/7 15/5 15/8 15/10 16/22 27/2 27/10 27/20 27/22 29/3 29/11 29/18 31/6 31/6 31/7 31/7 32/2 32/4 32/6 32/11 33/4 36/16 37/25 40/24 41/6 41/8 42/11 42/23 43/5 43/6 43/13 43/22 48/3 49/13 53/12 58/15 62/17 63/3 63/10 64/24 64/25 65/22 66/23 66/23 66/24 67/22 68/2 68/12 74/6 75/4 76/14 77/7 89/24 91/7 99/10 101/15 102/5 107/20 107/23 113/7 115/2 126/23 137/7 141/19 143/4 144/22 156/4 159/4 161/22 162/1 162/6 163/12 163/17 164/23 168/19 178/20 183/7 183/7 187/15 195/1 196/24 197/1 197/6
needed [20] 6/14 13/8 14/25 15/1 71/5 74/18 77/19 78/4 82/17 88/7 128/23 158/20 159/12 163/24 182/4 184/8 184/19 188/2 189/25 193/21 needs [8] 20/4 26/14 99/8 99/9 99/13 141/19 166/4 190/19
negative [3] 44/4
114/13 185/20
neither [1] 129/9
nervous [2] 54/3 54/4
never [3] 24/1 30/17
135/22
new [24] 7/23 10/18

19/4 20/5 23/2 25/4 26/12 27/6 27/9 27/25 50/4 50/6 54/14 56/4 57/24 65/4 74/4 75/11 76/11 76/11 76/12 86/5 185/18 186/3 newer [1] 143/6 newspaper [1] 10/6 next [12] 24/17 69/8 110/13 110/21 112/5 165/12 166/14 166/22 167/9 170/10 177/9 189/2
next week [1] 165/12
NHS [14] 39/23 42/20 59/8 94/3 94/4 94/5 101/10 168/5 168/16 170/4 170/19 191/2 192/4 194/20
NHS 111 [1] 168/5 NHS England [1] 94/3
nice [3] 54/12 54/12 77/6
Nick [1] 13/1
Nick Clegg [1] 13/1 night [1] 79/17 nine [2] 21/5 105/21 no [39] 13/13 13/21 14/10 14/16 16/3 17/4 18/20 26/13 33/16 43/13 63/19 63/23 67/18 74/1 79/25 88/17 91/25 93/10 93/24 100/15 104/25 107/19 110/5 110/6 111/16 111/18 130/7 133/15 134/6 151/6 168/17 170/13 171/2 176/6 177/8 177/9 186/16 188/1 194/14
No 10 [1] 91/25
No 10DS [2] 176/6 177/8
no one [3] 14/16 17/4 18/20
Nobel [1] 3/23
nobody [1] 39/24
non [3] 6/22 115/14 179/15
non-health [2] 6/22 179/15
non-white [1] 115/14
none [5] 67/19 122/2
170/6 171/13 175/5
nonetheless [1]
179/18
Norgrove [3] 103/1
103/8 126/10
Norgrove's [1] 128/2
normal [2] 9/22 17/7
normally [1] 90/18
north [2] 115/23
124/13
northern [6] 91/9 98/13 99/24 112/17 122/2 138/22
Northern Ireland [5] 91/9 98/13 99/24
112/17 138/22
northwest [2] 115/23 124/11
nosocomial [1] 106/12
not [182] 3/7 4/3 7/2 8/23 9/2 9/11 11/8 13/18 13/23 14/13 15/9 15/12 15/17 16/10 17/7 17/7 17/8 17/12 19/17 19/18 20/2 21/22 23/19 24/16 26/5 28/1 28/2 28/7 29/15 29/15 29/22 29/23 31/23 32/8 34/8 34/15 34/19 36/2 36/4 39/4 39/21 41/19 41/20 46/23 47/2 47/25 49/10 49/11 51/9 54/17 55/18 56/2 56/21 60/3 60/10 62/5 62/20 63/19 64/11 64/23 66/20 70/17 74/8 74/20 79/4 80/20 81/17 81/23 82/6 83/1 83/4 83/5 84/11 84/12 86/17 87/6 90/12 91/3 94/10 94/13 94/22 97/2 97/10 97/24 100/20 101/1 101/25 102/8 102/20 103/19 104/17 107/16 108/18 112/20 114/8 114/9 117/3 120/3 120/22 121/6 124/24 128/7 128/13 128/20 129/17 130/9 131/22 132/25 133/11 135/15 138/12 139/17 139/19 140/22 140/24 141/1 141/17 141/18 143/10 143/11 144/13 144/19 145/1 145/9 146/18 149/13 151/15 151/19 152/18 153/1 153/17 153/19 154/5 154/10 155/23
155/25 156/24 159/24
161/7 162/20 162/22 163/25 164/20 167/6 167/17 168/6 168/8 168/14 169/9 169/14 170/7 171/2 171/6 171/22 172/10 177/15 178/8 179/16 179/19 180/2 181/1 182/4 183/3 183/15 183/25

185/2 185/12 186/21 192/1 192/3 194/21 194/22 195/9 195/14 195/18 195/23 195/25 196/7 196/12 196/21 197/17 198/5
note [14] 23/15 48/10 86/13 110/18 113/19 114/25 117/13 128/13 154/3 157/21 165/3 188/25 189/2 193/24 notes [2] 14/5 175/22 nothing [3] 56/18 100/13 180/5 notice [5] 4/1 157/3 157/3 157/5 158/15 noticed [1] 170/12 notices [5] 63/14 100/8 101/22 157/10 157/18
noticing [1] 141/14 notified [1] 95/17 noting [1] 191/2 notwithstanding [1] 120/12
November [1] 14/8 now [35] 2/12 14/3 28/9 30/18 36/2 42/13 52/19 57/2 74/20 89/4 97/14 100/15 104/10 108/17 109/4 111/7 113/8 125/14 126/25 131/18 136/9 139/11 149/11 152/14 169/18 172/3 173/7 177/13 181/18 182/1 186/6 192/20 193/15 194/11 197/23
NPI [1] 67/24 NPI decisions [1] 67/24
NPIs [2] 6/7 181/1 NSC [4] 35/4 45/24 46/3 51/7
nuances [1] 89/17 nub [3] 52/22 68/1 94/17
number [75] 2/13 2/14 2/18 3/3 7/14 11/24 12/18 16/9 17/6 26/18 30/2 32/16 38/3 40/5 42/23 50/15 52/2 59/10 60/9 61/12 66/3 70/6 71/25 76/1 76/19 78/22 83/11 83/12 89/14 89/19 90/23 94/8 96/14 97/9 98/18 103/6 105/4 106/25 106/25 109/11 109/22 111/8 111/25 113/17 113/23 114/6 114/10 114/12 114/13 114/18 117/23 121/3 121/22 129/6 129/19 130/6

130/12 130/24 136/1
165/14 168/9 168/12 168/21 169/4 169/16
169/19 170/13 170/14 170/16 171/18 174/11 176/4 177/5 179/25
180/24
Number 10 [11] 7/14 11/24 12/18 16/9 17/6 26/18 30/2 169/16
169/19 171/18 177/5 number 28 [1] 165/14
numbered [1] 194/13 numbers [24] 38/10 56/12 60/7 60/9 83/3 87/23 88/9 105/25 107/16 107/19 107/20 111/18 115/11 121/7 125/8 166/7 167/2 169/7 170/4 170/5 171/13 172/1 172/17 178/15
nursing [1] 38/12 NUTS [1] 122/9

## 0

o'clock [1] 198/20
O'Connor [5] 136/8 145/12 154/21 155/1 168/24
O'Donnell [26] 1/4 1/5 1/9 1/10 1/15 1/23 4/17 14/18 17/2 22/8 24/6 25/2 36/12 43/7 45/9 49/23 51/19 55/10 58/21 64/1 67/15 67/21 68/1 69/3 69/4 199/3
obfuscation [1] 171/10
objective [4] 42/15 42/15 48/3 68/13
objectively [1] 58/10 objectives [6] 39/17 39/19 39/25 43/3 52/1 53/5
objectivity [1] 66/20 observation [3] 170/21 193/14 194/9 observe [1] 35/8
obtain [1] 192/3
obtained [2] 139/11 139/15
obvious [7] 57/9
61/11 61/16 69/25 73/14 141/4 192/17 obviously [21] 15/3 15/10 18/19 19/6 21/4 22/12 33/13 38/18 40/4 42/21 44/15 66/18 79/25 84/5 146/8 147/4 147/15 156/2 174/16 178/13

179/3
occasion [2] 100/23 103/1
occasionally [1]
138/23
occupation [4] 107/4 107/6 118/23 188/21
occupations [6]
107/11 108/4 116/20
117/10 118/24 119/2
occupied [3] 117/12
168/12 168/13
occur [4] 105/22
106/3 106/14 118/8
occurred [3] 107/1
111/13 113/13
October [4] 1/1 124/1
124/3 198/23
October 2020 [2]
124/1 124/3
off [8] 23/25 32/2
52/13 55/19 155/18
160/22 167/20 175/14
office [44] 2/3 7/14
10/21 11/3 11/5 11/7 11/8 11/20 12/15 12/18 24/1 26/19 28/9 28/11 28/19 29/1 29/3 29/23 30/2 30/21 48/22 49/2 49/3 69/10 70/8 70/20 71/12 72/8 72/17 73/14 75/9
77/22 78/2 83/22 84/7 88/13 88/14 136/4 146/10 149/25 150/1 150/8 153/21 160/14
officer [18] 23/7
26/10 36/6 37/22 43/16 80/12 89/12 146/16 146/23 150/19 150/23 150/25 151/4 151/5 151/11 151/18
151/23 196/15
officers [2] 150/14 150/17
official [2] 71/12 128/12
officials [8] 15/15 34/25 35/6 42/4 61/13 61/22 87/5 160/7
offs [9] 44/2 44/5
51/25 52/6 52/9 52/11 54/23 57/23 60/22
often [17] 5/20 27/24
29/13 37/7 66/1 66/12
84/15 90/13 91/16
96/5 130/4 131/24 141/21 142/18 183/12 186/25 194/17
Oh [1] 44/25
okay [8] 8/19 20/4
27/9 32/11 52/8 60/18
122/17 169/4
old [7] 82/14 82/25

105/19 106/16 106/17 112/3 112/3
older [3] 111/13
113/5 143/5
oldest [1] 105/17
olds [2] 107/14
107/15
Oliver [2] 25/25
192/20
Oliver Dowden [1] 192/20
Omicron [2] 88/5 110/17
on [292]
once [11] 1/23 15/5 32/8 50/15 63/7 92/8
115/9 175/7 175/12 189/14 189/14
one [140] 4/5 4/16
7/21 9/11 9/19 13/11
14/16 14/18 15/13
17/4 18/5 18/20 19/4
21/9 21/15 22/18
25/10 25/14 26/8
28/24 29/5 29/5 29/19
35/4 36/8 38/21 39/19
40/11 40/18 41/12
45/24 47/9 47/10
48/24 50/20 51/15
52/10 58/15 58/16
60/20 63/20 64/17
66/25 67/13 70/1 70/2
70/9 73/2 73/2 73/3
75/3 75/22 75/23 78/7
78/24 79/18 82/7 82/7
83/22 88/25 90/6
91/25 94/9 96/3 96/15
97/11 100/10 100/24
104/20 104/20 107/3
107/4 110/1 114/18
115/2 118/10 119/9
119/17 120/13 121/23
130/18 130/23 130/24
135/16 137/19 141/2
143/13 144/6 144/10
144/14 145/7 145/7
147/23 147/24 148/18
148/22 149/13 150/3
151/2 152/19 152/20
152/24 153/11 153/25
156/17 156/23 159/1
161/13 162/6 162/22
164/10 167/2 167/5
167/5 167/8 167/24
168/5 168/6 168/14
172/3 172/5 175/14
176/20 177/2 178/6
178/12 178/21 179/5
179/23 181/19 182/17
183/15 184/12 184/13
184/16 187/11 187/19
193/25 198/2 198/14
one page [4] 118/10
119/9 119/17 167/8
(72) northern - one page
one's [1] 86/20
ones [9] 29/20 31/10 44/4 61/17 66/11 71/6 140/24 153/19 162/17
ongoing [3] 31/12 108/9 152/7
onlial [1] 41/13
online [1] 186/3 only [20] 13/22 31/1
66/8 77/8 77/23 81/13 88/25 91/16 91/17
102/9 110/10 141/2 151/5 155/20 156/7 175/7 177/15 194/16 195/12 195/18
ONS [51] 70/8 70/22 73/19 73/23 75/5 75/8 75/20 75/25 78/14 79/10 80/18 81/8 81/23 85/18 85/21 86/4 87/4 88/12 88/24 89/14 91/2 92/3 93/20 94/24 95/13 95/20 96/10 97/2 97/3 97/15 98/2 98/23 99/3 99/13 99/16 100/1 101/19 102/14 110/13 116/9 116/24 118/11 120/24 128/19 134/4 134/21 135/4 178/18 178/19 188/19 191/14
ONS carried [1] 91/2
onto [1] 160/22
open [3] 60/1 86/1
137/11
opening [3] 108/20
108/23 156/7
openness [1] 126/21
operate [6] 15/8 31/1
59/5 62/4 65/1 101/23
operated [3] 28/13
68/5 70/21
operates [2] 42/1 64/22
operating [1] 65/11
operation [5] 30/5
38/4 160/1 162/10 163/19
Operation Cygnus
[3] 160/1 162/10
163/19
operational [13]
32/19 46/19 47/7
47/11 47/20 47/22 48/2 71/22 71/23 103/11 140/6 175/12 197/5
operationalised [2] 109/20 196/13
operationally [1] 47/17
operations [2] 47/14

168/10
operatives [5] 108/3 118/25 119/1 119/10 119/16
operators [1] 180/18 opinion [2] 32/21 73/25
opinions [9] 75/15 76/25 77/3 77/5 77/21 89/3 89/20 98/8 135/6
OPN [3] 76/25 77/21 83/15 opportunities [2] 140/21 142/1
opportunity [3] 23/20 99/4 134/7
opposed [5] 40/16 45/15 45/21 51/13 165/22
opposite [2] 27/20 197/18
Opposition [1] 25/9 opprobrium [1] 62/12
options [3] 27/15 35/8 35/9
or [173] 3/11 3/14 7/18 8/23 9/1 9/23 11/8 12/9 12/10 12/12 12/20 13/17 14/5 15/24 15/25 17/3 18/12 18/12 19/7 21/11 23/13 26/18 28/7 30/2 30/3 30/5 31/1 31/13 32/8 39/2 39/4 39/23 40/7 40/13 41/16 41/19 43/7 46/20 46/21 46/25 48/13 51/14 52/22 53/19 53/21 53/23 55/7 55/18 58/17 59/3 60/4 60/14 66/22 67/19 68/13 71/19 72/8 73/25 74/12 76/23 76/24 77/1 80/12 81/1 82/5 82/14 82/23 82/25 84/24 85/20 85/20 86/2 86/3 87/17 88/17 92/14 93/10 95/8 95/11 98/11 98/12 100/6 100/9 103/13 103/14 103/18 105/1 105/22 106/2 106/6 106/8 106/8 106/9 106/18 111/15 111/17 112/2 117/4 118/13 122/12 124/5 124/12 124/17 124/19 128/20 128/23 130/18 133/21 134/25 137/20 138/4 140/14 140/23 142/13 142/15 143/4 143/10 143/12 143/15 145/6 145/10

146/8 147/1 147/1 148/1 149/10 149/17 152/13 153/1 154/6
156/8 156/12 156/20 157/3 159/15 159/25 162/2 162/15 163/7 163/12 166/5 167/2 167/15 167/15 168/8 169/9 169/24 170/2 170/5 172/5 174/18 175/13 175/15 177/25 179/16 180/20 181/1 182/21 183/14 185/8 185/22 185/24 186/19 186/22 188/16 189/5 191/17 192/15 192/23 193/2 193/5 197/18 198/6
orange [2] 113/15 114/15
order [22] 1/13 1/24
6/12 22/10 28/13 41/16 45/13 52/23 52/25 57/14 70/13 78/17 89/15 93/14 98/24 101/18 102/17 133/6 141/20 156/2 164/23 167/11
organisation [4]
79/11 79/24 146/11 184/18
organisational [3] 144/6 144/15 144/25 organisations [6] 30/18 144/2 144/19 161/10 187/12 190/9 organised [1] 149/6 originally [1] 94/17 other [77] 15/4 17/15 18/25 19/5 20/13 28/14 29/2 29/25 34/9 35/2 35/15 38/19 41/21 42/5 43/21 44/21 45/3 46/5 67/13 68/12 68/18 68/20 77/1 78/4 78/18 78/25 82/2 88/24 90/23 91/19 92/15 93/7 93/23 94/2 96/10 96/14 96/21 98/10 98/18 105/7 107/13 113/10 116/14 117/13 118/25 119/25 121/20 123/4 123/6 125/16 134/25 144/24 146/4 149/2 149/22 153/19 157/7 163/5 163/23 168/4 173/9 176/2 176/18 176/23 177/2 178/21 179/13 179/25 180/12 186/16 186/17 187/12 187/14 188/1 188/12 189/10 198/7 others [14] 17/18

20/23 23/8 75/22
100/6 171/11 177/22 178/11 181/10 186/7 190/12 190/21 191/14 198/12
otherwise [1] 27/17 ought [1] 52/24 our [37] 1/14 1/25 5/13 15/21 25/16 29/17 37/13 42/15 42/15 56/25 64/18 64/22 64/24 67/7 70/13 72/15 74/18 83/22 84/1 84/2 84/15 85/5 85/8 85/11 87/15 89/2 94/14 96/5
100/12 125/1 139/19 154/4 170/7 170/23 194/8 194/23 198/2
ours [1] 97/24
ourself [1] 97/11 out [56] 2/13 10/5 11/12 17/15 22/5 26/3 31/17 37/21 39/24 42/14 43/2 54/12
54/14 56/6 57/6 59/2 59/3 65/18 67/2 68/10 70/17 70/19 75/20 77/4 77/11 77/12 77/12 79/15 80/6 91/2 93/15 102/16 105/11 105/21 111/22 112/2 113/25 116/9 121/2 121/9 128/8 128/23 129/16 130/3 130/3 130/7 130/8 130/10 130/24 131/3 131/6 137/7 144/25 165/22 168/20 170/7
outbreak [3] 124/10 156/2 195/6
outbreaks [2] 124/11 189/21
outcome [2] 15/23 15/23
outcomes [6] 39/8 39/11 39/12 53/14 68/16 187/20
outline [1] 89/19 output [2] 74/23 84/24
outputs [1] $84 / 25$ outrage [1] 45/16 outrageous [1] 61/16 outset [6] 138/14 139/6 139/24 155/6 158/14 171/17
outside [4] 32/25 41/23 46/1 185/12 over [33] 16/11 28/20 29/24 39/23 73/4 88/21 89/1 95/25 105/5 105/7 106/10 111/7 114/2 120/24

131/12 136/2 136/4 143/15 146/7 149/9 165/10 172/1 172/14 175/2 175/13 185/8 189/6 191/11 195/3 196/4 196/9 196/11 196/12
over 80s [1] 95/25 overall [8] 6/13 39/19 39/25 72/10 83/10 115/15 148/16 168/21 overarching [4] 43/9 50/20 52/7 149/2
overcome [5] 147/10 147/18 157/23 185/24 193/23

## overlapping [1]

 184/11oversee [1] 150/19
overseeing [1] 11/6 oversight [1] 72/10 overwhelmed [1] 168/17
own [12] 19/7 33/6 38/25 39/1 52/18
60/15 62/6 62/10 85/11 139/7 149/9 194/8
owners [1] 102/8
Oxford [3] 4/4 4/4 90/13
Oxford University [1] 4/4

## P

pace [2] 85/13 85/14
pack [4] 108/21
111/8 113/8 120/23
page [59] $1 / 191 / 20$ 24/11 33/6 59/1 59/23 78/15 104/16 108/19 110/4 110/13 110/13 110/21 112/11 113/11 115/5 117/17 118/10 118/10 118/22 119/9 119/17 120/21 121/1 123/25 125/5 128/2 128/5 131/13 136/18 141/3 152/21 155/12 158/8 159/20 162/15 166/14 166/22 167/8 167/9 167/23 167/24 170/10 171/1 171/2 171/3 171/5 176/7 177/9 177/9 177/10 181/23 182/16 184/23 186/12 189/1 191/11 194/12 199/2
page 10 [2] 120/21 121/1
page 12 [1] 110/21
page 13 [1] 152/21
Page 15 [1] 112/11
page 16 [1] 1/20
page 17 [1] 158/8 page 19 [1] 176/7 page 2 [1] 115/5
page 3 [1] 117/17 page 31 [2] 171/1 171/2
page 34 [1] 118/22
page 36 [1] 177/9
page 39 [1] 194/12
page 4 [2] 59/1
118/10
page 40 [1] 159/20
page 41 [2] 155/12
162/15
page 44 [1] 181/23 page 46 [1] 186/12
page 5 [4] 104/16
110/4 113/11 167/23
page 59 [1] 177/10
Page 6 [1] 110/13
page 7 [1] 125/5
page 777 [1] 33/6
page 785 [1] 24/11
page 8 [1] 141/3
page 9 [1] 123/25
page finally [1]
131/13
page of [2] 108/19 136/18
pages [8] 123/15
137/20 141/5 141/8 166/13 174/8 174/13 175/15
pages 11 [1] 174/8 pages 12 [1] 174/13 pages 8 [1] 123/15 paid [1] 44/6
Pakistani [1] 116/6 pan [2] 49/17 49/19 pandemic [84] 3/3 3/4 3/20 5/12 7/5 8/3 41/22 45/16 50/3 50/3 62/15 67/22 68/5 69/24 70/21 73/5 73/14 75/1 79/1 83/13 83/16 83/24 93/17 96/9 96/13 98/21 100/19 110/2 111/4 116/10 121/7 136/17 137/22 138/7 140/7 146/13 147/6 147/8 147/10 148/6 151/4 154/4 155/6 158/14 159/4 159/6 159/25 160/6 160/14 162/19 162/19 163/8 163/22 164/3 164/11 165/6 165/23 175/7 175/9 175/18 176/3 178/2 178/7 178/16 182/3 183/10 184/10 184/14 185/2 185/23 186/11

188/14 189/6 189/14 190/17 192/14 193/1 193/12 193/17 194/20 195/18 196/5 196/8 198/3
paper [2] 160/22 169/17
papers [2] 6/20 122/8 paragraph [29] 59/1 59/6 131/14 132/4 152/23 155/13 157/1 158/8 158/25 159/21 160/3 162/8 162/14 162/18 176/7 177/10 181/24 181/25 182/11 185/22 186/13 187/17 188/15 188/23 190/4 190/15 190/24 194/13 194/18
paragraph 14 [1] 152/23
paragraph 2 [2] 59/1 59/6
paragraph 28 [2] 158/8 158/25
paragraph 35 [1] 176/7
paragraph 36 [1] 177/10
paragraph 48 [1] 157/1
paragraph 75 [2] 159/21 162/8
paragraph 76 [1] 160/3
paragraph 79 [1] 155/13
paragraph 80 [1] 162/14
paragraph 85 [2]
181/24 181/25
paragraph 89 [1] 186/13
paragraph 90 [1] 187/17
paragraph 91 [1] 188/23
paragraph 95 [1] 190/4
paragraph 96 [1] 190/15
paragraph 98 [1] 190/24
paragraph below [1] 131/14
parameters [3] 58/16 59/25 60/8
parents [2] 6/17 41/1
pares [1] 12/4
Paris [1] 122/5
Parliamentary [1] 2/19
part [25] 17/7 23/20
37/10 37/15 51/16

56/22 72/8 74/3 78/8 95/8 95/10 97/4 98/5 114/17 124/18 128/3 137/23 141/10 144/10 147/7 152/16 159/25 180/17 186/21 190/5 partial [1] 43/20 participants [3] 20/13 67/19 163/2 particular [37] 40/11 45/14 54/8 59/4 59/9 61/13 73/22 76/24 77/22 77/25 85/24 89/8 90/2 93/12 94/9 100/5 104/11 104/14 107/22 108/24 113/5 114/12 117/5 121/15 121/17 124/8 145/8 148/17 149/20 157/20 162/1 162/13 164/5 165/21 184/19 188/18 190/2
particularly [16] 9/17 20/10 20/20 21/18 66/8 88/4 95/5 112/19 121/23 123/12 140/2 140/8 154/3 154/8 159/5 186/5
parties [1] 63/18
partly [1] 31/15
partnered [1] 76/15
partnership [3] 76/12
90/11 96/4
parts [27] 16/6 28/20
52/12 53/23 71/4
77/17 78/4 99/2
124/25 127/25 142/14 142/19 143/12 143/25 146/2 147/13 148/20 149/2 149/23 150/3
150/9 153/10 153/20
176/18 182/3 184/4 186/1
party [6] 2/19 19/8
56/10 56/15 63/20 66/18
pass [1] 45/17
passage [1] 194/24
passages [2] 127/10 131/14
passed [1] 148/9
past [3] 98/9 124/18 147/15
paste [2] 161/12 166/11
pasting [2] 162/7 167/17
patch [1] 174/25
patient [9] 100/7
100/21 101/6 101/7
101/21 154/12 157/2 158/3 161/15
patients [4] 94/19 158/24 168/13 168/17

Patrick [8] 14/3 15/7
15/15 17/18 26/8 34/13 89/13 188/25
Patrick Vallance [5]
15/7 15/15 17/18 34/13 188/25
patterns [1] 191/7
Paul [1] 192/5
pause [4] 24/6 27/8 27/24 29/22
pausing [1] 180/5
peak [2] 109/10 113/18
peaks [1] 113/20 penalty [1] 63/14 pensions [1] 21/6 people [108] 5/8 10/7 15/4 17/11 21/24 22/13 23/4 23/6 24/19 31/6 35/22 36/23 37/6 37/11 37/11 37/21 37/23 40/24 42/10
44/17 47/9 47/20
50/12 52/11 53/10
55/13 55/24 56/11
56/20 57/1 57/22 58/5 62/18 62/19 62/23 62/25 63/3 63/9 64/18 64/22 65/13 77/9 82/18 84/12 87/25 90/19 92/8 92/11 92/13 92/15 95/22 100/18 102/10 103/13 103/13 106/4 106/14 106/25 107/4 107/5 107/10 108/9 108/14 111/13 111/24 114/19 114/23 115/19 118/3 118/5 118/19 125/10 125/12 125/15 125/17 128/19 $142 / 19144 / 1$ 144/22 151/17 $156 / 14$ 157/22 157/25 158/16 153/2
158/20 159/3 159/10 160/21 163/18 167/7 167/16 170/5 172/5 172/24 174/22 176/10 176/21 179/3 179/16 180/1 180/4 180/9 180/15 181/14 181/15 183/11 189/15 192/22 people's [3] 6/8 62/3 85/3
per [4] 111/24 112/1 127/7 127/8
percentage [2] 168/5 168/12
percentages [1] 168/20
perfect [4] 26/1
55/22 64/5 154/21
performance [1] 24/9
performs [1] 11/20
perhaps [53] 3/7

7/15 10/23 19/9 26/22 31/2 38/22 50/4 58/13 74/8 79/3 80/11
120/19 128/16 137/19 139/24 139/25 141/1 142/13 146/1 147/14 147/15 147/19 152/12 152/25 153/25 155/12 156/17 156/21 161/22 162/9 163/25 165/9 167/2 167/3 170/20 171/11 171/16 171/20 173/1 173/19 186/12 186/18 189/24 190/2
192/17 192/23 193/3 193/9 194/12 195/1 195/16 195/19
perhaps weeks [1] 31/2
period [11] 93/17
105/4 105/6 105/9
106/11 113/24 118/20
124/2 138/10 141/16
157/9
periods [2] 110/25
147/20
permanent [11] 9/14
11/3 11/5 11/8 18/10
18/11 18/18 26/9
73/12 89/10 146/18

## permanent

secretaries [2] 9/14 89/10
permanent secretary
[7] 11/3 11/5 11/8 18/10 18/11 26/9 73/12
permanently [1]
152/4
permission [2]
154/14 159/17
permissions [1]
permit [1] 154/12
person [7] 75/3 82/8 133/14 134/6 162/1
167/3 172/5
personal [6] 4/8
12/24 34/21 61/15
62/12 74/5
personalities [2]
64/6 64/8
personality [2] 13/3 18/12
personally [4] 6/1
62/13 78/11 78/12
persons [7] 111/24
112/1 112/1 115/11
118/12 125/6 125/8
perspective [1]
10/12
Peter [1] 64/19
PHE [4] 187/17
187/18 188/8 189/6
phone [3] 160/9
160/21 167/21
phones [1] 180/2
phrase [5] 12/3 19/9
40/15 80/9 172/9
pick [2] 159/21
169/22
picking [5] 22/7
144/25 162/15 170/20
188/25
picture [5] 94/14
151/21 164/16 176/16 189/12
piece [5] 24/9 27/25
161/23 169/15 193/25 pieces [3] 130/14 143/20 169/17
pile [1] 9/25
pillars [3] 83/22
148/18 148/22
pilots [3] 91/3 91/7 91/7
pipeline [1] 161/25
pipelines [6] 160/5
160/18 166/9 172/14
175/2 196/25
pivot [2] 76/8 85/11
pivoted [2] 77/11 85/4
place [26] 4/18 25/4 25/12 36/4 41/17
45/15 47/6 56/7 63/18 64/3 71/3 78/24 91/4 92/7 94/22 96/23
99/21 101/20 144/18
159/19 160/13 161/17
165/2 179/10 198/6 198/9
places [5] 26/4 37/2
56/25 113/10 171/22
plain [4] 30/20 40/18
53/25 91/24
plainly [4] 23/19 33/23 34/18 76/2
plan [8] 31/24 32/3
51/18 51/20 52/25 53/1 53/4 57/6
planning [5] 23/20
164/21 182/19 183/2 183/4
play [9] 66/21 66/22 73/18 77/24 97/3 147/7 151/3 164/10 165/15
playbook [3] 18/17 18/17 37/10
played [3] 8/2 95/7 117/15
players [1] 16/22
playing [1] 151/17
please [42] 1/4 1/7
1/11 4/20 58/20 69/11

69/16 70/12 73/10 80/8 81/16 86/13 95/5 104/15 104/20 106/23 108/19 110/21 111/7 112/5 118/21 119/9 120/21 121/1 123/25 128/6 136/9 136/13 162/14 164/12 166/14 167/23 169/22 170/10 171/1 173/6 174/8 181/24 184/22 188/23 194/12 198/20
pledge [1] 150/24 plethora [1] 74/11 plumbing [3] 193/5 193/6 193/7
plus [1] 34/25
pm [6] 14/15 104/6
104/8 154/23 154/25 198/21
poetic [1] 178/11 point [66] 4/6 7/9 27/3 28/7 28/7 33/23 41/12 51/15 56/2 56/4 59/25 61/24 63/2 67/2 68/7 68/8 74/12 74/17 78/25 83/9 84/11 85/7 92/1 93/12 98/22
98/23 113/5 113/25
117/13 121/20 124/6 125/13 126/8 130/1 130/17 131/15 133/6 139/1 139/24 141/13 146/22 146/24 148/6 150/13 154/1 154/20 155/17 161/13 163/6 163/9 165/18 165/21 166/16 166/20 168/15 positivit [4] 75/13 172/23 183/18 184/13 possibility [2] 45/19 185/1 185/17 190/15 64/17
192/12 192/20 194/14 195/20 197/6
pointing [3] 11/11 129/16 187/14
points [12] 113/17
144/6 144/14 146/25 153/25 166/5 182/16 191/11 191/11 191/24 192/13 193/14
police [5] 31/7 62/21
62/22 63/14 119/13
policies [2] 140/5 197/5
policy [15] 8/9 27/6
27/15 35/8 55/22 56/3
56/6 56/6 66/25 67/4 77/20 126/17 137/3 140/1 140/3
political [29] 14/13
15/21 33/11 33/19 33/24 34/2 34/4 34/5 34/24 35/10 35/19 51/16 56/9 56/15 56/22 66/17 66/18

66/24 67/1 67/2 67/5 67/7 137/21 146/4 146/5 146/14 146/19 147/16 193/22
politically [1] 34/10 politicians [6] 21/2 26/15 36/4 37/13 37/13 54/15 polling [1] 180/14 poor [3] 22/25 142/2 191/3
populate [1] 166/4
populating [2]
172/25 174/17
population [19]
42/17 52/5 53/24
57/16 61/17 73/3
84/18 85/9 90/5 100/4 107/14 113/6 115/11 121/10 121/11 122/10 122/25 166/17 166/24 posed [1] 4/17 position [15] 9/24 17/23 20/9 22/10 29/12 40/16 44/7 46/8 60/20 72/3 80/10 105/24 121/8 156/11 156/15
positions [6] 23/16 23/18 28/15 83/19 196/16 196/18
positive [11] 82/8 90/6 94/19 94/21 110/15 110/16 114/12 130/22 131/1 131/4 156/12
positivity [4] 75/13
109/15 109/23 116/2
possibility [2] $45 / 19$
possible [24] 4/19
7/12 20/2 20/12 27/3 30/10 41/9 47/15 59/14 74/6 97/10 97/13 98/24 99/5 99/25 102/17 118/19 128/24 129/6 129/19 144/9 171/7 173/20 188/9
possibly [4] 56/10 56/16 141/2 163/23 post [4] 71/2 133/5 137/15 151/24 posted [2] 130/3 130/8
posts [1] 102/6 potential [5] 20/11 100/11 114/18 115/1 140/15
potentially [1] 50/1 pounds [1] 48/21 poverty [1] 117/5 power [11] 11/25 13/12 20/17 23/17

28/13 30/6 30/19 47/3 $32 / 1$ 93/6 178/17 64/13 64/16 196/17
powerful [1] 27/10
powers [3] 153/10 153/14 153/15
PPE [2] 120/8 120/13
PR [1] 66/7
practical [3] 100/3
162/21 164/8
practicalities [1] 163/17
practicality [1] 164/6
practice [3] 59/5 131/17 190/23
practitioner [4] 80/23
82/10 82/13 83/2
practitioners [2]
82/16 82/20
pragmatic [1] 158/19
pre [2] 25/22 121/8
pre-ministerial [1]
25/22
precedents [1] 145/25
precisely [6] 19/24
25/7 36/8 60/10
183/21 193/3
predecessors [2]
14/16 14/18
premium [1] 26/4
preparation [2] 88/1 189/23
prepare [2] 22/11
139/7
prepared [5] 99/10
111/7 136/15 150/10 168/25
preparedness [2]
159/25 162/20
prescription [1] 56/3
presence [1] 43/10
present [4] 2/6 29/7
43/10 60/22
presentation [3]
127/13 130/4 130/20 presented [4] 79/3
129/3 129/17 130/12
presenting [1] 163/1
presents [1] 174/10
president [2] 2/15
3/22
press [6] 53/6 79/1
79/2 97/16 130/5
130/9
pressure [1] 161/20
pressures [2] 132/5
159/2
presumably [2] 7/9
179/8
Presuming [1] 49/3
pretty [8] 65/3 66/11
79/6 80/3 82/10 82/20
83/2 161/5
prevalence [5] 91/22

178/21
prevalent [2] 106/18
120/7
prevent [1] 57/14
previous [5] 5/10
105/5 114/11 116/9
162/19
previously [2] 135/6 135/7
prices [1] 74/21
primarily [1] 20/16
primary [5] 53/2
77/24 78/4 82/23
88/15
prime [45] 8/6 8/9
8/25 9/6 9/8 9/10
11/25 12/3 12/8 12/9
12/11 12/17 13/4 13/6
13/13 13/14 13/24
14/1 14/22 14/25
17/15 18/6 18/19
18/23 18/25 19/6
19/13 24/2 26/11
26/20 27/11 27/16
27/17 30/8 53/7 55/5
66/14 67/9 71/3
167/10 168/25 173/8
176/14 177/21 192/21
Prime Minister [29]
8/6 8/9 8/25 9/6 9/8
11/25 12/8 12/9 12/11
12/17 13/4 13/6 13/13
13/14 13/24 18/6
19/13 24/2 26/11
26/20 27/17 30/8 67/9
71/3 168/25 173/8
176/14 177/21 192/21
Prime Minister's [2] 18/25 27/11
Prime Ministerial [1] 55/5
prime ministers [4]
14/1 14/25 19/6 66/14
primus [1] 12/4
primus inter pares
[1] 12/4
principle [1] 60/5
principles [5] 42/14
42/14 149/3 149/8
158/19
printed [2] 165/22
167/20
prints [1] 175/14
prior [2] 24/23
137/13
priorities [3] 40/8
146/5 168/14
priority [1] 168/14
prisons [1] 96/3
Pritchard [1] 102/5
privacy [5] 100/14
101/13 102/11 152/15
190/9
producing [2] 73/24 97/7
product [9] 60/4 84/9 172/7 172/10 172/24 173/8 173/15 174/7 175/16
production [8] 71/12 71/14 72/16 72/17 72/20 74/4 79/6 97/21
products [2] 54/11 84/23

## profession [1]

196/22
professional [1] 71/18
professionally [1] 64/16 professionals [4] 38/10 119/18 119/19 120/11
professor [36] 3/14 69/9 69/12 69/18 69/19 69/21 70/11 70/16 72/1 73/10 76/15 81/23 83/7 85/16 86/8 86/10 88/17 89/12 92/17 92/20 93/2 101/10 104/10 106/23 108/22 112/7 122/18 125/22 126/4 132/24 134/18 135/17 188/19 193/25 194/4 199/9
Professor Cathie Sudlow [1] 101/10 Professor Diamond [2] 69/18 188/19 Professor Diamond's [1] 132/24
Professor Keeling [2] 193/25 194/4
Professor Khunti [2] 92/17 92/20

## Professor Laura

Shallcross [1] 76/15
Professor Nazroo [3]
85/16 86/8 86/10
Professor Sir [2] 69/19 89/12
Professor Sir lan Diamond [1] 69/9 programme [8] 92/17 109/20 109/21 113/22 128/22 129/1 129/8 137/15
programmes [2] 22/13 22/14 programming [1] 162/4
progress [4] 100/20 100/20 102/13 197/18 progressed [2] 178/8 178/16
progression [1]

188/14
project [1] 158/1 projects [1] 102/10 prominence [1] 149/10
promise [1] 108/17 promised [1] 146/17 promote [1] 58/10 proper [8] 19/11 26/23 26/24 27/2 30/5 36/13 36/21 129/12 properly [8] 8/13 16/4 30/25 31/25 99/24 156/2 183/3 192/25
proportion [3] 90/5
121/14 130/21
proposals [1] 133/19 proposed [2] 59/12 128/12
proposition [1] 12/23 propositions [1] 38/3 pros [1] 35/7
prospects [1] 59/18 protected [1] 49/24 protecting [1] 168/16 protection [7] 94/3 120/4 143/17 152/13 157/14 157/15 159/11 protective [2] 118/24 119/12
protocol [2] 103/21 103/25
protocols [1] 161/2 prototype [2] 173/25 174/5
proud [1] 90/22
prove [1] 102/21
proved [1] 82/8
provide [23] 1/15
22/25 69/21 70/19 71/18 78/20 82/17 83/10 87/3 88/16 96/2 97/15 97/19 98/14 98/24 100/11 105/10 118/11 134/7 135/12 143/10 153/10 195/16 provided [24] 36/5 42/6 70/1 70/5 74/1 83/11 87/9 93/8 93/18 93/20 96/10 97/11 98/2 98/11 103/12 104/12 104/15 108/19 139/10 158/6 168/18 173/13 180/25 194/7 provides [6] 72/10 75/22 80/14 84/7 95/1 143/11
providing [10] 26/20
74/13 74/25 79/19
88/7 88/8 89/7 163/1 180/19 191/19
provision [8] 72/10
75/18 88/22 96/16

97/4 99/17 102/16 153/18
provisionally [1] 125/24
provisions [6] 98/15 145/16 152/19 152/19 152/23 154/11
public [55] 2/16 2/23
16/18 17/22 30/20
36/17 36/19 36/25
41/23 55/1 56/10
56/16 56/19 56/23
57/2 57/7 58/19 62/10
73/18 76/4 77/16
78/17 78/21 94/3
97/23 98/10 98/11
98/16 98/17 101/14
101/14 102/11 102/12 102/20 102/21 103/16 116/22 117/10 119/5 126/20 127/20 128/25 129/17 130/13 132/7
134/24 153/16 161/12
173/13 175/20 175/23
177/19 185/5 190/12
193/19
public facing [1] 116/22
Public Health [1]
98/16
public-facing [2]
117/10 119/5
publication [2] 88/2
121/9
publications [2] 121/22 190/12 publicly [4] 17/23 44/9 53/16 139/9 publish [5] 87/14 88/11 94/20 103/22 135/15
published [15] 3/3
3/12 3/14 3/20 88/2 94/6 125/11 126/15 127/4 128/13 134/4 135/15 141/24 148/5 153/21
publishing [1] 189/7 pulling [1] 160/10
purpose [11] 128/21
129/5 129/10 129/13
129/18 147/12 147/13
157/8 180/21 181/23
193/10
purposes [12] 72/15
87/9 128/17 129/18
153/16 153/19 155/12
159/5 159/20 186/12 190/24 194/23
pursue [1] 179/13
push [2] 52/15 68/25
pushed [2] 75/4 75/5
pushing [1] 66/8
put [35] 4/17 6/13

7/22 23/8 27/15 35/25 38/2 38/23 41/8 41/16 42/3 47/6 47/20 51/6 53/16 56/25 58/17 60/9 65/2 77/18 78/23 79/22 82/9 83/9 83/9 92/6 117/1 121/9 126/22 152/12 155/25 157/6 160/25 175/22 198/8
putting [3] 23/4 62/1 62/12
PwC [2] 2/17 2/23

## Q

QALY [1] 59/7
QALYs [1] 61/5
qualify [1] 115/17
quality [14] 36/20
61/6 79/3 79/9 79/12
$84 / 584 / 1184 / 20$
85/15 88/1 95/17
167/17 191/3 191/6
quality-adjusted [1]
61/6
quarters [1] 179/12 question [35] 4/18 4/21 10/25 27/11 28/6 33/8 35/15 35/16 39/13 40/22 40/22 41/18 44/20 52/21 56/18 63/23 64/9 65/7
66/15 75/7 77/21
87/19 90/5 95/6
116/15 135/2 138/9
141/13 164/17 169/10
180/25 184/1 186/9
198/3 198/5
Questioning [1]
138/4
questionnaire [3]
194/8 195/2 195/7
questions [48] $1 / 6$
38/23 39/7 45/9 63/25
64/1 67/18 69/13 74/7
74/16 75/10 75/11
75/24 77/18 78/9 89/2
89/3 89/8 92/24 93/4
96/1 125/4 125/22
125/25 126/2 126/4
126/7 132/19 134/12
134/16 136/12 140/10
141/12 154/18 155/4
189/23 196/7 197/4
197/10 197/11 197/12
199/5 199/7 199/11
199/13 199/15 199/19 199/21
quick [2] 77/16 91/8
quicker [1] 94/23
quickly [25] 15/18
29/8 31/20 74/24
74/25 75/2 77/12
77/19 79/24 82/20


85/11 87/24 88/8 90/10 91/9 97/9 97/13 100/9 102/3 102/13 108/17 141/7 160/19 191/8
quite [47] 3/18 5/8 5/20 10/19 12/7 21/6 29/13 31/19 34/8 34/9 41/12 47/15 51/7 66/1 66/12 71/25 81/23 87/18 90/14 92/9 105/20 106/1 126/23
140/22 141/14 141/25 142/2 144/20 145/17 146/1 146/8 149/21 151/15 151/19 158/23 163/23 167/12 167/22 168/3 183/25 184/2 184/19 186/13 187/2 187/18 190/13 190/22
quote [3] 156/1 182/23 192/18

## R

R number [1] 180/24
race [4] 186/10 186/15 190/21 191/4 radically [2] 36/23 53/11
raged [1] 17/25
raise [2] 38/25 67/15 raised [2] 126/20 191/12
raising [1] 127/12
ramp [1] 74/12
ran [1] 178/19
random [1] 171/12
range [2] 43/23 137/8
ranked [1] 121/13
rarely [1] 54/15
rate [20] 106/24
107/8 107/10 111/11
111/19 112/10 112/14
112/24 115/13 117/2
117/18 117/22 119/2
119/3 119/15 119/22
119/24 121/15 123/18 161/10
rates [18] 64/10
74/20 105/11 105/16
107/21 107/21 108/2
108/11 110/24 113/7 115/6 118/15 119/19 121/17 121/18 122/22 123/19 124/21
rather [15] 12/11
37/14 39/2 66/12
66/25 85/20 107/8
134/8 160/23 161/1
161/18 163/19 167/24
172/17 179/17
rational [3] 16/15 16/16 56/13
rationalised [1] 58/12
rationally [1] 60/19 re [1] 66/19
re-elected [1] 66/19
reached [1] 103/5
REACT [1] 96/16 read [6] 81/1 128/6 128/7 129/11 129/24 170/7
reader [1] 139/16 readiness [1] 175/8 reading [2] 160/22 189/19
ready [8] 64/3 86/14 87/16 87/22 99/10 99/14 100/1 160/23 real [7] 51/1 76/13 117/13 117/15 185/8 193/11 198/16
realistically [1] 56/9 really [58] 4/7 4/13 10/9 10/9 21/8 21/12 22/4 23/4 26/13 26/15 27/10 27/20 31/1 39/24 41/7 44/22 45/25 48/15 50/13 51/10 53/13 56/14 57/5 60/13 60/22 63/7 redolent [1] 124/18 63/9 65/15 66/6 68/20 reducing [1] 109/22 68/23 74/17 75/11 reduction [1] 94/9 77/16 80/6 82/6 84/25 refer [29] 6/19 7/4 85/9 85/14 86/15 97/6 97/20 101/2 109/10 109/12 109/20 110/10 113/19 120/5 127/19 133/4 138/21 146/24 165/12 166/19 179/17 188/2 197/24
realpolitik [1] 30/14
reason [12] 15/6
35/20 36/25 47/24 68/7 114/18 133/8 133/11 133/14 139/11 173/11 193/13
reasonable [1] 131/2 reasoning [1] 35/19 reasons [13] 4/5 55/14 55/15 79/22 86/18 104/25 113/24 114/18 115/1 126/25 132/25 140/25 185/16 reassurance [1] 157/24
recall [8] 48/9 49/9 90/3 92/4 103/4
118/23 124/9 124/10
receipt [1] 26/5
received [5] 91/24
102/17 149/10 163/6 194/20
receiving [2] 100/5
recovery [1] 96/18
172/25
recent [1] 140/13 recently [4] 100/25 149/21 150/8 152/7
recipient [1] 36/20
recipients [1] 172/3
recognise [1] 190/12
Recognised [1] 164/16
recollection [1] 67/11
recommend [2] 40/17 43/8
recommendation [1] 151/25
recommendations
[6] 140/24 141/21 142/4 162/21 191/10 196/9
recommended [1] 162/24
record [3] 17/22 30/20 188/12 recorded [5] 1/14 14/5 123/7 171/21 185/22
recording [3] 123/10 142/20 191/2
records [1] 192/4
$\begin{array}{ll}\text { redolent [1] } & 124 / 18 \\ \text { reducing [1] } & 109 / 22\end{array}$

30/18 38/14 41/18
59/6 98/21 121/20
143/8 146/4 152/14
154/10 155/14 155/19
157/4 157/9 158/8
159/22 159/24 160/3
162/10 162/18 178/22
182/12 184/12 187/17
188/16 188/18 190/4
reference [6] 59/16
69/20 110/25 126/23
162/8 190/4
references [2] 17/5
136/1
referred [19] 23/13
24/11 34/19 36/12
40/6 75/16 85/17 87/8
97/5 98/9 100/2
111/11 118/24 146/24
172/6 180/18 184/23
190/15 191/25
referring [4] 17/18
86/7 188/23 191/3
refers [2] 157/2
171/9
reflect [1] 95/7
reflected [3] 94/18
124/15 145/10
reflective [2] 40/15 123/23
reflex [1] 26/14
reform [1] 143/5
regard [3] 5/9 106/3 144/7
regarded [1] 182/18
regarding [1] 127/6
regimes [1] 158/12
region [1] 112/9
regional [4] 91/12
179/9 182/13 183/20
regions [9] 50/17
112/10 112/22 122/9
122/9 122/12 122/14
181/21 181/22
register [3] 2/22 5/14 153/20
registered [3] 80/11
95/16 95/18
registration [14]
79/19 80/3 80/9 80/19
81/5 86/17 86/19
93/20 94/25 116/13
117/25 118/2 132/25
133/24
registrations [4]
95/11 105/1 111/9
112/7
regressing [1]
195/19
regrettable [1] 19/20
regular [6] 73/17
86/25 89/9 90/25
164/22 172/22
regularly [3] 103/22
134/4 166/1
regulation [3] 71/11 143/18 157/14
regulations [4]
152/16 154/12 154/17
157/6
relate [1] 137/25
related [4] 23/14
34/12 34/15 71/11
relates [1] 131/18 relating [10] 59/10 70/7 93/15 95/8 95/14 138/16 138/19 174/14 178/21 180/20
relation [14] 3/21
9/25 45/10 45/21
53/17 67/19 76/3
93/12 104/21 116/5
116/9 123/22 124/1
155/5
relationship [13]
12/14 12/16 13/7
13/10 13/16 14/2
18/14 19/13 19/19
20/1 65/11 99/22 183/15
relationship's [1] 18/7
relationships [9]
12/14 12/20 12/24

15/17 16/1 18/6 99/1 99/8 99/15
relative [3] 24/9
51/11 121/14
relatively [18] 4/1
14/22 43/13 51/2
73/24 83/15 83/21
90/1 119/24 119/25
120/10 120/18 124/3
124/15 141/15 145/23
166/12 190/8
relayed [2] 7/6 36/5
Release [2] 3/16 58/22
releases [1] 95/13
relevancy [1] 69/24
relevant [6] 3/1 43/23
44/22 89/8 128/20 130/5
reliable [2] 36/16 138/5
relies [1] 110/15 reluctance [1]
156/20
reluctant [1] 157/22
relying [2] 62/17 62/18
remain [3] 8/20 90/22 170/4
remained [3] 46/8 46/13 47/3
remember [6] 1/11
25/7 70/12 75/3
145/14 174/1
remind [1] $12 / 2$
remnants [1] 179/2
renewed [2] 148/13 157/10
repeat [2] 102/10 141/21
repeatedly [1] 44/11
replaced [3] 2/6
32/17 149/17
replicative [1] 46/24
replies [1] 171/5
4 reply [1] 184/15
report [55] 9/15
35/17 38/21 121/21
136/15 136/18 136/22
137/7 137/18 138/11
138/15 138/20 138/24
139/5 139/7 139/16
139/18 139/23 139/24
140/13 140/18 141/4
141/23 142/5 147/4
148/5 152/15 152/22
154/10 155/12 157/1
158/8 159/21 162/14
176/4 176/7 177/10
178/3 178/22 181/6
181/20 181/24 186/13
187/17 187/21 188/24
189/2 189/4 190/1
190/5 190/6 190/25
report... [3] 191/4 192/13 193/14
reported [12] 93/25
94/8 94/11 108/9 108/12 110/2 110/9 111/20 118/12 118/18 122/7 123/14
reporting [4] 110/6 170/13 189/9 192/9
reports [21] 110/8
140/19 141/2 141/5 141/8 141/10 141/15 142/7 143/14 147/2 147/23 153/12 157/18 170/5 170/9 184/12 187/18 187/24 188/8 189/19 191/4
represent [1] 132/18
representative [1] 107/17
representatives [1] 50/21
represented [4] 49/9 50/6 153/5 155/7
represents [1] 126/5 reproduced [1] 3/10 reproducible [1] 160/18
reproduction [1] 179/25
request [2] 91/25 92/5
require [2] 10/18 10/18
required [11] 5/19
6/8 28/13 34/7 48/12 49/18 57/21 63/9 91/18 97/12 183/11
requires [4] 10/17
53/22 91/12 100/13
research [3] 37/2
38/17 137/4
researcher [1]
137/14
researchers [3]
71/22 71/23 71/24
residency [1] 106/9
resident [1] 95/18
resigned [1] $2 / 5$
resilience [4] 48/7
48/9 122/25 184/15
resolved [2] 10/14 195/6
resolving [1] 29/15
resources [1] 56/25
respect [3] 13/2
13/23 14/24
respected [1] 65/16
respects [1] 26/1
respond [13] 9/24
12/19 12/21 16/4
25/16 25/17 32/1

32/24 45/14 63/3 64/3 87/10 90/19
responded [1] 19/21
responders [1] 163/1 responding [3] 36/18 74/16 193/3
response [16] 3/4 3/19 8/3 10/6 48/12 62/17 96/1 128/2 153/12 170/25 171/25 194/7 194/9 195/2 195/8 198/15
responses [2] 77/13 127/4
responsibilities [1] 73/7
responsibility [2] 148/8 149/11
responsible [5]
146/11 150/1 151/14 172/5 176/21
responsive [1] 39/2 rest [8] 28/4 28/21 31/8 31/11 50/18 58/3 63/22 182/16
restricting [1] 66/3 restrictions [3] 59/14 59/21 62/2
rests [1] 94/25
result [5] 44/10 53/14 82/2 151/6 182/3
results [2] 77/14 156/12
retrospective [1] 156/10
retrospectively [1] 170/15
return [7] 52/21 104/5 126/8 133/2 133/6 154/22 193/23 returning [1] 130/21 revert [2] 7/8 198/5 review [4] 101/11 139/18 148/8 149/17 revolution [1] 140/14 rider [1] 81/11
right [119] $2 / 73 / 8$ 6/24 7/2 7/3 8/8 17/1 20/8 24/2 24/21 26/21 26/21 27/23 32/12 39/16 46/12 46/15 50/14 50/18 51/1 53/3 60/8 61/9 62/10 62/18 62/23 62/24 63/8 65/21 66/10 68/7 71/17 71/24 72/23 72/25 79/14 80/17 81/9 81/10 81/15 83/24 88/11 97/1 99/13 101/24 102/2 107/19 108/16 115/4 115/18 122/6 123/2 124/6 124/8 126/15 130/11 136/24 137/3

137/17 138/14 138/23 rule [2] 97/2 197/11 139/19 140/3 140/18 Rule 10 [1] 197/11 142/17 142/18 144/17 rules [9] 61/12 62/18 145/19 146/7 147/9 148/2 150/15 150/16 150/21 151/1 151/20 152/2 154/6 155/25 156/16 157/13 158/14 158/17 162/4 164/19 166/8 167/17 173/9 173/16 173/17 173/21 175/11 175/19 176/20 176/22 176/23 177/11 179/11 179/12 179/20 180/9 180/24 181/2 181/9 182/23 184/2 185/6 185/19 185/21 186/21 187/23 188/4 189/13 190/20 191/22 191/23 192/8 193/10 193/19
rightly [7] 2/24 9/13 41/13 86/16 90/14 103/17 118/6
rigorous [1] 77/10
ring [1] 48/23
riot [1] 56/11
rise [1] 179/6
rising [1] 34/6
risk [9] 5/13 45/16
111/23 112/2 119/4
120/12 138/8 187/20 193/15
risks [4] 45/15 45/21 48/10 99/9
road [1] 59/21
roadmap [1] 150/2
roadmaps [1] 150/5
roads [1] 54/10
robust [1] 191/20
role [15] 7/19 8/2 8/4
10/11 11/17 11/21
20/16 22/10 24/2 33/5 71/7 117/15 146/19 151/3 152/3
roles [6] 2/14 8/8 11/1 137/8 151/18 177/1
room [6] 30/22 35/15
35/21 158/10 171/10 192/2
round [7] 31/6 34/25
42/10 47/13 47/18
62/22 88/21
round-up [1] 88/21
roundtable [2] 149/5 149/5
roundups [1] 88/24
route [1] 21/1
routed [2] 7/12 43/15
routes [1] 143/22
routine [1] 142/7
routinely [1] 54/8
Royal [1] 101/25

63/21 64/22 64/23
65/4 65/5 93/15
100/21
run [4] 56/11 67/9
80/1 104/20
running [6] 139/25
163/12 163/13 166/9
181/11 183/17
ush [1] 193/4
S
sad [2] 114/22
114/25
sadly [8] $82 / 15$
105/14 106/5 111/12
124/11 125/17 133/15
134/6
safer [1] 158/2
safety [1] 158/5
SAGE [36] $7 / 736 / 2$
36/4 36/4 36/8 36/12
38/2 38/4 38/15 38/22
39/6 40/5 40/9 40/16
40/20 41/3 41/13
41/20 41/21 42/7 43/9
43/18 44/7 44/8 44/10
44/14 44/21 45/1 78/8
78/11 78/12 89/10
90/1 90/16 165/7 195/9
SAGE's [1] 43/14
said [32] 17/17 19/1
23/17 25/11 33/9
38/15 48/2 53/9 65/12
66/2 66/15 72/6 72/12 75/3 81/25 82/14 84/13 86/16 103/14 109/17 132/23 132/24
133/8 137/18 137/19 158/18 159/9 178/7 178/14 184/13 195/1 197/15
sake [1] 139/4
Sam [1] 73/13
Sam Beckett [1] 73/13
same [30] 11/16 16/13 17/13 60/18 63/6 68/15 71/8 75/23 92/8 92/15 96/23 99/21 101/3 109/19 114/10 122/3 131/3 138/10 157/7 158/7 165/2 166/23 167/5 170/2 170/17 170/20 171/20 180/21 187/1 197/17
sample [3] 68/17 91/13 91/14
samples [1] 179/4
SARS [2] 5/11 5/21
save [2] 56/24 57/1 saving [1] 54/17 saw [6] 127/19 127/19 147/18 165/23 172/3 187/11
say [121] 2/24 4/5
4/11 7/21 9/13 10/3
10/3 10/13 13/2 13/12
13/13 13/16 14/20
14/23 17/9 17/9 19/22
22/23 23/3 23/24
25/16 27/8 27/9 27/13
27/19 28/2 28/8 28/22
29/3 29/19 31/13
31/16 32/11 32/25
37/12 38/14 39/20
40/2 40/20 41/13
42/13 43/19 44/18
47/20 48/15 49/11
49/13 49/23 51/12
51/13 52/8 52/18 53/6
53/15 53/19 54/17
55/7 59/2 60/10 60/12 63/1 64/12 64/20
64/25 65/2 65/12 66/2 67/3 67/8 67/9 67/13
68/13 73/4 74/15 79/8
79/11 80/3 83/7 84/21
86/5 90/8 96/9 96/20
98/25 100/18 100/22 101/2 105/6 106/2 114/22 118/6 120/15 121/5 123/25 124/23
124/25 127/10 135/21
135/22 142/6 142/22
144/9 148/12 150/23
162/16 166/10 168/24
170/5 174/6 175/5
176/20 182/1 182/8
183/5 184/4 185/7
185/21 186/13 189/9
190/11 194/4
say: [1] 60/18
say: okay [1] 60/18
saying [28] 6/14 12/8
12/11 24/15 25/3 25/7
34/3 34/14 35/19 41/4
62/9 75/3 75/6 79/15
107/3 109/23 113/6
113/12 129/21 130/15
147/10 179/12 183/9
185/17 186/18 189/20 192/5 197/21
says [19] 14/8 14/10 26/9 26/12 39/15
55/16 56/5 62/5 77/4 82/25 90/9 167/8
169/23 170/3 170/12 191/5 192/21 195/1 195/4
scale [1] 165/8
scaled [1] 110/7
scaled-up [1] 110/7
Scandinavia [1]

S
Scandinavia... [1] 121/18
scenario [1] 49/4 scheme [1] 185/4 schemes [1] 48/20
school [3] 4/3 22/14 181/10
schooling [1] 84/25
schools [7] 6/10
40/23 40/25 76/5
76/20 181/7 181/12
science [20] 3/11
3/13 37/16 37/24
37/25 38/1 44/12
44/18 44/20 44/24
44/25 45/1 78/8 78/9
92/5 149/11 174/23
176/8 176/11 176/21
sciences [3] 3/11
38/12 44/21
scientific [14] 14/4
23/7 26/11 36/5 36/7
37/22 40/16 41/13
41/21 41/24 42/8
43/16 46/9 89/13
scientists [3] 38/8 40/5 42/4
Scotland [5] 91/10 98/12 99/23 112/18 138/22
Scottish [1] 180/13
scraps [1] 160/22
screen [13] 58/20
59/24 70/2 81/16
81/20 83/8 128/1
136/18 147/2 147/24
148/4 164/12 164/19
scribble [1] 170/5
scroll [3] 121/2 141/7
174/13
sea [1] 27/1
seal [2] 53/24 57/16
searching [1] 180/5
season [1] 114/20
seat [1] 49/19
second [19] 22/20
22/23 23/13 27/8
27/24 70/5 73/12
110/21 114/21 115/22
115/22 116/4 118/21
124/9 124/14 128/5
128/21 189/3 193/13
secondary [1] 82/23
secondly [6] 38/21
46/16 74/25 85/2
113/20 115/15
seconds [1] 168/6
Secretariat [2] 30/3 88/14
secretaries [3] 9/14 18/19 89/10
secretary [59] 1/24

| $1 / 252 / 107 / 147 / 20$ | $118 / 18$ |
| :--- | :--- | :--- | 154/11 196/20 8/2 8/5 8/8 8/20 8/23 self-evident [3] 12/13 services [1] 119/12 9/1 9/3 9/16 9/22 10/4 36/14 55/10 10/12 10/21 10/25 self-reported [3] 11/2 11/3 11/5 11/8 11/11 12/7 12/15 12/17 13/5 13/11 13/24 14/9 14/16 15/6 15/22 17/23 18/3 18/5 18/8 18/10 18/11 18/20 18/23 19/3 19/14 19/25 20/5 20/8 26/9 30/16 45/18 53/7 73/12 103/2 126/13 127/17 128/9 132/1 154/13 157/5 160/16 section [3] $84 / 4$ 133/5 194/18

sections [1] 56/16 sectors [1] 119/23 security [14] 29/21 34/23 35/5 42/2 45/12 45/13 47/1 49/7 49/10 sensitivities [1] 50/2 119/13 158/1 159/10 178/25
Sedwill [3] 2/4 17/22 19/25
see [48] 33/16 52/9 59/5 59/24 64/3 81/20 86/15 94/9 109/15 112/22 113/14 113/18 116/6 119/9 121/16 122/11 123/12 123/25 September [10] 2/5 136/19 136/19 140/7 141/5 141/8 143/13 148/4 155/7 155/14 160/15 165/14 166/14 166/22 168/9 170/8 171/3 171/7 171/17 172/17 173/11 173/23 174/6 174/9 174/14 180/10 181/14 188/14 191/12 191/24 195/23 seeing [3] $15 / 2$ 155/20 180/16
seek [1] 57/15
seem [4] 101/1
141/25 160/12 167/1
seemed [2] 185/25 198/9
seems [10] 129/5 159/9 163/5 164/6 168/17 170/13 182/16 189/12 189/16 189/18 seen [18] 14/16 17/4 60/24 65/8 65/23 82/13 82/24 90/6 102/14 109/25 112/21 127/5 139/14 140/19 147/15 171/13 183/3 196/20
segments [1] 57/16 self [6] 12/13 36/14 55/10 108/12 118/12

108/12 118/12 118/18 send [2] 76/9 86/13 sending [1] 157/19
senior [3] 65/10 187/12 196/22 seniority [1] 151/20 sense [20] 5/9 6/3
6/9 6/20 9/12 14/23 16/16 18/16 20/25 21/10 27/8 50/8 55/22 64/9 144/17 170/8 183/5 196/23 197/1 198/13
sensible [3] 5/2 170/16 170/18
sensibly [1] 16/4
sensitive [2] 154/8
190/7
sensit
190/2
sent [2] 103/13
128/23
sentence [4] 33/17 130/18 182/11 188/16
sentences [2] 143/9 172/11
separate [3] 11/5
78/18 181/18
$3 / 6$ 17/24 70/1 70/3 70/10 70/16 73/12 92/1 195/3
September 2020 [2] 73/12 92/1
September 2022 [1] 195/3
series [2] 122/8 174/9
serious [3] 4/7 64/24 171/17
seriously [6] 26/2
31/16 71/7 74/3 192/24 197/24
servant [3] 65/10 66/19 67/3
servants [9] 14/14
20/21 24/12 26/6
66/23 67/8 150/22
193/19 196/21
serve [2] 128/16 129/9
serves [1] $153 / 2$ service [26] 2/9 9/2 9/5 9/14 11/2 11/18 20/15 23/18 26/14 26/18 26/25 28/23 65/16 65/17 71/17 72/13 79/5 108/4 118/24 133/22 133/23 146/14 149/6 153/16
set [24] $5 / 95 / 196 / 25$
8/11 14/4 30/10 30/22 31/14 35/1 35/3 40/11 40/21 43/1 45/22 59/2
64/12 93/15 137/7
163/9 169/11 174/4
185/11 185/16 196/7
sets [4] 44/17 44/17
70/17 107/23
setting [10] 29/20
32/13 45/19 59/2
61/21 70/19 75/12 148/16 175/6 185/3
seven [3] 24/19 146/8 166/12
seven years [1] 146/8
several [5] 160/4
178/3 188/16 189/10 193/19
severe [1] 159/2
sewage [1] 179/1
sex [3] 80/15 105/10 115/8
sexist [1] 64/20
Shadow [1] 24/20
shall [4] 101/2 104/5 124/23 154/22
Shallcross [1] 76/15 share [15] 143/12 144/9 144/20 145/6 153/11 156/21 157/20 158/3 158/16 158/20 159/17 160/19 182/2 183/20 184/14
shared [8] 144/13 144/14 153/22 158/21 159/4 182/9 186/18 195/23
sharing [31] 17/12
100/9 100/14 100/15
100/18 101/11 101/25
138/9 140/15 142/9
143/21 144/1 144/12
148/25 153/9 153/14
153/15 154/2 154/5
154/8 154/14 155/5 156/24 157/16 159/1
176/3 181/20 182/13
182/22 184/22 192/16
she [5] 8/23 9/1
158/18 158/19 192/10
shed [1] 179/4
sheet [1] 168/11
Shepherd [6] 126/1
132/16 134/15 134/16
135/19 199/15
shifts [1] 80/4
Shinner [4] 160/24 171/4 172/4 174/2
shitshow [1] 170/13
shops [1] 74/21
short [16] 4/1 31/5
32/8 45/7 86/13 97/14
104/7 131/14 131/21
141/15 154/17 154/24
158/17 159/1 166/12
167/4
shortly [2] 51/23 178/5
should [46] 2/21 3/22
4/5 5/23 12/9 12/10
13/15 17/25 19/6
23/24 27/12 34/22
37/5 39/13 40/17
40/23 41/19 42/14
42/24 48/4 59/14
60/10 62/20 63/1 71/6
74/5 81/11 81/20
86/13 99/21 99/24
103/21 122/18 128/25
133/12 137/19 139/17
161/16 161/16 162/9
168/22 170/16 171/7 171/24 171/25 195/1
shouldn't [7] 13/15
30/14 51/4 122/18
144/21 170/18 190/17
show [16] 28/11
60/11 83/14 108/11
108/24 110/8 111/8
112/7 115/9 119/24
122/4 122/12 123/22
129/5 129/19 130/9
showed [2] 64/21
117/11
showing [9] 107/16
110/10 110/16 112/9
117/18 121/4 123/19
125/7 128/19
shown [1] 147/24
shows [15] 109/2
109/9 111/10 111/12 113/17 115/25 118/2
118/16 121/12 121/13 125/10 125/12 158/25
163/14 171/19
side [3] 19/5 140/6 177/19
signal [1] 157/19
signalling [1] 31/15
signed [2] 1/18 70/3
significance [1]
significant [10] 23/17
24/12 40/14 109/10
109/14 109/15 112/20
112/23 127/12 127/16
significantly [3] 1/23
105/18 115/13
silo [1] 185/18
siloed [2] 145/3
195/14
similar [9] 138/21
141/22 142/20 170/11
172/8 173/13 174/13
(79) Scandinavia... - similar
similar... [2] 174/14
177/1
similarity [1] 123/23
similarly [1] 116/5
Simon [6] 2/6 14/9
14/10 15/6 17/19 160/15
Simon Case [6] 2/6 14/9 14/10 15/6 17/19 160/15
simple [3] 133/14 155/17 180/25
simply [16] 31/22 38/24 41/14 94/10 107/20 117/3 129/19 130/6 142/24 155/10 155/23 156/15 159/18 166/3 173/2 180/19
simulation [1] 162/23
since [10] $3 / 23 / 13$
79/20 104/4 140/20
146/11 146/17 152/4 152/4 163/2
single [9] 10/5 $13 / 2$ 29/11 29/15 42/13 164/25 171/24 172/9 177/18
sir [45] 2/1 $2 / 4$ 14/3 25/25 26/8 69/9 69/12 69/19 81/20 89/12 89/13 99/14 101/9 103/1 103/8 103/10 103/14 103/19 103/21 103/23 126/10 126/11 126/17 127/19 128/2 129/12 129/14 129/21 130/15 131/12 131/25 135/20 154/16 157/4 178/4 178/17 179/14 188/24 191/1 191/12 192/2 192/5 192/6 192/9 199/9
Sir Chris Whitty [2] 101/9 188/24
Sir David [12] 103/10 103/14 103/19 103/21 103/23 126/11 $127 / 19$ 129/12 129/21 130/15 131/12 131/25
Sir David Norgrove [3] 103/1 103/8
126/10
Sir David Norgrove's
[1] 128/2
Sir David's [1]
129/14
Sir lan [5] 135/20 178/17 179/14 192/6 192/9
Sir Ian Diamond [5] 154/16 157/4 178/4 191/1 191/12

Sir Jeremy [1] 2/1
Sir Mark [1] 2/4
Sir Mark [1] $2 / 4$
Sir Oliver Letwin [1] 25/25
Sir Patrick Vallance
[2] 14/3 89/13
Sir Patrick Vallance's
[1] 26/8
Sir Paul [1] 192/5
SIREN [2] 96/17
178/11
SIS [2] 76/21 87/7 sit [1] 166/10
sitting [1] 167/19
situation [8] 17/20
18/22 19/10 76/8 99/7
166/14 168/1 198/6
situations [1] 22/3
six [2] 157/11 166/12 size [3] 91/13 91/14 175/16
skills [4] 102/2
174/23 176/12 196/21
slide [1] 125/10
slides [4] 79/3 79/7
79/9 130/9
sliding [1] 198/1
slightly [6] 31/10
129/24 156/18 159/14
180/7 181/18
slow [4] 25/1 73/10 73/11 182/2
slowing [1] 29/2
slowly [4] 1/12 26/14 70/13 140/11
small [10] 20/2 20/12 50/15 51/2 51/7 66/24 106/1 117/24 125/16 173/23
smaller [1] $83 / 3$ smooth [1] 18/16 snap [1] 27/18 snapshot [1] 165/21 so [332]
so that [1] 59/5 social [23] 38/1 38/12 39/13 39/14 39/16 40/4 42/19 44/21 59/14 59/20 61/15 63/22 71/23 76/2 76/17 103/3 104/13 119/18 153/18 153/18 154/6 168/1 180/15
social care [3] 76/17 153/18 154/6
societal [3] 41/15 41/22 76/1
society [5] 41/16
57/11 59/13 60/2 61/21
Society's [1] 102/1
socio [6] 106/19
116/20 117/1 117/4

117/7 122/25
socio-economic [5] 106/19 116/20 117/1 117/7 122/25
software [3] 161/24 174/18 174/24
solace [1] 22/25
solve [1] 196/2
solved [3] 6/21
143/18 193/21
solving [1] 6/4
sombrero [1] 51/14
some [157] 2/23 3/19 5/8 7/9 10/8 11/16 12/6 18/12 20/22 21/3 21/21 22/7 25/17 27/14 27/25 31/3 33/4 34/10 42/13 42/17 42/18 42/19 42/19 45/3 45/9 46/2 46/5 47/21 47/24 53/13 56/20 60/16 64/15 64/21 64/25 65/5 67/5 73/6 74/23 76/6 78/9 81/13 84/19 85/8 86/1 86/8 87/23 88/4 91/19 92/10 92/12 92/21 93/15 97/14 98/5 99/9 100/23 101/1 108/17 114/22 114/23 115/21 117/11 119/2 120/10 120/25 123/10 124/10 125/4 125/25 128/11 132/19 135/11 139/14 139/15 139/22 140/21 141/22 141/25 142/5 143/1 143/1 143/14 143/16 143/18 143/19 143/22 144/24 145/1 145/15 145/16 145/21 145/24 145/25 146/19 146/20 147/10 147/14 147/18 148/7 148/16 149/8 149/19 149/21 149/24 150/4 150/7 151/17 152/11 153/12 153/21 153/22 154/17 155/3 155/8 156/12 157/21 157/24 159/11 161/4 162/17 163/25 164/4 167/20 167/20 168/19 171/7 171/17 171/20 172/15 172/19 172/19 174/21 174/25 177/1 178/2 178/10 179/8 179/8 179/22 179/24 181/9 182/7 182/9 182/15 184/24 186/2 187/6 188/20 189/24 191/1 191/12 193/12 193/16 193/22 194/22 197/6
somebody [5] 27/19
151/14 166/10 182/24

184/13
Somehow [1] 49/23 someone [10] 6/14 47/13 48/1 68/25 71/5 75/8 78/2 158/11 166/4 167/19
someone's [2] 57/25 166/6
something [59] 6/12 10/14 10/16 18/11 22/23 24/4 28/8 30/9 31/5 31/9 31/18 32/5 32/5 32/6 32/10 34/22 39/10 45/22 45/23 46/4 47/16 48/16 48/20 48/24 56/15 65/19 75/6 78/14 81/20 102/4 105/3 144/19 144/21 146/16 151/16 155/23 156/13 157/12 158/7 158/21 161/7 162/10 165/23 166/8 166/13 169/12 172/7 177/13 178/2 178/23 180/20 181/6 182/12 183/9 183/19 188/4 189/16 192/2 193/5
sometimes [14] 9/9 15/14 73/5 75/21 77/6 77/7 82/9 142/1 142/23 144/1 145/4 151/16 151/21 159/18 somewhat [1] 114/19 somewhere [1] 68/24 soon [1] 34/20
sophisticated [6] 67/23 161/6 161/8 175/14 175/17 190/19 sorry [15] 8/16 25/1 42/25 50/10 51/8 54/13 66/15 83/7 85/20 96/25 114/5 120/22 177/9 192/7 197/16
sort [70] 7/5 28/12 30/24 31/17 40/15 42/1 43/2 45/20 57/20 59/3 60/2 60/5 61/17 89/5 89/25 143/11 143/14 143/18 143/24 144/11 144/12 145/10 146/7 146/19 148/12 149/13 153/9 153/17 155/4 156/3 158/22 158/25 159/15 160/18 161/5 161/18 162/5 163/6 164/20 164/22 165/13 167/19 170/2 174/7 174/22 176/11 176/11 176/25 177/18 177/19 177/25 178/10 178/24 179/4 179/6 179/8 179/8 180/1

180/3 180/9 184/5 184/7 184/9 185/10 186/6 187/1 187/13 195/17 196/15 196/21 sort of [47] 7/5 28/12 30/24 40/15 45/20
57/20 59/3 60/2 61/17
143/11 143/14 143/18 143/24 144/11 145/10 146/19 149/13 153/9 153/17 155/4 156/3 159/15 161/18 162/5 163/6 164/20 170/2 174/7 174/22 176/11 176/25 177/19 177/25 178/10 179/4 179/8 180/1 180/3 180/9 184/5 184/7 185/10 187/1 187/13 195/17 196/15 196/21
sorts [8] 34/13 38/16 41/2 44/3 45/25 49/16 167/13 196/16
sought [1] 127/16 sounding [2] 65/17 178/10
Sounds [1] 26/13 source [5] 39/22 164/25 167/3 172/9 179/18
sourced [1] 175/21
sources [7] 78/23
93/18 138/1 161/21
172/20 175/1 179/23 south [1] 122/3
southwest [2] 113/2 113/5
space [1] 146/5
SPADs [10] 14/11 14/12 65/8 65/11 65/12 66/4 66/7 66/17 67/1 67/6
speak [8] 1/12 13/12 13/22 70/12 140/11 142/13 142/14 190/13
speaking [5] 92/17
105/25 109/6 124/3
160/16
speaks [2] 124/6 144/21
special [5] 14/13
65/14 65/23 137/10 154/9
specialism [1] 146/1 specialists [1] 43/23
specific [14] $33 / 5$
39/7 39/13 42/9 70/7
70/18 73/21 107/22
111/10 148/20 150/23
154/13 162/19 185/1
specifically [3] 92/3
134/23 150/1
specify [1] 39/18
speedy [2] 26/6

## S

speedy... [1] 36/20
spend [1] $12 / 7$
spent [1] 161/19
SPI [5] 78/8 97/4 97/4
98/17 195/9
SPI-B [1] 78/8
SPI-M [3] 97/4 98/17 195/9
SPI-M-O [1] 97/4
spirit [1] 195/18
spoke [2] 14/19 182/24
spoken [6] 14/15 93/21 149/20 160/4 183/10 193/19
spokesmen [1] 37/21
Sport [1] 149/15
spotted [1] 191/8
spread [10] 49/1
53/22 53/23 57/14 57/17 155/22 180/17 182/6 185/10 193/1
spreadsheet [2]
161/5 161/14
spreadsheets [4]
160/21 162/2 167/15 172/25
squashing [1] 51/14 staff [3] 42/20 169/19 195/13
stage [20] 32/8 33/13
73/25 74/1 74/6 74/8
74/9 74/10 80/20
83/15 83/21 90/1
99/19 99/25 120/1
145/23 155/24 156/14 165/16 194/8
stages [5] 110/5 139/23 160/14 164/11 165/6
stand [4] 6/1 99/14 102/19 164/15
standard [3] 24/14 97/22 121/11

## standardise [2]

107/24 113/7
standardised [17]
106/22 107/9 108/1
110/23 111/14 112/9
112/13 112/24 115/6 115/10 115/12 118/7 119/1 119/15 119/21 121/10 172/22
standardising [1] 188/10
standards [2] 61/12 142/19
standing [2] 184/9 184/24
stands [3] 100/1 166/3 176/8
stark [2] 116/4

116/16
start [24] 6/24 23/24
32/2 32/13 50/16 52/8 57/7 57/8 58/19 64/23 68/12 70/15 73/23 91/2 92/3 128/7 139/22 145/14 160/6 160/15 168/23 181/12 189/6 197/5
started [8] 5/14 93/2 94/19 98/6 110/20 127/2 175/7 190/21 starting [4] 155/14 165/2 178/13 194/24 starts [2] 6/21 124/12 state [9] 50/16 73/18 103/2 126/13 127/17 128/9 132/1 154/13 157/5
State's [1] 30/16 statement [22] 1/16 1/17 54/5 70/5 70/16 70/16 79/11 84/4 91/24 98/21 99/3 104/11 109/4 110/22 112/6 112/6 118/22 125/3 129/23 136/20 158/17 160/24
statements [3] 39/23 40/6 69/22
states [2] 3/25 122/16
static [2] 165/19 166/2
stating [1] 190/6
statistic [1] $87 / 1$
statistical [4] 71/16
71/25 72/12 97/3
statistician [9] 69/9 69/17 70/24 71/1 71/2 72/6 90/9 103/24 120/2
statisticians [7] 71/17 71/21 72/25 73/1 73/8 90/12 99/23
statistics [49] 69/10
69/23 70/7 70/8 70/18 70/19 70/20 70/23 71/9 71/9 71/11 71/12 71/13 71/14 71/14 72/3 72/8 72/9 72/11 72/16 72/18 72/21 73/2 73/3 73/15 73/19 75/18 80/5 80/25 83/23 84/7 85/25 87/8 93/14 95/10 97/6 97/11 102/25 103/22 128/16 129/8 129/9 131/17 131/19 131/21 135/21 136/5 138/5 179/25
stats [2] 21/19 21/25 status [3] 66/9
106/20 118/15
statutory [2] 72/4 152/11
stays [1] 113/23
stems [1] 142/18
stenographer [4] 1/14 70/14 140/12 192/8
step [2] 49/3 80/8
stepped [1] $3 / 25$
steps [4] 188/1 188/9 188/13 193/17
stick [1] 55/8
still [20] 2/3 128/14
131/21 132/6 143/19 145/24 145/25 149/7
149/19 149/19 149/23
151/24 157/22 157/22
159/1 172/1 185/9
189/17 195/11 198/8
stop [6] 56/19 87/16 155/15 156/5 196/4 198/1
stopping [2] 39/23 100/25
stories [1] 198/14 straight [3] 88/12 118/3 170/25
straightforward [3] 26/5 58/13 183/18
Strasbourg [1] 122/5 strategic [11] 40/7 43/3 47/15 47/16 51/18 51/20 54/1 54/2 57/6 146/20 163/2
strategies [1] 150/5 strategy [25] 31/24 31/24 32/18 35/1 39/25 46/19 47/10 50/9 51/10 52/7 53/16 147/25 148/5 148/11 148/15 148/24 149/1 149/8 149/17 149/22 150/3 150/13 150/17 151/7 192/19
Street [11] 17/24 61/14 63/15 63/18 91/25 92/6 160/4 160/13 160/23 176/13 176/17
strength [1] 17/14
strengthen [1] 65/5
strengths [2] $13 / 3$
35/4
stress [2] 9/8 43/25
stressful [1] 80/4
stretched [2] 90/4
90/4
striking [3] 50/3
167/12 168/3
strikingly [1] 141/22
strong [5] 13/11
51/16 109/22 123/12 147/16
strongly [1] 4/9
struck [2] 189/18

## 193/24

structure [24] 7/9
8/16 9/4 9/5 30/22
31/17 34/17 34/23
35/4 35/5 41/20 42/1
42/11 42/24 43/2 43/5 43/9 45/20 46/6 49/13 52/21 64/6 64/12
145/2
structures [28] 4/18
4/23 5/9 5/19 6/25
7/13 7/23 7/23 8/1
8/12 8/14 10/18 29/18
31/14 32/12 33/2 34/6 35/2 42/23 45/10 47/5 48/23 50/23 64/2 64/7 64/25 101/20 138/10 stuck [2] 196/10 196/11
students [1] 95/22
studies [9] 2/16 3/6
3/23 95/25 96/14
178/17 179/16 180/12
188/17
study [10] 67/16
67/23 68/20 90/21
90/21 95/23 95/23
95/25 96/17 96/17
stuff [2] 43/19 170/23 stuttering [2] 28/1 28/6
style [1] 18/25
styles [1] $13 / 8$
sub [3] 36/9 36/10 64/4
sub-bodies [2] 36/9 64/4
sub-body [1] 36/10
subgroups [1] 50/21
subject [13] 21/10 44/7 48/8 84/13 84/18
88/1 98/1 102/24
134/9 136/16 156/9
181/19 185/14
subjects [1] 181/19
submissions [1]
60/25
submit [1] 183/11
subparagraph [1] 148/2
subsequent [2]
109/3 128/6
subsequently [4] 3/9
88/10 114/24 116/14
subtly [1] 171/12
succeeded [2] 2/3 140/24
success [2] 132/8
198/14
successes [1] 142/3
successfully [2]
130/8 196/12
successor [1] 14/8
successors [1] 2/1
succinctly [1] 106/23
such [21] 33/23
33/23 46/13 48/17
59/15 59/16 90/15
94/2 101/21 104/12
104/12 106/19 107/13
122/25 137/25 147/11
147/12 147/12 176/24
180/12 188/9
suddenly [2] 174/19 192/24
Sudlow [1] 101/10
suffer [1] 23/1
sufferers [2] $82 / 2$
92/21
suffering [2] 125/8 125/15
suffice [1] 88/17
sufficient [2] 29/24
182/21
sufficiently [1] 182/5
suggest [8] 82/11
87/19 88/11 107/20
129/14 162/5 184/17
190/20
suggested [5] 102/1
103/21 149/7 155/7 175/19
suggestions [2] 39/3 196/3
suggests [2] 40/13 173/1
suitable [1] 4/24
summaries [1]
139/23
summarise [1] 194/19
summary [4] 9/7
104/16 111/4 152/10
summer [6] 18/1 46/21 77/24 91/10 91/10 114/16
supplementary [2]
52/19 154/18
supplied [1] 183/16
supply [2] 36/13
73/21
support [9] 8/10 74/1
129/8 131/16 133/18
144/22 159/12 186/7
192/3
supported [3] 72/24
73/8 73/11
supporting [1]
198/12
suppose [1] 9/25
suppression [2]
51/12 53/19
sure [42] $3 / 78 / 58 / 12$
8/14 8/22 9/16 16/14 16/24 19/16 20/1 20/6
20/12 24/15 27/14
28/2 33/1 34/8 47/12

28/11 61/18
systems [9] 25/3 143/1 143/2 143/6 185/12 186/17 191/3 193/12 197/5
85/8 86/11 90/19 92/22 96/6 97/6 97/12 T 97/21 98/19 107/2 132/6 155/25 175/4 176/13 192/1
surprise [1] 160/25 surprises [1] 164/4
surprising [1] 131/22 surroundings [1] 116/19
surveillance [2] 93/6 189/4
survey [44] 75/12 76/17 76/20 76/21 76/22 76/25 77/3 77/3 77/5 77/10 77/18 77/22 84/17 85/5 85/20 87/7 87/7 87/15 89/3 89/21 89/21
89/22 89/23 89/24
89/25 90/9 90/10
90/25 91/15 91/17 92/23 92/23 93/5 98/6 98/8 98/9 110/13
128/19 135/5 135/7 177/25 178/19 180/13 188/20
surveys [13] 75/19
76/12 76/12 76/19 77/1 83/16 87/5 87/7 89/20 90/14 95/21 96/17 110/19
suspect [1] 133/4
swabs [2] 90/20 91/14
swathes [1] 76/4
sweeping [1] 124/17
swept [1] 66/21
swift [1] 101/18
swiftly [2] 101/22
187/18
switch [1] 184/1
sworn [4] 1/5 69/12 199/3 199/9
symptoms [9] 91/22
92/10 92/13 92/24
93/1 108/9 125/7
125/11 125/12
synthesise [3] 28/16 41/20 43/9
system [16] 7/10 29/17 29/23 35/12
45/12 46/18 59/20 64/18 64/22 74/12 81/4 157/19 165/15 168/21 173/3 186/15
systemic [2] 17/8 159/15
systemically [2]
takes [5] 61/20
159/15 171/23 183/14 197/24
taking [6] 22/10 31/16 115/10 137/21 160/13 179/10
talk [19] 9/9 11/14 11/16 18/9 27/18 28/25 35/9 39/11 46/2 55/13 56/10 67/6 102/7 119/6 119/12 142/11 147/5 162/6 188/9
talked [5] 50/14 56/14 133/25 135/6 135/7
talking [11] 15/7 18/18 50/1 50/17 103/12 119/7 146/21 154/16 170/1 170/11 196/14
talks [1] 25/8
tap [1] 155/18
target [2] 127/7 127/8
tasked [1] 158/11 Taskforce [6] 46/22 46/23 47/7 75/9 77/23 77/23
taxi [1] 119/7
teachers [1] 6/16
teaching [1] 21/21 team [8] 79/5 79/10 88/15 88/15 97/20
176/8 176/21 198/12 teams [1] 149/19 technical [12] 52/17 142/11 142/25 143/8 159/16 161/6 188/24 189/2 189/19 190/5 190/6 190/25
technically [1] 66/4 technique [1] 191/19 technology [3] 143/1 143/6 149/12
teeth [1] 55/12
telecommunications
[1] 180/18
telephone [1] 85/4
tell [12] 6/12 28/25 52/8 75/6 107/20
128/25 148/11 153/4 172/12 176/8 178/23 189/12
telling [2] 62/24
63/21
tells [2] 32/9 42/22
temporarily [1]
193/23
ten [1] 105/21
tend [3] 137/3 145/3 189/21
tended [6] 76/12 94/9 109/18 119/5 140/22 180/21
tested [3] 94/19 159/25 179/2

157/1 158/4 159/13 164/12 171/2 171/15 175/25 177/23 181/17 181/24 198/18 198/20

## that [1146]

that's [146] 3/7 6/23 15/5 15/10 15/19 16/20 16/20 17/6 17/7 17/8 18/21 18/21 19/6 19/7 20/25 21/17
21/22 24/21 29/18
31/9 32/2 32/10 36/8 37/7 39/9 39/20 41/7 41/7 42/8 43/25 44/19 46/12 48/3 49/11 51/12 52/15 53/19 55/13 56/18 58/14 61/5 61/5 61/6 62/20 63/2 64/7 64/8 64/17 67/10 68/7 69/20 70/2 74/20 79/14 80/17 81/9 81/24 92/9 94/1 96/24 101/24 102/22 106/24 107/19 110/22 113/6 113/6 119/12 120/9 121/5 122/7 122/9 122/17 123/2 123/25 126/9 127/9 129/20 129/21 130/15 131/2 131/10 132/13 136/25 137/3 137/17 138/23 139/20 140/3 140/18 142/8 142/18 143/13 144/14 144/17 144/18 145/19 146/7 146/16 146/17 147/9 150/2 150/9 150/13 150/21 152/2 152/21 153/22 155/25 156/16 156/17 156/21 157/13 158/5 158/17 160/17 162/4 166/8 167/18 170/15 171/1 173/17 175/10 175/19 176/23 177/8 179/11 179/20 180/3 180/9 181/2 181/9 182/23 184/2 185/6 185/19 186/21 188/4 190/20 191/17 191/23 192/11 192/18 193/10 193/19 197/8 their [57] $5 / 56 / 96 / 15$ 10/17 18/10 19/7 21/22 22/10 22/10 22/19 23/11 35/6 35/18 36/23 37/5 40/5 41/1 41/10 47/20 52/4 53/10 54/23 58/3 60/15 61/17 65/13 66/8 66/9 66/9 66/20 67/2 68/10 71/19 74/22 77/19 84/23 106/9 107/5 107/6 118/13 118/14 128/20
their... [15] 131/22 145/6 147/7 149/9 157/23 167/21 180/2 182/6 183/17 184/15 187/12 190/10 191/4 191/10 193/20
them [71] 5/6 15/20 21/9 21/12 21/14 21/19 21/23 21/23 22/11 22/16 25/22 26/20 27/25 29/7 31/8 37/11 39/10 39/12 40/22 41/9 48/18 52/13 54/19 55/19 60/24 61/4 62/7 62/24 63/4 64/25 65/20 65/25 71/18 77/18 78/23 79/22 80/7 81/13 85/3 87/14 88/11 94/6 102/3 104/20 129/4 131/20 132/19 135/15 141/3 142/10 147/18 149/21 157/4 157/23 158/2 162/2 164/24 167/20 167/21 168/5 170/6 178/5 178/7 179/5 183/8 183/14 183/16 191/12 194/17 196/23 198/12
theme [4] 4/16
139/25 139/25 170/20
themes [4] 76/1
184/21 185/20 185/20
themselves [2] 23/10 141/11
then [117] 2/1 $2 / 44 / 2$ 6/2 13/20 14/3 18/14 19/2 19/24 26/17 27/7 27/18 30/18 32/11 32/13 32/17 35/8 39/11 39/14 40/2 40/23 43/4 43/21 44/14 46/4 46/10 46/20 47/10 48/22 49/17 50/12 50/20 52/8 53/5 55/20 55/22 57/7 58/10 58/19 60/12 60/16 60/17 62/4 62/25 70/19 80/24 81/2 82/22 83/4 87/14 87/25 88/2 88/23 89/5 91/4 91/9 92/24 93/5 93/14 103/2 107/1 107/7 107/23 109/11 109/13 111/20 115/5 116/5 116/6 116/14 117/13 117/25 118/10 118/21 120/22 121/17 121/18 123/18 124/13 126/20 128/5 129/2 130/8

131/13 133/22 134/7 139/22 141/7 143/5 146/3 146/13 146/24 148/19 150/18 151/23 158/25 170/10 170/12 170/15 170/20 171/4 175/2 178/16 181/12 182/8 184/21 187/18 187/21 188/18 188/22 189/5 190/24 191/3 191/24 194/18 194/23 198/15
theory [1] 64/20 there [294] there'd [1] 83/3 there's [30] 2/24 6/5 13/21 18/20 19/3 24/3 24/16 24/18 27/5 27/9 27/17 27/19 29/9 29/10 30/15 48/24 56/18 57/24 61/1 68/14 68/19 84/11 87/21 100/15 112/22 116/17 131/6 141/22 183/5 189/19
thereafter [1] 126/1 thereby [2] 57/17 123/19
therefore [36] 6/23
10/17 13/5 15/17 23/19 29/14 35/23 47/4 51/5 56/25 62/6 63/10 66/13 72/3 72/15 75/16 75/25 80/18 86/18 88/12 95/11 96/15 110/8 111/3 111/22 115/10 115/25 116/25 117/2 117/18 118/19 119/3 133/15 145/17 174/12 198/3
thereto [1] 3/21 these [81] $12 / 13$ 12/24 15/16 15/20 16/1 16/5 16/22 16/24 22/1 25/14 26/2 27/16 30/12 33/24 40/11 41/2 41/10 43/25 45/25 51/2 54/15 55/2 57/9 58/3 58/9 60/9 61/1 61/2 61/3 61/7 61/20 63/2 65/1 68/11 83/3 90/14 114/7 114/9 116/12 116/12 116/15 117/23 118/6 119/5 121/9 122/20 137/23 139/8 140/16 141/8 142/7 147/23 155/10 155/11 157/6 157/10 158/12 159/20 162/9 168/25 169/3 169/11 169/20 175/7 178/3 179/17 184/21 184/24 185/2 185/23

187/19 189/17 190/24 $\quad 66 / 13$ 88/10 127/5 $\quad 132 / 21$ 134/5 137/2 193/4 194/25 195/5 $\quad 144 / 20$ 183/13 183/15 | $138 / 24$ | $140 / 3$ | $140 / 7$ |
| :--- | :--- | :--- | :--- | :--- | :--- | 196/4 196/16 196/24 they've [1] 185/7 196/25 197/3

they [164] 3/24 5/4 8/24 8/25 9/2 9/3 9/4 9/23 13/6 14/25 15/1 15/7 15/19 18/9 19/23 21/4 21/11 21/17 22/15 22/16 22/17 22/20 22/21 22/22 23/5 23/9 23/10 25/19 27/2 28/25 29/1 29/3 29/8 30/17 32/17 33/1 33/3 34/12 35/10 35/15 35/16 35/16 35/20 35/21 35/21 35/24 35/24 36/16 36/24 37/12 37/21 37/23 38/16 38/16 39/11 40/10 42/8 43/22 44/5 44/14 44/18 44/18 45/3 47/19 54/3 54/4 54/20 55/25 57/2 57/11 60/23 61/7 62/3 62/19 62/20 62/22 62/23 64/13 64/23 65/15 65/16 65/17 65/23 65/25 66/3 66/11 66/19 68/6 71/19 77/19 77/24 78/1 78/4 78/10 81/11 82/22 83/20 85/9 88/2 89/16 94/6 94/13 99/24 102/8 102/8 105/13 105/23 106/7 106/7 109/18 118/13 119/21 119/22 119/24 123/22 128/22 128/23 128/24 135/2 135/3 135/3 137/21 138/11 138/13 141/12 144/20 144/21 145/4 150/10 151/18 151/19 159/12 162/21 162/21 163/20 174/15 174/18 174/18 174/21 176/15 177/4 179/19 180/10 180/16 181/13 182/4 183/1 183/1 183/5 183/7 183/7 183/22 184/7 184/8 184/14 185/9 188/1 188/6 188/25 189/2 193/3 194/20 194/21 194/21
they'd [4] 33/4 60/16 65/21 94/19
they'Il [2] 25/13 25/13
they're [17] 43/20 43/24 44/1 49/10 51/2 55/20 57/11 62/6 65/24 66/10 66/12
thing [26] $4 / 7$ 7/21 21/9 25/10 29/15 31/12 41/7 43/20 45/24 48/25 60/24 62/10 62/23 62/24 67/13 80/4 88/11 89/5 149/2 161/6 163/15 171/21 180/9 183/19 184/7 198/9
things [68] 5/11 6/5 7/25 10/12 10/19 15/17 20/6 21/24 22/1 22/15 22/18 26/2 27/16 34/13 37/3 39/19 41/2 41/3 41/6 41/11 43/22 44/6 44/19 45/1 45/3 46/2 46/3 47/22 48/1 49/16 49/22 49/24 52/17 54/15 61/1 61/8 63/9 65/1 68/12 68/15 68/20 68/21 76/7 87/23 96/21 101/12 105/8 119/13 141/20 142/23 143/16 146/12 147/16 153/7 157/17 161/16 166/11 168/21 169/17 175/6 175/8 177/20 180/6 184/16 185/11 185/22 186/2 187/14
think [194] 1/19 3/15 4/13 5/15 5/25 5/25 6/6 8/4 8/6 10/10 10/13 10/19 13/14 13/14 14/21 14/23 15/11 16/20 17/16 18/10 18/14 20/4 22/22 25/14 25/24 27/7 31/12 33/3 33/16 37/5 39/5 39/9 39/16 39/18 40/19 40/20 43/1 43/18 44/13 44/18 45/25 46/4 47/9 47/12 47/21 47/24 48/24 50/7 50/19 50/25 54/3 54/3 55/13 56/2 56/22 57/7 58/23 60/7 60/7 60/21 62/3 62/6 62/22 63/11 64/21 65/19 66/8 67/4 68/21 70/2 70/3 74/3 74/4 74/15 80/15 85/20 86/7 91/17 92/18 93/24 96/20 96/22 99/6 99/7 99/13 99/21 99/24 100/9 100/19 101/15 102/22 104/4 113/4 113/6 113/19 119/21 121/20 122/7 125/25 129/23 140/19 141/4 141/6 141/17 142/2 142/8 142/12 143/13 143/24 143/24 144/4 144/18 144/24 145/19 145/23 146/7 146/9 147/9 148/8 148/13 149/16 149/21 150/15 151/12 151/16 152/3 152/6 152/7 152/24 153/11 157/9 157/13 158/10 158/18 160/24 163/13 163/21 164/25 166/15 167/7 168/19 169/8 171/19 172/19 173/12 173/24 174/3 174/17 174/23 174/25 175/14 176/17 176/20 177/2 179/11 179/12 179/21 180/13 180/21 181/11 181/13 182/23 183/1 183/9 184/6 184/11 184/12 184/17 185/20 186/2 186/23 189/22 190/11 192/5 193/4 195/20 195/21 196/6 196/14 196/15 197/3 197/17 197/19 197/21 197/22 198/11 198/13 198/15
thinking [12] $5 / 12$
5/23 37/8 41/8 50/16 50/20 151/14 163/16 164/7 176/15 183/4 188/11
thinks: [1] 32/7
thinks: is [1] 32/7
third [4] 130/17
131/13 144/4 166/22
thirdly [4] 3/16 26/3
85/6 113/22
this [258]
Thomas [1] 132/22 thorny [1] 33/7
those [149] 4/9 8/12 12/20 14/7 17/17 18/3 23/19 26/23 26/25 27/22 34/12 35/3 35/9 35/16 35/17 35/18 38/17 39/12 41/6 52/6 54/20 57/18 58/5 60/7 60/7 61/15 62/3 62/13 65/5 67/2 67/7 68/21 73/6 75/10 75/21 76/6 76/10 76/13 79/2 79/7 79/9 80/5 81/5 83/17 85/14 87/25 88/9
92/13 94/11 94/12
95/10 95/11 98/10 99/11 100/25 107/21 108/6 108/13 109/1 112/10 114/2 114/23
those... [87] 115/7 115/15 116/3 116/5 117/9 118/8 120/16 122/12 122/14 125/22 129/18 131/3 131/4 132/5 132/18 133/22 135/13 135/14 138/11 139/2 139/4 139/16 140/21 140/23 141/2 141/5 142/3 142/23 143/4 143/5 143/8 143/15 143/18 143/22 144/2 144/4 145/21 146/24 146/25 147/1 147/3 147/6 147/11 147/24 148/18 152/18 153/7 153/12 153/19 154/18 155/8 156/19 160/16 160/18 161/15 161/21 163/11 163/12 163/16 164/7 165/1 167/14 168/11 171/20 174/14 175/1 175/2 178/17 181/19 182/7 183/21 184/6 184/16 184/19 185/12 185/20 186/9 186/12 187/24 196/8 196/10 196/11 196/15 196/18 196/22 197/10 198/8
though [15] 9/8 17/2
25/19 29/22 34/18 37/24 39/6 100/25 119/22 128/11 128/14 159/1 169/14 187/23 190/1
thought [9] 11/4 53/11 63/16 78/20 159/24 163/24 167/5 167/24 168/7
thoughts [1] $3 / 20$ threat [3] 10/16 45/17 45/17
threats [4] 45/14 45/14 45/21 46/4 three [8] 11/1 58/1 72/24 73/1 73/7 74/17 157/11 179/12
three months [1] 58/1
three-quarters [1] 179/12
through [32] 5/10
5/22 7/6 7/13 7/22 22/20 25/14 25/19 36/5 37/8 43/15 53/23 53/23 56/11 83/24 84/2 84/3 101/19 104/20 108/17 109/18 111/21 122/6 124/13 124/17 135/8 140/1 140/7 141/7 153/15

166/9 175/3
throughout [4] 17/25
28/22 79/1 113/23
throwing [1] 171/12 Thursday [2] 90/16 90/17
tide [1] 193/16
tier [1] 183/22
Tim [1] 101/9
Tim Ferris [1] 101/9
time [72] 1/24 2/23
5/13 5/16 9/21 11/1 12/8 13/22 13/22 13/22 14/22 15/3 17/10 20/10 21/5 22/3 took [3] 91/4 100/23 22/21 22/23 22/24 24/25 29/11 29/20 30/4 32/11 33/11 33/19 33/24 56/4 56/5 63/5 65/2 65/6 65/18 71/8 75/23 79/25 81/14 88/5 88/21 89/1 89/8 90/3 90/14 90/19 topic [2] 61/10 92/15 105/4 109/19 138/24 125/18 126/13 126/25 topics [2] 83/19 132/20 133/3 142/6 97/14
146/15 148/10 157/9 total [1] 130/2 157/23 158/7 170/17 touch [2] 138/23 171/23 171/25 172/14 177/24
173/19 174/3 175/2 175/13 177/5 177/7 178/20 183/14 195/7 198/10
timeline [1] 79/13
timelines [1] 162/25 timely [1] 77/16 times [12] 8/15 9/22 12/3 13/8 30/19 61/25 74/16 89/3 98/7 140/2 170/14 183/17
timing [1] 154/21 tip [1] 155/20 titular [1] 11/7 today [1] 45/20 together [39] 5/2 9/17 11/10 11/12 11/17 18/24 20/10 28/5 29/7 30/13 41/6 42/3 43/21 47/19 48/24 61/8 65/2 65/4 67/20 71/21 78/19 78/23 82/9 100/10 113/14 117/24 130/2 130/14 139/16 145/4 160/10 161/18 164/22 171/22 174/25 175/22 177/20 182/15 187/1 told [6] 10/4 26/11 27/5 27/18 80/21 198/4
Tom [5] 160/24
169/23 171/4 172/4 174/2
Tom Shinner [4]

160/24 171/4 172/4 174/2
Tom/Marc [1] 169/23 tomorrow [3] 171/8 198/4 198/20
Tony [4] 13/1 17/12 23/25 24/1
Tony Blair [4] 13/1 17/12 23/25 24/1
too [14] 5/24 11/4 20/18 28/19 28/20 29/1 32/22 33/14 39/1 42/25 54/18 130/4 136/3 170/18 157/22
tool [5] 134/23 135/1 135/9 135/12 140/1 top [11] 5/13 9/25 15/9 23/18 37/24 123/22 134/1 146/9 166/16 171/3 173/11 topics
$97 / 14$
total [1] 130/2
touch [2] 138/23
touched [5] 126/8 126/14 141/13 153/13 162/20
tough [2] 58/4 58/5
towards [1] 85/22
trace [6] 47/23 90/3 155/16 185/4 185/11 185/16
tracing [1] 185/10
trade [10] 44/2 44/5
51/25 52/6 52/9 52/11
52/13 54/23 57/23
60/22
trade-off [1] 52/13
trade-offs [9] 44/2
44/5 51/25 52/6 52/9
52/11 54/23 57/23 60/22
trading [1] 55/19 traditionally [1] 145/19
tragedy [1] 3/10
tragically [1] $2 / 2$
trained [2] 66/5 66/7
training [9] 21/16
22/9 22/12 22/14
22/16 25/13 25/20
25/23 66/4
transfer [1] 142/15
transform [1] 81/2
transition [3] 18/16 174/15 174/20
transmissible [1] 109/18
transmission [2]

6/11 41/5
transparency [2]
126/21 137/16
transparent [2]
102/12 127/22
transport [5] 108/3 118/25 119/7 119/10 119/15
Treasury [5] 5/18 48/19 151/2 151/6 151/10
Treasury's [1] 52/18
treated [1] 8/13
treating [1] 190/18
treatment [2] 59/9
60/4
trebled [1] 175/16
trend [1] 105/13
trends [2] 94/24
191/7
triage [1] 59/10
trials [1] $96 / 18$
tried [3] 20/11 78/22
142/5
trolleying [1] 55/7
trouble [1] 198/16
true [7] 1/18 9/20
94/14 107/8 110/14
136/23 165/8
truly [2] 40/10 170/22
trust [29] 13/23
14/24 16/1 36/17
36/24 36/25 37/3 37/4
37/5 37/11 37/12
37/13 37/23 44/19
53/9 53/12 55/24 57/4 UK [27] 3/12 42/17
57/7 61/10 61/25 62/1 $49 / 11$ 49/17 49/19
62/7 62/23 62/25
63/10 64/16 102/20 190/8
trusted [4] 37/7
65/16 102/15 132/7
trustworthiness [1]
102/24
trustworthy [1] 102/22
truth [5] 13/12 70/4 165/1 171/24 172/9
try [22] 1/11 8/11 9/23 11/22 16/14 18/13 20/1 22/5 23/7 31/19 57/15 61/5 64/7 68/10 84/14 134/8 140/10 149/8 152/5 158/20 182/15 186/6 trying [19] 9/16 11/22 37/20 39/8 43/4 44/19 57/5 63/6 65/3 65/20 83/25 131/12 141/18 143/5 144/23 167/25 170/8 189/15 192/3
Tuesday [2] $1 / 1$ 87/23
turn [9] 36/2 80/24

93/14 97/14 104/10 110/21 142/10 176/7 186/12
turned [4] 4/2 10/5 94/23 155/18
turnover [1] 146/9 turns [1] 56/6
tweak [1] 64/25
two [31] 9/11 46/20 47/18 69/21 77/4 82/9 88/5 93/17 105/20
107/23 109/1 113/20
128/16 130/13 131/10
131/13 131/20 140/14
148/7 153/25 167/4
168/11 169/19 175/13
176/2 176/5 186/8
186/9 187/18 189/5
191/24
two months [1] 77/4
two years [1] 148/7 type [18] 4/22 7/4 47/2 50/4 76/24 91/15 91/17 93/16 119/6 128/2 166/7 170/11 172/10 173/23 179/22 181/8 182/22 190/3
types [9] 157/20
164/3 169/20 170/2
177/25 178/9 178/10
183/12 184/18
typically [1] 87/22
typing [1] 167/1
U

49/25 52/5 70/19
70/23 71/9 71/9 71/14
72/3 98/6 98/8 121/22
123/4 126/6 135/4
135/8 135/16 138/19
152/14 178/25 181/21
182/1 195/12
UK GDPR [1] 152/14
UK Government [1] 181/21
UK level [1] 49/25
UK population [1]
42/17
UK Statistics [3]
71/9 71/14 72/3
UK-wide [3] 98/6
135/8 135/16
UKHSA [3] 195/12
195/13 195/22
UKSA [2] 126/11
127/4
ultimate [7] 5/3 15/23
21/2 39/8 39/10 39/22 68/13
ultimately [14] 11/6
18/15 18/24 23/10
30/1 30/7 44/6 44/16
ultimately... [6] 46/20
47/6 86/1 88/23 88/25 93/5
unable [3] 29/24 53/24 83/7
unanimity [1] 16/21
uncertainties [1] 22/1
uncertainty [7] 21/13
21/14 21/17 84/14 84/15 84/19 86/2
unclear [1] 163/3
under [12] 21/13 21/16 49/7 50/4 63/19 144/15 153/20 154/1 157/6 157/7 187/1 189/14
under way [1] 189/14
underestimate [2]
118/17 166/19
underlines [1]
127/17
underlining [1]
157/13
underlying [1]
189/11
undermined [1] 64/6
underneath [1]
148/21
underpin [1] 4/23
underpinning [2]
152/11 152/17
understand [45] 4/12 5/5 6/13 10/8 15/8 16/18 19/1 19/2 22/21 23/9 27/22 28/9 35/22 38/17 40/9 40/24 55/1 55/25 55/25 57/3
66/24 75/13 75/14
76/14 77/5 77/15 78/3 89/16 102/18 103/20 128/18 132/5 132/18 150/10 151/1 151/22 151/25 156/3 158/11 168/1 179/2 182/6
183/6 188/7 196/25
understandable [1] 190/9
understanding [19]
6/8 21/25 28/4 48/2 54/22 84/2 129/7
136/21 139/8 155/22
174/21 175/18 182/21
182/21 184/18 187/8
187/15 187/21 196/10
understands [2]
47/14 133/14
understood [5] 61/11 102/18 153/1 192/23 193/8
undertake [1] 137/8 undertaking [1]

137/13
unemployment [1] 59/17
unfortunately [2] 18/17 37/14
unfortunates [1] 22/25
unified [1] 186/16 unit [3] 92/5 190/21 191/4
united [14] 24/10 80/10 96/15 97/17 102/15 102/25 110/25 112/8 112/13 112/15 121/4 123/17 123/20 124/21
United Kingdom [10]
80/10 96/15 102/15
102/25 110/25 112/8 112/13 121/4 123/17 123/20
universities [1] 181/7
University [4] 4/4 76/16 90/13 194/5 unless [1] 24/13 unlike [1] 124/24 unprecedented [1] 62/2
unreasonable [2] 170/24 171/6
until [4] 32/22 33/23 81/2 198/22
unto [2] 4/25 13/12 unwieldy [1] 50/13 up [75] 1/11 5/9 6/25 8/11 16/13 16/25 17/22 21/21 22/10 29/3 29/15 29/20 30/10 30/22 31/14 32/13 33/24 35/3 36/15 37/4 41/10 41/11 41/15 43/1 44/1 44/5 45/19 45/23 47/16 47/20 49/3 53/9 56/23 58/19 60/24 61/4 64/12 64/21 70/12 74/12 75/12 81/25 83/8 88/21 92/11 107/19 110/7 120/19 126/22 126/23 128/1 129/11 140/22 142/6 144/13 154/1 156/23 159/21 162/15 162/22 163/12 163/12 164/11 167/3 169/22 170/20 174/4 175/6 181/11 183/12 185/3 185/11 185/16 186/6 188/25
upbringing [1] 65/25 update [1] 166/15 updated [4] 166/1 170/15 172/21 173/19
upon [15] 1/23 3/5

26/5 42/12 53/3 64/18 V 85/25 94/25 109/8
110/15 111/5 122/21
126/8 126/14 138/23
upshot [1] 93/2
upskilling [1] 150/22
uptake [4] 117/15
120/4 120/5 120/10 urgency [4] 90/15
147/11 193/11 193/21 urgent [3] 10/9 168/10 187/14
urgently [1] 10/19
us [48] $5 / 12$ 10/19
21/21 21/24 22/22 29/2 39/17 44/14 44/14 52/8 52/15 68/2 75/11 79/21 80/5 80/21 81/17 84/12 92/25 102/20 102/21 104/15 108/22 115/6 128/18 128/19 133/15 133/25 134/6 136/13 139/1 140/11 148/11 151/8 152/11 153/4 158/10 159/15 161/3 161/4 170/23 171/13 172/11 172/12 176/8 178/23 189/22 191/1 use [38] 12/4 16/23 31/13 47/25 58/1 65/8 71/6 75/23 107/21 117/23 120/7 120/13 127/22 136/17 141/12 142/9 143/2 143/3
146/12 148/14 148/16 148/17 149/3 149/9 151/12 158/23 161/25 170/14 173/8 173/8 176/3 176/12 178/24 181/10 183/7 184/6 190/10 192/16
used [24] 8/15 19/9 52/18 59/8 60/11 78/1 92/10 97/16 103/25 123/11 128/24 129/18 130/9 145/12 163/7 174/1 174/12 179/5 179/21 179/23 180/1 180/14 180/16 193/8 useful [4] 45/25 93/24 94/12 179/18 usefully [1] 72/11 users [3] 77/25 78/4 195/15
uses [3] 6/7 121/10 148/24
using [9] 33/1 52/17 76/18 133/20 133/24 155/5 176/16 192/25 193/11
usual [4] 70/4 74/18 147/19 193/24
vaccination [2]
106/20 120/19
vaccine [7] 95/25
109/20 109/21 113/21
117/14 120/4 120/5
vaccines [2] 6/4 179/17
Vallance [7] 14/3
15/7 15/15 17/18
34/13 89/13 188/25
Vallance's [1] 26/8 valuable [1] 183/16 value [5] 54/7 56/19 58/17 83/24 129/4 variable [3] 166/23 167/5 167/6
variant [3] 26/12 27/6 27/9
variants [1] 109/17 variation [2] 123/10 179/9
variety [2] 113/24 176/12
various [39] 6/5 8/15 16/1 16/2 16/6 27/15 27/16 30/11 33/11 33/19 35/7 35/14
35/18 39/11 39/22 49/22 49/24 52/17 63/9 67/24 68/3 75/19 78/23 142/23 158/12 165/25 166/5 173/22 175/1 177/20 178/6 178/17 179/1 179/4 180/12 183/12 183/22 188/12 192/13
vary [1] 186/1
vast [2] 96/10 96/18 version [4] 65/4
171/24 173/15 175/20
versus [1] 35/25
very [175] 2/2 4/6 4/9 4/16 5/15 5/17 6/7 7/21 11/17 13/10 13/25 13/25 18/21 19/2 19/2 19/11 20/9 23/4 23/5 24/2 24/2 29/16 30/19 31/4 31/16 37/17 37/25 39/7 39/12 39/20 40/9 41/3 43/3 43/25 45/1 46/5 50/15 50/24 51/4 54/3 54/4 54/15 54/16 55/4 55/4 55/11 56/18 60/21 65/19 66/11 66/11 69/4 69/22 70/6 71/7 71/7 72/22 74/24 74/25 75/1 75/2 75/5 75/5 76/1 76/6 77/11 77/13 77/19 82/7 83/11 83/11 83/22 84/20 85/4 85/11

86/17 86/22 86/25 90/10 90/10 91/8 91/8 91/8 92/20 93/24 96/1 97/14 99/8 99/22 100/9 100/22 102/7 102/8 102/13 103/20 104/1 105/16 105/18 110/8 111/12 111/12 112/23 113/3 113/18 114/1 114/22 114/25 115/25 116/3 116/7 118/3 121/23 122/17 123/12 124/2 124/7
124/11 124/14 125/7
125/16 125/16 125/17
125/21 126/17 132/1
132/13 133/13 134/2 134/4 134/14 135/20 135/20 135/23 138/15 139/10 140/16 141/22 142/14 142/21 144/17 146/25 147/21 149/1 150/23 153/12 154/14 155/17 160/10 160/20 164/17 167/4 171/17 172/8 172/9 172/18 173/24 174/6 175/21 178/5 178/7 178/9 183/14 183/15 183/22 184/6 184/16 192/24 193/10 196/6 197/8 197/9 197/16 198/2 198/11 198/17
vested [2] 12/1 47/3
victims [1] $4 / 10$
view [22] 4/8 16/8 16/9 24/13 33/13 34/18 34/21 35/6 38/8 53/25 60/1 62/12 64/6 74/5 81/2 101/17 114/15 115/1 133/12 147/6 155/18 185/18 views [4] 14/6 16/12 17/13 28/24
violated [1] 63/20 viral [1] 50/3 virologists [1] 90/12 virtue [2] 44/10 60/16 virus [12] 28/4 51/12 53/22 53/22 57/15 57/17 68/16 82/5 82/6 83/5 132/8 155/22
visual [1] 172/16
vital [9] $8 / 2$ 25/15 36/13 41/18 51/24 52/14 74/1 101/17 140/1
VIVALDI [3] 76/18 95/23 178/11
voice [4] 1/11 70/12 84/1 102/15
voices [2] 16/24 197/13
volition [1] 39/1

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 116/5 121/24 122/4 |  |  |  |
|  |  |  |  |  |
|  |  | [2] |  | 121/16 122/7 122 |
|  |  |  |  | 129/21 130/15 133/4 |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  | 48/13 151/23 153/1 |
|  |  |  | 193/24 |  |
|  |  |  |  |  |
| ] | way [61] $4 / 175 / 3$ | 163/10 165/12 169/24 | Well done [1] 136/6 | 59/12 163/17 163/24 |
|  | $\begin{aligned} & 9 / 1111 / 2312 / 1915 / 8 \\ & 18 / 1118 / 1319 / 21 \end{aligned}$ | 175/13 181/4 181/4 | well known [5] 14/3 | 163/24 164/4 164/13 |
|  |  | 187/7 194/6 | 20/14 38/6 155/15 | 64/15 165/20 165/22 |
|  | $\begin{aligned} & 18 / 1118 / 1319 / 21 \\ & 20 / 623 / 928 / 529 / 1 \end{aligned}$ | week 7 [1] 163 |  |  |
|  | 29/6 39/16 41/9 43/1 |  | wellbeing [8] $2 / 20$ | 179/15 180/15 183/6 |
|  |  | weekend [6] 94/10 | 3/17 42/20 52/5 52/16 | 184/8 184/16 184/19 |
|  |  | 111/7 120/25 136/2 | 52/21 58/22 61/7 | 184/19 185/17 186/5 |
|  | $\begin{aligned} & 55 / 17 \text { 58/2 59/3 59/13 } \\ & 60 / 2162 / 564 / 25 \end{aligned}$ | 136/4 165/10 |  | 5 |
|  | 68/24 75/19 77/8 | weekly [13] 79/19 | 61/6 | 190/22 192/11 192/17 |
| 30/ | 81/17 83/9 83/24 | 80/6 80/9 80/18 80/25 | Welsh [3] 98/17 | 194/6 196/3 197/1 |
|  | 98/14 100/6 100/12$100 / 20110 / 1110 / 2$ | 81/5 87/7 93/19 94/14 | 135/14 135/14 | 197/2 197/2 197/6 |
|  |  | 95/16 98/14 98/15 | Welsh Governm |  |
|  | 100/20 110/1 110/2 $110 / 14117 / 2$ 118/1 | 189/3 | [1] 98/17 | hat's [15] 5/1 6/14 |
|  | 110/14 117/2 118/11 124/18 123/5 | weeks [9] 31/2 86/14 | went [6] 23/15 33/23 | 6/15 6/16 20/4 25/10 |
|  | 129/3 129/16 139/2 | 92/13 125/11 125/13 | 77/4 77/11 80/4 82/3 | 54/6 57/22 67/8 67/10 |
| 100/24 101/3 107 | 139/3 147/19 149/24 | 125/15 125/16 156/8 | were [249] | 68/12 84/17 130/11 |
| 仡 | 150/4 152/12 160/18 | 170/22 | $\begin{aligned} & \text { weren't [7] 18/9 } \\ & 90 / 19 \text { 97/24 131/3 } \end{aligned}$ | 176/6 197/25 |
|  | 170/17 174/9 183/15 | weeks' [1] 177/6 <br> weigh [5] 41/10 |  | whatever [9] 12/11 |
| 152/19 155/3 158/5 | 185/16 186/18 189/14 |  | $\begin{aligned} & \text { 90/19 97/24 131/3 } \\ & \text { 139/10 160/17 184/7 } \end{aligned}$ | 8/13 21/11 39/24 |
| / | 191/19 | $\begin{aligned} & \text { weigh [5] } 41 / 10 \\ & 41 / 1544 / 144 / 561 / 4 \end{aligned}$ | Westminster [2] <br> 138/16 138/25 | /17 60/14 |
| 176/5 177/24 182/15 | ways [13] 6/4 9/10 |  |  |  |
|  | $\begin{array}{\|l\|} \hline 22 / 5 ~ 39 / 11 ~ 61 / 7 ~ 76 / 10 \\ 78 / 22 ~ 84 / 21 ~ 120 / 3 \end{array}$ |  | what [176] 7/1 8/4 | whatsoever [1] 24/4 |
|  |  | 60/15 65/13 <br> weighted [1] $85 / 8$ |  | when [81] 2/9 3/16 |
|  | /21 171/21 176/15 |  |  | $4 / 215 / 19 / 18$ 10/25$15 / 10$ 15/12 17/10 |
|  |  | $60 / 18$ | 21/12 21/17 23/21 |  |
|  | we [44 |  | $\begin{aligned} & \text { 24/15 25/3 27/12 } \\ & 27 / 21 \text { 28/3 30/17 32/2 } \end{aligned}$ | $\begin{aligned} & 15 / 1015 / 1217 / 10 \\ & 18 / 1818 / 1919 / 5 \end{aligned}$ |
| 132/18 159/21 179/13 | we haven't [2] | welcome [3] 104/ |  | $22 / 2023 / 2 \text { 24/3 25/8 }$ |
|  | 12 | 28/11 131/16 | 3 | 25/9 27/18 29/7 30/9 |
|  | We'd [1] 184/15 <br> we'll [21] 7/7 7/8 7/16 | welcomed [1] 158/21 | 33/16 34/4 34/16 | 1/5 32/7 35/21 43/18 |
|  |  | well [110] 3/12 4/11 |  | 4/18 45/18 45/22 |
|  | we'll [21] 7/7 7/8 7/16 36/2 36/11 38/20 |  |  | $\begin{aligned} & 46 / 447 / 1448 / 1649 / 1 \\ & 53 / 1055 / 1358 / 21 \end{aligned}$ |
| 9/25 | 52/21 70/9 81/4 103/4 | 14/3 15/9 15/12 18/5 | 38 |  |
|  | 108/5 139/15 146/2 | 19/16 19/23 20/14 | 39/18 39/20 39/21 | 60/10 60/17 62/25 |
|  | $\begin{aligned} & 166 / 2 \text { 169/2 170/1 } \\ & 172 / 11 \text { 172/23 175/4 } \end{aligned}$ | 20/20 22/12 23/14 | 39/25 40/3 40/9 40/17 |  |
| 3] 1 |  |  | 42/8 42/15 43/4 43/5 | 64/9 64/11 64/23 66/16 66/17 66/25 71/3 71/4 76/14 79/9 |
|  | 189/1 198/2 | 27/23 30/7 33/6 33 |  |  |
| Warwick [1] 19 | we're [19] 8/18 55/17 55/19 73/21 81/23 | 33/10 33/18 34/21 | 51/5 52/24 53/16 | 90/16 92/3 102/7 |
|  |  | 37/17 38/6 38/20 40/3 | 53/17 54/23 55/1 55/2$55 / 255 / 656 / 1957 / 4$ |  |
| wa | $\begin{aligned} & 83 / 7 ~ 86 / 15 ~ 86 / 22 \\ & 119 / 7129 / 11142 / 2 \end{aligned}$ |  |  | 102/10 110/19 113/11 |
| 17/16 18/15 |  | 59/7 61/4 61/11 63/1 | $57 / 657 / 1357 / 15$ | $117 / 1119 / 6119 / 12$$122 / 10130 / 10140 / 5$ |
| 35/23 41/1 | $\begin{aligned} & 119 / 7 \text { 129/11 } 142 / 2 \\ & 145 / 23 \quad 158 / 12165 / 10 \end{aligned}$ | 64/7 64/12 64/18 66/5 | 58/14 58/15 58/17 |  |
| 43/18 46/25 79/23 | 194/7 197/17 197/18 197/19 198/16 | $\begin{aligned} & \text { 66/21 66/22 66/23 } \\ & 75 / 2177 / 379 / 18 \end{aligned}$ | 59/12 60/8 61/5 61/5 | 140/8 140/10 145/14 |
| 127/14 156/15 164/17 |  |  | 61/6 62/9 62/20 64/5 | 45/20 14910 |
| 0/12 187/25 | we've [20] 18/25 | 80/22 83/17 84/10 | 65/10 65/18 68/6 71/1 | $\begin{aligned} & \text { 161/9 164/1 } 164 / 4 \\ & 171 / 24 \text { 172/21 } 175 / 14 \end{aligned}$ |
| waste [3] 178/ | $\begin{array}{\|ll} 20 / 25 & 27 / 14 \\ 65 / 6 & 118 / 111 \\ 62 / 20 \end{array}$ | $\begin{aligned} & 89 / 15 \text { 91/2 96/24 } \\ & 100 / 9 \text { 101/22 105/16 } \end{aligned}$ | $\begin{aligned} & 72 / 1573 / 1874 / 775 / 7 \\ & 76 / 1476 / 2577 / 4 \end{aligned}$ |  |
|  |  |  |  | 182/7 183/24 185/10 |
| I | $\begin{array}{lll} 135 / 6 & 135 / 7 & 140 / 19 \\ 140 / 22 & 153 / 13 & 159 / 22 \end{array}$ | 109/9 112/10 122/14 | 77/15 78/7 80/23 82/2 | 187/1 194/10 198/5 |
| water [6] 178/22 |  |  | 82/3 82/11 85/6 86/3 | whenever [1] 197/7 where [66] 4/12 9/19 |
| 179/1 179/5 192/ | $\begin{aligned} & \text { 140/22 153/13 159/22 } \\ & 165 / 4 \text { 167/3 172/16 } \end{aligned}$ | 126/19 129/10 131/21 |  |  |
| 92/15 192/22 | 183/3 186/19 | 136/6 137/5 | 87/3 89/7 89/16 90/5 | 20/20 21/1 22/3 |
| wave [20] $88 / 5$ | $196 / 20$ <br> weaknesses [1] 13/4 | 140/8 140/25 142/15 | $\begin{aligned} & 94 / 13 \text { 97/23 103/8 } \\ & 103 / 16104 / 21 \text { 105/24 } \end{aligned}$ | 29/18 |
|  |  | 143/22 147/9 147/17 |  | 32/9 37/3 41/7 42/3 |
| 110/17 113/18 115/18 | wear [1] 72/1 <br> wearing [1] 89/4 | $\begin{aligned} & 149 / 4150 / 15152 / 5 \\ & 153 / 8 \text { 154/2 } 155 / 15 \end{aligned}$ | 106/23 106/24 107/9 107/21 108/5 108/25 | $\begin{aligned} & 47 / 2248 / 148 / 10 \\ & 54 / 1264 / 1264 / 21 \end{aligned}$ |
|  |  |  |  |  |

(86) voluminous - where

## w <br> where... [46] 76/8

78/22 83/1 83/4 86/8 88/5 94/19 94/21
99/25 102/19 105/4 116/22 121/4 122/3 124/7 124/14 125/14 128/23 129/11 130/5 131/19 132/24 135/3 135/4 135/10 135/12 135/14 143/1 143/10 143/14 147/15 156/21 158/18 159/21 161/17 162/21 165/8 169/23
173/2 178/25 179/9
180/1 180/4 180/7 180/10 193/25
whereas [3] 58/1 122/5 166/10
wherever [1] 94/21
wherewithal [1] 7/11 whether [25] 11/7
28/6 30/1 30/2 41/19
54/12 54/14 55/18 62/19 82/21 103/12 118/13 133/1 138/4 151/8 163/21 168/8 169/11 179/6 179/16 180/25 186/21 186/22 189/23 193/1
which [230]
while [4] 75/2 109/14
113/24 165/15
whilst [6] $1 / 102 / 3$ 61/16 70/11 79/12 81/25
whip [1] 30/1
white [2] 115/14 115/14
whiteboards [1] 160/22
Whitehall [1] 138/25 Whitty [5] 15/16 89/12 101/9 187/12 188/24
who [51] 2/2 4/2 5/3
13/8 20/16 20/17
21/21 23/1 24/20
27/19 30/1 37/8 38/15
57/18 62/13 65/14
66/7 66/7 66/18 76/16 77/17 78/17 80/2 82/1 83/18 85/16 91/19 92/13 92/15 106/4 114/23 117/9 125/17 132/18 133/14 134/6 139/4 147/3 151/14 158/11 158/23 174/24 176/21 177/3 183/11 187/7 191/18 192/23 194/5 197/24 198/12 whoever [1] 167/1 whole [25] 6/18

11/18 21/20 30/25 37/10 40/2 41/16 48/12 50/3 52/5 52/15 59/13 59/13 60/2 61/5 within [33] 9/24 16/9 61/21 63/2 67/5 74/11 112/8 121/2 128/7 151/24 157/19 194/13 whole-society [2] 41/16 61/21
whom [7] $8 / 25$ 14/19 20/23 73/2 85/16 99/8 107/1
whose [1] 65/18 why [33] $4 / 21$ 16/18 19/1 19/2 23/2 33/1 34/8 35/18 37/15 47/25 50/14 51/19 51/19 55/10 55/25 60/19 61/21 64/7 64/8 64/9 95/10 101/9 113/6 114/15 115/2 119/21 122/7 123/2 123/11 133/18 163/10 196/10 196/11 wide [6] 76/1 98/6 98/8 135/4 135/8 135/16
widely [1] 131/23
wider [1] 11/20
wilderness [1] 197/13
wildly [1] 27/7
will [71] 9/1 9/5 11/15 12/7 13/20 16/2 22/15 23/5 24/19 25/4 25/17 26/21 27/1 27/17 27/18 27/19 28/25 29/3 30/6 31/3 32/14 37/11 37/18 37/23 40/14 42/9 42/11 42/21 47/16 48/25 51/25 54/21 57/1 57/25 58/10 60/8 62/19 66/21 67/1 67/9 68/8 68/9 69/20 73/11 81/21 88/17 107/3 109/15 113/17 118/23 119/9 122/22 131/3 133/20 133/25 139/5 140/11 143/13 145/9 153/4 154/17 163/2 165/4 165/4 165/6 177/5 184/2 194/10 194/15 197/7 198/1
Winston [1] 71/3
Winston Churchill [1] 71/3
winter [2] 109/24 114/21
wisdom [1] 23/8
wise [1] 79/21
wish [2] 21/15 35/16
wished [2] 83/8 194/21
wishes [1] $126 / 19$ withdrew [3] 69/7
136/7 198/19
16/17 17/6 24/16
71/19 92/6 136/22
138/9 138/21 141/15
142/9 144/18 146/5
146/12 149/19 149/20 149/23 150/18 150/19 151/9 151/11 151/13 153/9 154/2 154/3 156/20 156/24 159/16 166/5 168/6 175/12 176/13
without [9] 20/18
26/24 26/24 60/23 62/16 162/6 193/20 193/21 196/2
witness [11] 1/16
40/5 69/7 69/8 69/22 85/16 91/24 104/10 136/7 187/7 198/19 witnesses [1] 19/1 women [4] 105/12 105/15 108/13 117/11
won't [6] 16/2 16/21
39/15 66/22 135/21 185/15
wonder [3] 145/12 148/1 154/19
wondered [1] 133/1 word [8] 135/22
142/8 145/12 145/13 160/8 160/21 167/16 174/17
words [11] 40/12 82/3 105/7 125/16 127/23 157/24 163/5 168/4 182/19 189/1 198/7
work [52] 8/14 9/17 13/7 18/14 18/15 18/24 20/20 25/4 27/20 29/7 29/19 32/14 37/3 42/14 49/1 51/2 53/5 65/11 65/13 66/7 68/11 84/8 84/9 86/4 86/8 86/22 90/11 91/4 91/5 97/20 101/2 101/3 105/11 111/22 129/8 136/2 136/4 137/3 137/14 138/25 145/3 149/23 150/8 150/11 150/22 164/7 168/20 190/22 193/8 195/18 197/2 197/25
worked [15] 12/25
14/1 14/23 77/17
79/11 79/15 79/23
82/1 84/20 90/13 92/15 92/20 92/21 96/4 97/6
workers [2] 187/9

187/10
workforce [1] 85/12 working [22] 12/13
13/9 15/12 20/2 27/3 29/23 33/2 66/12 85/12 86/10 96/6 99/1 99/15 112/1 117/9 147/14 149/20 160/17 162/24 177/4 181/1 196/22
workings [2] 14/6 19/11
works [7] 4/14 8/16 18/17 22/21 54/12 54/13 140/5
world [15] 15/19
20/22 24/22 25/7
31/16 68/4 68/15
68/22 79/24 91/18
96/16 96/20 149/6
152/11 173/14
worried [1] 100/17
worse [1] 195/9
worst [1] 13/16
worth [11] 11/11
54/17 65/12 109/23 113/6 144/25 147/10 157/13 162/13 183/9 197/21
worthy [2] 2/18 4/25 would [195] 6/16/8 6/10 7/1 7/2 7/21 9/8 9/19 10/3 10/3 10/14 12/22 13/2 13/25 15/6 15/9 15/13 15/18 16/10 18/1 18/16 19/9 19/22 19/23 19/25
21/8 21/15 21/15 22/14 22/23 25/16 25/21 25/22 26/1 28/2 28/22 29/9 29/19 31/13 31/19 33/2 33/3 34/23 34/24 34/25 35/1 35/3 36/8 36/9 36/23 37/12 37/24 38/14 38/14 39/5 39/19 42/13 42/16 $42 / 17$ 42/18 42/18 42/19 43/1 43/2 43/13 46/3 46/5 48/2 48/15 49/2 49/12 49/16 49/18 49/23 50/5 50/7 50/7 50/25 52/10 53/12 53/17 57/2 57/2 58/2 58/17 60/12 60/16 60/19 63/6 63/17 63/20 64/3 64/5 65/2 65/19 66/2 68/21 70/3 74/2 74/5 74/15 74/17 75/21 76/7 76/13 77/12 77/13 78/25 79/8 82/9 82/11 86/5 86/12 86/12 86/20 86/25 87/14

87/16 87/17 87/17 87/19 87/25 88/11 89/5 90/18 90/19 93/10 96/9 99/19 100/18 100/22 100/24 101/13 102/4 103/16 105/6 105/8 106/2 106/5 107/7 107/20 109/2 109/21 110/18 112/19 113/25 114/2 114/10 114/11 115/2 115/17 115/20 116/22 118/16 120/5 120/5 120/15 121/12 123/5 124/24 124/25 125/13 129/14 132/6 132/23 133/1 134/4 139/19 139/19 154/19 158/18 163/3 163/11 163/12 163/20 163/21 164/7 166/9 166/10 167/1 168/19 168/20 173/19 179/4 185/7 185/25 188/6 194/21 195/5 196/3 196/18 197/19 198/5 198/6 198/11 would-be [1] 22/14 wouldn't [4] 24/11 42/12 89/6 133/4 write [4] 103/1 103/9 127/17 196/24
Writing [1] 160/10 written [3] 17/11 80/22 126/20
wrong [6] 13/14
24/15 44/15 56/3
66/10 144/19
wrote [3] 82/22
103/10 195/7
WTF [1] 170/14
Y
yeah [11] 24/7 31/3 31/19 38/7 58/25 63/11 67/5 84/10 98/19 120/14 132/12 year [13] 31/13 107/14 107/15 111/9 111/19 112/3 112/3 149/5 149/10 151/2 151/5 189/6 195/3
years [10] 21/6 54/10 61/6 61/7 105/5 114/11 115/7 141/24 146/8 148/7
yes [167] 1/21 $2 / 8$ 2/11 2/21 3/2 3/22 9/8 10/3 13/10 13/21
14/20 17/16 19/22
26/7 27/2 27/19 32/2
32/4 33/22 38/14
38/18 39/5 39/15
43/12 43/18 44/2 45/5
46/14 47/9 48/15
yes... [137] 48/15 49/6 50/1 50/7 51/3 56/13 67/14 69/11 70/25 72/14 72/19 73/1 74/3 75/22 78/16 81/7 81/9 87/12 87/14 88/17 88/18 88/25 89/1 89/17 92/5 93/10 93/11 93/22 95/3 95/12 95/15 95/19 96/12 103/7 104/19 105/13 105/23 106/15 106/21 108/7 108/15 110/12 111/2 111/6 111/10 112/4 112/12 112/16 113/1 113/3 113/17 116/2 117/20 118/16 119/5 121/9 122/24 123/9 123/21 125/10 126/18 126/21 127/15 127/21 127/24 129/2 129/11 129/13 129/16 129/20 129/22 129/24 130/16 131/5 131/8 131/11 132/2 132/3 132/9 132/13 132/16 133/10 135/2 137/3 137/12 137/17 138/2 138/3 138/13 140/3 140/9 140/18 141/17 142/18 143/23 145/19 146/7 147/9 148/2 154/7 158/17 159/20 164/14 164/25 169/2 169/5 173/6 173/10 173/17 173/22 173/23 175/19 175/25 176/10 176/23 177/2 177/12 178/9 178/24 179/11 179/20 179/23 180/21 181/2 181/17 182/23 182/25 187/4 188/4 189/18 190/11 190/20 191/23 193/6
194/2 194/14 195/20
yesterday [2] 138/18 177/13
yet [8] 28/20 52/18 126/23 128/13 146/2 149/17 149/17 152/8
Yorkshire [1] 112/25 you [740]
you chose [1] 56/7
you know [64] 5/25
9/11 12/25 13/6 13/15 14/20 15/14 15/21 18/24 19/24 20/4 20/25 21/5 21/19 21/20 21/21 21/22 22/23 23/25 30/11 30/14 35/14 42/7 43/25 44/20 47/21

47/23 48/19 48/19 51/1 51/4 53/7 54/9 55/16 55/18 56/20 57/3 57/23 58/17 60/9 60/12 60/25 61/4 62/2 63/1 63/4 63/5 65/2 65/20 66/4 68/11 82/10 82/25 84/22 90/14 94/10 100/17 102/1 124/8 141/24 145/1 163/14 197/3 197/6
you'd [3] 18/13
132/11 163/11
you'll [4] 29/14 39/14 48/9 171/7
you're [50] 1/12 2/12 2/15 4/12 7/1 8/7 9/9 11/9 13/4 13/9 13/14 15/2 15/19 18/18 20/8 21/13 21/19 23/4 23/4 31/16 34/1 37/7 37/20 40/22 47/14 50/1 50/17 50/18 51/1 51/25 53/10 53/24 54/14 62/1 62/5 62/9 62/17 62/18 74/20 84/17 115/18 126/16 155/19 161/6 171/1 171/2 172/1 185/17 188/23 197/14
you've [63] 3/20 5/6 8/14 9/18 11/7 12/12 15/4 19/9 22/19 27/4 27/4 27/21 32/9 36/3 36/12 39/17 42/2 45/20 46/24 47/1 47/13 50/5 53/4 53/4 55/24 55/25 56/14 58/18 59/12 59/25 60/19 63/7 64/5 64/13 66/6 72/6 76/21 80/20 88/20 91/2 93/20 95/24 97/5 98/22 104/11 108/18 109/4 127/3 136/20 136/22 137/7 137/13 138/19 141/13 146/24 152/20 155/6 161/22 172/6 182/17 184/23 191/25 197/15
your [123] 1/8 1/11 1/13 1/19 2/1 3/20 4/16 14/8 16/23 18/1 19/16 21/8 23/13 23/14 24/8 24/16 26/3 28/18 30/24 32/21 33/6 35/24 38/3 38/8 38/21 41/12 47/1 48/3 51/15 52/21 53/25 54/5 55/23 56/1 57/6 58/21 60/1 62/6 62/9 62/10 64/6 67/3 67/6 67/10 68/12 69/16

70/12 73/25 79/11 83/15 83/15 83/20 84/4 85/7 91/21 91/24 92/17 98/21 99/3 101/17 104/10 104/21 108/11 109/4 110/21 111/3 112/6 113/8 114/15 118/21 125/3 127/22 128/10 131/16 136/13 136/19 136/21 136/21 136/23 137/7
137/23 138/11 138/15 138/15 138/20 138/20 139/5 139/7 139/16 139/23 139/24 140/13 141/3 141/5 142/5 147/4 147/6 149/16 152/14 154/10 155/12 157/1 158/8 159/7 159/21 162/14 166/15 172/8 175/18 176/4 176/7 177/10 178/3 178/22 181/6 181/20 181/23 182/19 187/17
190/1 192/13 193/14 196/3
yourself [3] 25/24 78/11 89/9

## Z

zero [2] 114/10 114/16
zoom [1] 194/12

