HOUSE OF COMMONS

Science and Technology Committee
Health and Social Care Committee

Oral evidence: Coronavirus: lessons learnt, HC 877

Tuesday 2 December 2020

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Watch the meeting

Members present:

Science and Technology Committee: Greg Clark (Chair); Aaron Bell; Chris Clarkson; Andrew Griffith: Carol Monaghan; Graham Stringer; Zarah Sultana.

Health and Social Care Committee: Paul Bristow; Dr James Davies; Dr Luke Evans; Neale Hanvey; Barbara Keeley; Dean Russell.

Questions 705 - 769

Witnesses

I: Professor Dame Sally Davies, Chief Medical Officer for England (2010-2019); and Sir Mark Walport, Government Chief Scientific Adviser (2013-2017).

II: Sir Oliver Letwin, Cabinet Officer Minister (2010-2016); and Lord Mark Sedwill, Cabinet Secretary (2018-2020).

Examination of witnesses

Witnesses: Professor Dame Sally Davies and Sir Mark Walport.

Q705 **Chair:** Welcome to this joint meeting of the Health and Social Care and Science and Technology Select Committees as we continue our inquiry into the lessons learnt from the handling of the coronavirus.

Sometimes, the House of Commons is a place of contention and disagreement, but on behalf of both the Science and Technology and Health and Social Care Committees, I thank the scientists, the volunteers in the trials, the healthcare workers who administered the vaccines, the staff of the regulatory authorities who worked at great pace, the manufacturers and funders, the Ministers and officials in Government and the Vaccine Taskforce for their indispensable part in what has been a complex team effort to achieve this remarkable breakthrough. We are in the UK the first country in the world to license a vaccine against Covid. On behalf of us all, thank you very much indeed.

Today, we are going to go back to before the pandemic and consider our preparedness for this and other risks. We are going to begin with the predecessors of two people who have become quite familiar to the public, Professor Chris Whitty and Sir Patrick Vallance. Their predecessors were Dame Sally Davies and Sir Mark Walport, who join us today. We are then going to hear from two people who were involved in cross-Whitehall planning, the former Minister for the Cabinet Office, Sir Oliver Letwin, and the former Cabinet Secretary, Lord Sedwill.

First, I am delighted to welcome Professor Dame Sally Davies. Dame Sally, as I mentioned, was chief medical officer from 2010 to 2019, and chief scientific adviser at the Department of Health before that. A warm welcome also to Sir Mark Walport, who was the Government's chief scientific adviser from 2013 to 2017. Welcome to you both and thank you for joining us today.

I will start with some questions to Dame Sally. Looking back, how prepared was it possible to be for what became Covid-19?

Professor Dame Sally Davies: That is a very important question. The World Health Organisation said that we and the USA were well prepared, but we planned and prepared for flu. I think we did that well, but I would ask that you do not overestimate the role of planning, because what we have underestimated as we have gone through all this is our lack of resilience compared, say, with Germany or Scandinavia, both in our public's health—I will pick out obesity—and the fact that our NHS has been known for more than a decade to run hot, at full capacity, every winter because of seasonal flu. We saw, through that, a number of problems come out that planning did not address because it was not planning for the specific issue. We have seen poor data linkage, which needed addressing, and we have no industrial and manufacturing base, but we have great science and great people in the NHS.

I also want to put on record here that we all, in the UK, US and Europe, as experts and in policy, had a bias to flu, and planning for flu and

diseases that had already occurred. As I look back, going back to Winter Willow, which was well before my time, and the national risk assessment, we underestimated the impact of novel and particularly zoonotic diseases.

Q706 **Chair:** I will put the same question to Sir Mark but I want to probe it a bit further. We planned for flu more than zoonotic diseases. Would it have been possible to plan more, and better, than we did, for the type of virus that presented itself?

Professor Dame Sally Davies: The differences are of course that, when you are planning for flu, the classic is that you don't bother to test, so we did not have a test and trace system to stand up. We already had antivirals as a national stockpile, and we had experience across the world of making vaccines with, on occasions, depending on the flu strains, some pre-pandemic vaccine. We had a lot of knowledge about the disease. Covid is a vascular not a respiratory virus. It is infective early, before people are symptomatic. It has a different range of death curves. We would have had to think differently if we had prepared for a SARS-type virus.

Q707 **Chair:** Specifically on testing, you regard the lack of early capacity for testing as attributable to the fact that we were preparing for flu rather than the disease that turned out to be the case.

Professor Dame Sally Davies: There are a number of factors. The first is that we did not prepare to stand up testing. Another is that, in my annual report in 2017, I highlighted that our laboratories in the NHS—I was talking particularly about genomics, but I said it about all the laboratories—were essentially a cottage industry, with lots of small ones. We did not, as a number of countries did, move to large, much more factory-effective scalable laboratories. We did not prepare for it, but nor did we have a system that responded particularly effectively because it was all cottage industry.

Q708 **Chair:** Sir Mark, may I ask you the same question? Looking back, was it possible to have prepared for what turned out to be the specific coronavirus Covid-19?

Sir Mark Walport: First, I very largely agree with what Dame Sally said. It seems to me that we need to look at the question of preparedness through three different lenses. First, there is the whole question of whether the scientific advice mechanisms were in place or not. Secondly, we need to look at the science and research preparedness. Thirdly, there is the whole question of operational preparedness.

Where I agree with Sally is that countries in general are much better at managing the last emergency than they are at managing the next one that has not happened. There are some lessons to look at from other countries and how they have been able to respond to the coronavirus. If you look particularly in the east at China, Korea, Hong Kong, Singapore and Vietnam, they had had SARS and avian influenza, and the Koreans had had the outbreak of MERS, so they were well set up. We might come to Germany rather specifically, but if you look in Europe, the UK is part of

a group of countries, including the United States outside Europe—France, Italy, Spain, Belgium—which all similarly have struggled.

Where I strongly agree with Sally is that the focus of the national health service has inevitably been elsewhere. It is slightly misnamed, in a way; it is the national disease service, and it is very driven in terms of its expenditure by managing disease, and, of course, as Sally says, things are worse in winter. In due course, it would be appropriate to look at the history of public health, where our traditional epidemiology around tracing infection and controlling it goes right back to John Snow in the 19th century.

In 2003, the labs of the Public Health Laboratory Service were largely merged with district general hospitals and teaching hospitals and became service providers. We lost some of our traditional test and trace capacity at that time. Of course, there is the whole history of public health since then. The economic model of paying for disease is much more clearly established than the economic model of paying for the maintenance of health. One of the big lessons of this is that we need to look very carefully at our public health mechanisms.

On the specific question of flu versus other infections, the UK was very aware of the issues around MERS, and, in fact, a precautionary SAGE meeting occurred when the MERS outbreak happened in Korea. One of the actions in the last few years was the formation of the UK Vaccine Network. It is because of the activity of the UK Vaccine Network that the group in Oxford who were developing a vaccine for MERS were so well positioned to repurpose the vaccine for SARS-CoV-2 to coronavirus 19. On the scientific side, and with the formation of NERVTAG as well, there was a whole list of viral infections that the scientific community was very well aware of.

Where I agree strongly with Sally is that every viral infection that causes pandemics is novel in some way or another. It would have been impossible to completely prepare for this coronavirus because it is a virus that we had never seen before. No tests existed, and we have continued to learn about its effects throughout the pandemic. Every viral pandemic is different. It is the nature of viral pandemics that they enter a human population that has no immunity, so they are typically what are called zoonotic infections, which jump from one animal species to another, and those are very difficult to predict. There is a very long list, which goes beyond coronaviruses, of viruses that can potentially cause misery in human populations.

Q709 **Chair:** You referred to some of the work that was done in the scientific community. You were chief scientific adviser to the Government. In your experience, how seriously did policymakers—Ministers and officials—take planning for contingencies that were individually unlikely to occur, and, if they did, perhaps long after they were in office? What was your broad assessment? Was that taken seriously in Whitehall by both Ministers and officials?

Sir Mark Walport: The national risk assessment, the publicly available version of which is the national risk register, was taken very seriously. In fact, I wrote a couple of times during my tenure as chief scientific adviser, to Ministers and other officials, commenting that the national risk assessment was used more for the management of emergencies when they arose and could have been used more effectively for preventing them in the first place. I always felt there was a bias towards managing. Of course, the responsibility for individual risks rests with Government Departments. In the case of pandemic infection, the responsibility rests with the Department of Health, now the Department of Health and Social Care. The challenge, if you are in a frontline operating Department, is how much money you spend on an insurance policy versus how much money you spend on operational management. Ultimately, that is a political decision; at national level, there is a whole set of political decisions as to how you balance the different insurance policies.

I well remember, in a different context, that flooding was a major issue at the start of my tenure as Government chief scientific adviser. There was an enormous amount of attention, and Sir Oliver will probably be able to talk more about it in the next session, but when it came to discussing the risk from drought, it was much harder to persuade policymakers that it required significant investment as well, although it definitely is a vulnerability.

There are two challenges: the challenge for individual Government Departments as to how they balance their everyday operational needs, such as the need for scans in the health service, for hospital beds and for all the treatments, against the insurance policy for something that one hopes is unlikely to happen. We have a good mechanism in place, but there is a critical question as to how the insurance policies are paid and who pays them. At the moment, it is up to individual Government Departments, whereas arguably it is a cross-government balancing act.

Q710 **Chair:** You mentioned that during your time as chief scientific adviser you formed the view that we should be anticipating these risks in a different way. Do you remember when that was and how you communicated that view?

Sir Mark Walport: From my perspective, it rather came to a head because there was a series of infections, which fortunately did not affect the UK, during my time. There was the MERS outbreak, and at the time there was a precautionary SAGE. It was not a full SAGE, which has to be called by the civil contingencies secretariat. It was run through the Department of Health, and one of Sally's deputies, John Watson, chaired that group.

Before I came into Government, in about 2011 the Wellcome Trust supported ISARIC—the International Severe Acute Respiratory and Emerging Infection Consortium. There was the formation of NERVTAG. There was a whole list of viral infections that NERVTAG was looking at. NERVTAG is run within the Department of Health and Social Care. There

was quite widespread awareness, but actually picking which infection you are going to prepare for is extremely difficult.

There are three core approaches, regardless of what the infection is. First, can you stop the transmission? To do that, you need to know how it transmits and when it transmits. Flu transmits extremely quickly, which is why it is very difficult to stop it. Secondly, can you develop treatments? They tend to be very bespoke to individual infections. Thirdly, how quickly can you get access to vaccination, anti-serum therapy or something like that?

All of those were very well recognised in the Department, although Sally, I am sure, will want to comment. They are fundamental principles of infection control. The broad principles are accepted and applicable to many infections. The two that happened were Zika and Ebola. The UK, and the north, is to a significant extent immune to many of the insect vector-borne viral diseases. Zika was a pretty borderline threat to the UK, although with climate change insect vectors are going to move, respectively, north and south. Ebola had a different pattern of contagion, which meant that, with careful surveillance, it was possible to keep it from spreading more widely around the world.

Chair: My colleagues will go into greater depth on the points you have both raised.

Q711 **Barbara Keeley:** Professor Dame Sally Davies, yesterday our Committees heard evidence from groups at particular risk from Covid-19. One of those groups is people with learning disabilities, a group which already has an age at death 14 years earlier for men and 18 years earlier for women. Public Health England's analysis points to rates of death from Covid-19 for adults with a learning disability at 3.6 to four times that of the general population. Given that, what public health steps could the UK have taken to reduce the impact of the virus on people with learning disabilities?

Professor Dame Sally Davies: You have to start from knowing what the problem is. At the beginning, we did not know who would be particularly hit by Covid. We did not know that it was infective before people became symptomatic. We did not know that, in the young, 75% can be infective and infected but asymptomatic. It took us quite a while to understand which groups were most at risk. Of the ones that I would talk to you about, obesity would come top, but you are right that the learning disability group seems to have high risks.

Once you know they have a high risk, it is very worrying. I think the best article on this was in *Nature*; we all had it pre-publication; it was called "Open Safely", and showed, for instance, that people with cancer and a history of cancer have an increased risk, particularly blood cancers. You then have to start to ask what we can do about that. Once we have a vaccine, those people ought to be in the front row for the vaccine, but until then it is about protecting them from the risks. You can do it, as we did in the first lockdown, by shielding. You can do it by asking their

families to look after them. If they are in homes, we have to think about how we protect them in those homes. As Mark went through, we have to stop transmission to them and shield them. We have to make sure they are diagnosed early and treat them effectively, and we have to give them a first hit at the vaccines.

Q712 **Barbara Keeley:** Yesterday, we heard evidence from a care provider to people with learning disabilities, many of whom live in their own supported accommodation, and not in care homes, so the shielding point you made is a difficult one. We heard from that quite substantial care provider to that group that they were denied medical treatment, there was the experience of DNACPRs being put on their notes, and, if they had to be admitted to hospital, their support staff who could interpret for them were not admitted with them, so they did not have any support when they went into hospital. It seems that steps that could have been taken were not taken through lack of understanding. You make the point that they should be in the front row for vaccines, but currently they are not.

Professor Dame Sally Davies: I came to talk about my tenure and preparedness, but we have a clear sight of who is most at risk and I would think that they should be included in the prioritisation for vaccines.

Q713 **Graham Stringer:** How well have the structures for giving Government scientific advice worked during this epidemic?

Sir Mark Walport: Thank you for that question. I should declare that I am a member of SAGE, so I am still actively involved. I joined SAGE just after Easter. I was not involved right at the beginning as a member of SAGE.

My own perception is that the mechanisms work pretty well. SAGE has proved remarkably resilient, as, I would observe, have the members of SAGE; there have now been approximately 70 meetings of SAGE, which is far more than there have ever been. That model of a scientific advice group in emergencies is bespoke, in the sense that it is formed with a membership that is specific, to provide expertise for whatever the emergency is. Obviously, the members of SAGE for flooding are different from those for coronavirus.

It has a series of well-established sub-committees, including NERVTAG, which I mentioned before. That it provides advice through the chief medical officer and the Government chief scientific adviser, and is hardwired into Cobra and into political decision makers, is an effective mechanism. I pay tribute to all the people on that committee who are working at incredible pace in synthesising the evidence. It is the point that Dame Sally has already made. This was a completely novel virus. No one knew anything about it. There are many coronaviruses affecting many species, including the coronaviruses that cause colds in humans. I think it is a good mechanism.

To anticipate a question you might ask, which is why it does not have economists on it, one of the critical things is that there are some very

important trade-off decisions that need to be made by politicians and policymakers about how much attention is paid to the health side versus how much is paid to the economy side. It is important that the scientific advice committee looks through the lens of the disease itself, and the prevention of transmission of the disease, its management, vaccine development and things like that, and that the economic advice comes in separately, because, ultimately, it is for Ministers to decide how to balance decisions about the economy with decisions about the management of the disease. To put that all together in one committee would be converting SAGE into a policy-making body, which it is not.

Q714 **Graham Stringer:** Governments tend to work in secret, and non-commercial science tends to benefit from being completely open with what is happening. At the start of this epidemic, the Science and Technology Committee was very concerned that the membership of SAGE was not public and that the minutes were not public. We are now in a situation where the Joint Biosecurity Centre is only partially in public.

This is a two-part question. As a scientist, have you found it difficult to debate things because when things go to Government they become secret? How can you give this Committee advice as to how we can persuade Government to open up right across the board? Science being open helps us to get to the correct scientific solutions.

Sir Mark Walport: That is a very important point, and I agree with the principles of what you are saying. There are two things. First, the membership of SAGE has never formally been secret. Going back to my time, people were able to say that they were members of SAGE, and they could speak about the science. I think things have improved during the course of this pandemic. There was reluctance initially to publish SAGE papers early, but I think there is now recognition that it is much better for SAGE papers to be transparent. We have moved a long way, and we have learnt during the current pandemic.

Going back to my time, SAGE papers were published, but they were published rather later than I think they should have been. It is better if there is scientific evidence. At the end of the day, the scientific advice mechanism is there to provide evidence about what we know and, indeed, what we do not know, and the uncertainties, of which there were many at the beginning and there are still quite a large number. It is the job of the advice community to give that evidence. It is then for policymakers to decide what to do with the evidence. It makes sense for the evidence to be made publicly available as soon as possible.

SAGE has resulted in there being the most fantastic volume of scientific evidence published during the course of this pandemic, in a much more open fashion than has ever been done before. Indeed, the very fact that the sequence was made available within weeks, or a small number of months, of the infection becoming apparent, has been transformative, and has enabled the very rapid development of vaccines. We are working in a much more open scientific environment, which I applaud. I think the arguments for keeping the evidence publicly available are overwhelming.

Q715 **Graham Stringer:** To follow up that point, this area of science is not precise in many ways, in the way that sending rockets to the moon is very exact, and other parts of science are very exact. One of your predecessors set up a SAGE 2, or a counter-SAGE committee, to have the debate. Don't you think that is part of the criticism that has been made that the information was not available, and the debate about the science was not as robust as it could have been? I would be interested in your opinion. The majority of members of SAGE, one way or another, earn their living by being paid by the Government; they were Government employees. Do you think that was a disadvantage to the debate? Your predecessor clearly did not think SAGE was giving the right advice.

Sir Mark Walport: The most active members of SAGE, who were doing the scientific modelling and providing evidence on the immunology and virology, are, by and large, academics working in UK universities and research institutes. They are publicly funded, largely through organisations like UK Research and Innovation, NIHR and the Wellcome Trust. They were providing the majority of the actual scientific input. The composition of SAGE typically also includes the chief scientific advisers from individual Government Departments. For example, the CSA for Transport is interested in providing the best advice on transmission in transport systems, but the vast majority of scientific advice came from independent scientists, many of whom we have seen regularly appearing on the media. I do not quite agree that the majority of people are, as it were, simply public servants.

Q716 **Zarah Sultana:** When we look across the world at the responses to the coronavirus pandemic, we often find ourselves looking at the response in east Asian countries. What lessons could the UK have learnt from previous outbreaks, such as SARS and MERS, in other countries?

Professor Dame Sally Davies: That is a good question. Clearly, as Sir Mark said earlier and I agree, if they faced either SARS in 2002, or MERS, they seem to have done better. A lot of it is down to having some facility or knowledge of working with different viruses; having sorted out test and trace; and having access either to manufacturing or good supplies of PPE and then putting in place test and trace, whether electronically or in another way, in a way that works.

People say they have done it by being a dictatorship. If you look at countries that have done well, Taiwan and Vietnam have done well and Hong Kong has done really well, and they are not dictatorships. They have done it by community cohesion, and using electronic data and all the rest of it very effectively. One might ask, why then have we not learnt from them? Quite simply, we were in groupthink. Our infectious disease experts really did not believe that SARS, or another SARS, would get from Asia to us. It is a form of British exceptionalism.

We have not been good at learning from others in this outbreak, as far as I can see. You need preparedness. You then need a resilient system. We can talk about our comparators, but those Asian countries had more doctors, beds and ITU facilities. We need fewer ventilators now than we

needed in the first wave because we have learnt how to manage patients better; we are using CPAP and things like that. They were more resilient, they had more in place, they had practice and, as a whole community, they came together to do it.

Sir Mark Walport: I agree with Sally's points. There are cultural differences. For example, the culture of mask wearing is much more established, and I think that turned out to be quite important.

There is another element, which may not have received enough attention; it is the effect of chance, and either luck or bad luck, in how the infection established. If you look at how the infection established in the UK, there are two separate issues. First, global hub cities have tended to do very badly, for obvious reasons. Cities that have done badly include Brussels, London and New York. Anywhere there is a ferment of people and very complex transport networks will always be a sitting duck for an infection that travels around the world.

Secondly, the introduction to the UK, when it happened, was very widespread in the way it was seeded. We know from genetic studies of the virus that there were somewhere between 1,300 and 1,500 separate introductions to the UK, probably happening around the half-term holiday in February this year when travellers returned from Spain, Italy and France bringing in the infection. That seeded it very widely indeed, and meant that it was a pandemic that started across the country as well. Events like that matter. In Korea, it got going in a particular community, and they managed to control it in that community. It is not all bad luck. Preparedness matters.

When it comes to comparisons, there are lessons to be learnt from Germany. The Robert Koch Institute, which was set up with the rather traditional structure of a very strong research institute as well as public health, entirely focused on infectious disease. To some extent, public health in the UK, as in other countries, made a switch away from infections towards chronic disease. Public Health England has been very focused on issues such as obesity, diabetes and other chronic conditions. With the changes in the PHLS, and other changes subsequently, the infection has not been quite so effectively centrally led in the way the Robert Koch Institute does it. I think there are lessons to be learned there.

Chair: Thank you, Sir Mark. If we could keep the answers short, we will be able to get more questions in.

Q717 **Zarah Sultana:** In our experience with coronavirus this time around, do you think that as a society, if we experience another virus like it in the future, we will be able to deal with it better? I am thinking more about public discipline, mask wearing and the importance of public health? If this happened to us again in the future, would we be able to deal with it better than we did initially?

Professor Dame Sally Davies: If it is in the next decade, there will be some community memory. I support what Sir Mark said. I do not think we have yet got mask wearing where it should be. We should have an absolute mandate at this point while it is cold weather and it is still transmitting. It depends how we change and prepare as a result of our learning.

To add to Sir Mark's comments, Robert Koch and all the other respected public health institutes that deal with infections are professionally led by a clinical scientist, and I think we need that; and not just for the emergencies. At the moment, we are talking about a fast pandemic. As most of you know, I am extraordinarily concerned about the slow pandemic of antimicrobial resistance. We have some really good people in the middle of Public Health England working on that, but, again, there is the problem of getting a focus on something because, although it is a problem today, it is not catastrophic. We need to do the insurance effort on that.

Q718 **Zarah Sultana:** Thank you. Sir Mark?

Sir Mark Walport: I don't have anything to add. All these things critically depend on the nature of the infection. Infections that transmit significantly before clinical manifestations are much harder to manage. If the incubation period is short, the time for intervention through testing, for example, is very low indeed. One of the interesting questions is the extent to which mass testing, as it develops at this stage of the pandemic, turns out to be deliverable and helpful. One of the challenges with test and trace is that it is extremely difficult to do when the number of cases is very large. Again, looking at Germany, they lost control of their test and trace at a much lower level of infection than we have here.

Q719 **Chair:** Sir Mark, is it your judgment that, given the level of infection, we cannot expect to see a significant contribution from test and trace towards suppressing the disease in the UK?

Sir Mark Walport: We have new tests. They are rapid if they can be logistically delivered in the most effective way. We saw that happen pretty effectively in Liverpool with the Army doing it. The logistical challenge of delivering millions of tests to millions of people across the country is a tough one. These are tests of a sort that have never been applied in a pandemic situation, and I think we will learn as they are implemented.

Q720 **Chair:** In September, SAGE did not expect test and trace to make a significant impact on the handling of the pandemic, hence its recommendation for non-pharmaceutical interventions. Is that September judgment still accurate?

Sir Mark Walport: It goes back to the debate in the House of Commons yesterday or the day before, which is that to keep this disease under control at the moment requires social distancing. That need has not gone away. It is not a question of one or the other. We should be applying mass testing and targeted testing—taking the opportunity, for example,

to test people before they go to care homes, or before they go to public events. It is a question of combining measures, not either/or. Mass testing is not the single magic bullet.

Professor Dame Sally Davies: It is very difficult, unlike the first SARS when they were infective and ill at the same time, to go chasing people who have been infected for two or three days. I can tell you what we have done in Trinity—in fact, in all the colleges in Cambridge. We have been testing in pools all our resident students every week. Our maximum in this college has been six positive students at any one time, with about 60 isolated. In this, our last week of term, we have no positives at the moment. If you test every week, and isolate the minute you find households that are positive, you can make a difference.

Q721 **Chair:** Your experience in practice has been that testing can help contain the pandemic.

Professor Dame Sally Davies: Yes.

Sir Mark Walport: But of course scaling up from Trinity to the nation is a big challenge.

Professor Dame Sally Davies: I made that point, but it is about anticipation and how you use testing. It is a good example.

Chair: Luke Evans has a particular point on antimicrobial resistance.

Q722 **Dr Evans:** Professor Dame Sally, you rightly point out that antimicrobial resistance is a real concern. We already have 250,000 people across the world who are immune to tuberculosis. It is expected to reach 10 million people being unable to be treated by 2030. This is a lessons learnt.

What lessons and practical steps can we take from the understanding we have about the worldwide pandemic to influence the antibiotic resistance programme worldwide? Arguably, it is the slow pandemic that is going to be much worse, with no easy solution; not that getting a vaccine, as we have heard today, has been an easy solution. I would like your thoughts on that.

Professor Dame Sally Davies: It starts with collaboration and recognising that we have to sort the problem and make sure that we do not get a worse problem. It needs good infection prevention and control, and keeping that going. We have a very shaky supply system for present antibiotics. Even in the UK and Europe, we have stock-outs because many of them are produced in India and China in just one factory, which can burn down, or it can be decided that it is not good enough. We need a sustainable supply of the present and the old ones for the whole of the world.

We need to activate a better research and innovation system. There is plenty of good research going on now to find new approaches, new anti-infectives, but pulling them through is the problem. I am very proud that the British have started the first pilot of incentive mechanisms in the world, but we must get everyone going.

Q723 **Dr Evans:** May I cut in? Do you see similarities from this learning to what could happen? In 30 years' time, could we be sat here on the Health Committee and the Science and Technology Committee saying that, if we had done something about antibiotic resistance, we could have prevented this?

Professor Dame Sally Davies: Absolutely. That is my message, as the UK's special envoy on antimicrobial resistance, to the Government and broader. We have shown that we can work together very effectively.

Q724 **Carol Monaghan:** Sir Mark, may I go back to comments you made at the start of the session? You said countries like South Korea and Hong Kong were well set up to deal with a pandemic due to their previous experience. Knowing that it was due to their previous experience, would it have been possible for the UK to have been as well prepared?

Sir Mark Walport: That is a good question. It comes down to the mechanisms for isolating people and for controlling infection. Ultimately, what they have done very well is early identification of people who may be infected and taking strong steps to isolate them. That comes down to whether the methods that were used in different countries would be culturally acceptable in European countries.

Korea is a similar size in terms of population to the UK. It probably never had it quite as widespread so it managed to control it quickly. It comes down to speed of response, and fairly draconian measures for keeping people isolated and quarantined effectively. A lot of transmission goes on within households. One way of dealing with that is to take an infected person out of the household and house them in a hotel or some kind of quarantine facility. The question is whether that sort of approach would be acceptable or not. There is no doubt that to get the numbers down really low, which is what they have done in the countries that have been most successful, requires pretty tough measures for isolating people when they are infected, and detecting them early.

Q725 **Carol Monaghan:** Very early on in the pandemic, when this Committee was meeting to look at our response, we were told that a lockdown would not work in the UK because people would not accept those measures for more than a few weeks, so they had to wait until the correct time to trigger it. As it happens, the public in the UK bought into it very well. Are we making assumptions about how the public would respond that are affecting our ability to react to the pandemic?

Sir Mark Walport: We have certainly learnt a great deal as part of this pandemic. Of course, it is unique in many ways because it is conducted in the modern world of social media. It is a completely different media environment from any previous pandemic in human history.

You are absolutely right. People were very observant of the lockdown and were quite slow once it was initially relaxed. It was in August when it all went wrong, in that people relaxed too much, and the infection took off again. Initially, there was no evidence that there was a concept of lockdown fatigue. There is now pretty strong evidence that that is

happening. We are seeing that, second time around, it is much harder for people. I think people in general are finding it harder to cope.

That emphasises another point, which is that an important part of the scientific advice comes from the behavioural scientific community. There is no question but that looking at the biological sciences, as well as looking at the social sciences of how people will behave, is important. I think we have learnt a lot from it.

Q726 **Carol Monaghan:** Was Eat Out to Help Out a mistake?

Sir Mark Walport: Again, it is not the job of SAGE or the scientific advisers to balance the economic versus the strict health measures. The rules for viral transmission are very well understood. It is pretty simple, in a way. The virus is exhaled. It comes out in bodily secretions and foam-outs, and so on. If people are allowed to mix close together in an indoor environment, particularly a poorly ventilated, noisy one, the virus will transmit more easily. It is as simple as that.

Q727 **Carol Monaghan:** Dame Sally, back in 2009, Dame Deirdre Hine carried out a review of the UK response to the swine flu pandemic. It concluded that our pandemic preparedness was generally "impressive". Did we get that wrong, or what went wrong between 2009 and 2020?

Professor Dame Sally Davies: I think that remained true, if you look at the preparations. That was my point right at the beginning when I said that the World Health Organisation said that we and the United States were among the best prepared in the world, but there is a difference between preparation and action. We prepared for flu. I think we did a good job, but we have been found wanting as a nation now, and some of that is lack of resilience. It is our poor public health as regards overcrowding and obesity. We are one of the fattest nations in the world and that is directly related to outcomes—diabetes, heart disease and all of that.

We need to be agile. In the past, as I said, we got into groupthink. If you look at the practices, Winter Willow and Cygnus, they were on flu. We practised a response and found things that needed rectifying, and we set about rectifying them. The emergency legislation that was passed came directly out of Cygnus. We had already prepared for asking staff who had just retired to come back and for how that would work. We prepared well, and I will stick to that, but that is different from delivering well. We should have put more challenge into ourselves in some way or another: are we looking at the whole variety of diseases we might get?

Q728 **Carol Monaghan:** You said earlier that you felt British exceptionalism had contributed to our response. Is British exceptionalism going to delay us coming through or coming out of this pandemic?

Professor Dame Sally Davies: I posited British exceptionalism as one issue, because we do not seem to have learnt from Asia very quickly, but clearly, we are on a much better track now, so I hope it will not get in the way.

Q729 **Chair:** On that point, Dame Sally, clearly this is a disease that is happening everywhere in the world, and there are particular lessons from east Asia. The construction of SAGE, and indeed its conception, which is very high-minded in many ways and brings the best brains together, involved people from the UK predominantly. Would a challenge to the exceptionalism that you mentioned be to have a more international response, rather than a domestic scientific committee of advice?

Professor Dame Sally Davies: Challenge can come from many places internationally. The Royal Society set up a couple of groups to think about things and bring challenge in. We started working with a flu-modelling model that was 13 years old, although it must have developed. One of our problems as we go forward is that we have to recognise that public health and epidemiology have, in general, been either flu focused or not particularly digital and forward looking. Our maths people, when you bring them in, can do amazing modelling in different ways and bring AI and things like that into it. As we go forward, we will want to do that sort of work.

I absolutely agree with Sir Mark that you want the biomedical to be biomedical and advise Ministers, but I would have thought that Ministers also need advice, as they did in the 2008 banking crisis, from economists and anthropologists and people from other angles, so that they can balance the issues. It is not the role of scientists to balance the issues. They can give advice, but you need to get balance. From the outside, I am not sure where the balance was coming from to help Ministers make the difficult decisions.

Q730 **Chair:** This is a fascinating theme as to how, in preparing for future, perhaps unknown, pandemics, one can have a challenge to groupthink in the preparation for the pandemic, quite apart from the conduct of it—a challenge to the focus on flu, for example. Sir Mark, do you want to come in briefly?

Sir Mark Walport: I have two comments. First, scientists around the world have been very bound up in their own national responses, but I am well aware that Patrick Vallance has regularly been meeting international scientific advisers. There is an established network and he has been in communication with the Koreans and others throughout.

As a specific example of something that happened during the flood response, which I think Sir Oliver will remember, a group was brought in that included hydrologists from the Netherlands and the United States to, as it were, peer review the decisions that were being made around flood defences. It is worth considering. There has been a great deal of international contact between and among the scientific community. The science includes anthropology; the biological sciences in their broader senses come together, and, for the economic sciences, there is economic advice that comes in via different routes.

Q731 **Aaron Bell:** This is a lessons learnt inquiry. Obviously, we are hoping to produce a report that will be useful not only for what actions we can take

now on preparedness, but as something of a "how to" guide for future Governments faced with the same sort of challenges. What advice would you give to future Governments about how to assess emerging threats, essentially the situation in January? How will they avoid both an optimism bias that things will turn out okay and being the boy who cried wolf, which I think leads to optimism bias?

Sir Mark Walport: It is a question of building on what has been happening over the past few years. It is quite interesting looking at the introduction to NERVTAG, where it commented about the post-pandemic period following flu: "We have seen emerging respiratory virus threats with influenza A through to MERS. We are reminded that we cannot predict the future beyond saying another pandemic is inevitable, but it seems quite clear there is a range of major respiratory virus threats." It is about scanning. It is about doing better scanning in the animals that may transmit, but it will never be perfectly possible to predict what the virus will be and where it will come from.

Future Governments will depend on the investments of previous Governments. There needs to be close examination of public health and all the lessons that have been learnt from this about how you stop transmission, develop new treatments and develop vaccinations.

Q732 **Aaron Bell:** What does that mean for the process, in a situation like January, of assessing the nature of an emerging threat?

Sir Mark Walport: The issue there goes back to the question of transparency of data. While quite a lot was known about what was going on in China, more could have been known. It is about recognising a true global public good. We have moved in the right direction. In the past, getting sequences of flu viruses into the public domain was quite problematic. There were some countries that did not collaborate. I think it is now recognised that we need to get sequences out there quickly.

The other thing, frankly, is that, if ever there was obvious evidence of the importance of investment in fundamental science, it has been this pandemic. We would not have RNA vaccines without an enormous amount of basic, discovery-driven research. If we are to protect future generations, we need to preserve our capacity for excellent research, and we need to really think about the history of public health delivery in the UK and how to make it stronger for the future.

Q733 **Aaron Bell:** Dame Sally, on the same theme, you mentioned groupthink. How do we avoid that when we are assessing threats in the future?

Professor Dame Sally Davies: We need to open up and get some more challenge into our thinking about what we are planning for. People might model well, but that does not mean they know what is out there and what might come and hit us. We may need different people to debate and challenge what could come out and hit us—although antimicrobial resistance is here and hitting us—from those who then do the modelling and think about the proper response.

In thinking through what could happen, it would be well worth bringing in people from Asia and Africa to think about that as well, to broaden our experience and the voices in the room. Process-wise, as I said, there needs to be a balance to the biomedical to support the decisions, but it is going to take money, as Sir Mark said, for the basic sciences. We would not have the Oxford vaccine if, following Ebola, we had not set up the UK Vaccine Network that invested in it to develop the basic backbone for MERS. We have to invest to be in a position to respond effectively in whatever way there is.

Q734 **Dean Russell:** This is a question about the breadth of the preparation with regard to the impact on wider society and how much that was considered. For example with schools, if this had been a flu-based pandemic, I imagine schools would have been hit even harder. Children and teachers would have been having it. Similarly, in businesses and the workplaces, there would be lots more younger people off sick and not just isolating. I am interested to get your views on how much the wider impacts of these things are looked into. A lot of the issues this year have been behavioural, and there have been impacts on daily life beyond the coronavirus pandemic itself.

Professor Dame Sally Davies: I think what you are bringing up is not only science but our priorities. Should our priorities be the young and going to school or whatever? How you respond depends on those priorities. For flu, and I am sure Sir Mark will come back to this, there was a lot of modelling and debate about whether to close schools or not. Last time I was aware of it, back in 2016, we decided that we would not close schools even though it would transmit very quickly. In Covid, we did not know what was happening in schools, and, therefore, it was a perfectly reasonable response until you discover that it is not transmitting that much in schools, and our priority has to be the young, their education and getting them jobs.

Sir Mark Walport: The challenge is that the vulnerability of different parts of the population varies according to the infection. If you go back to the 1918 flu pandemic, which killed more people than were killed in the first world war, the young turned out to be particularly vulnerable and the elderly were less vulnerable, possibly because they had pre-existing immunity to similar influenza infections from the past. You have to work it out with each particular virus. In many cases, the young are very potent sources of transmission. In the case of this coronavirus, it turns out that adolescents and older children are as susceptible as adults to infection, although not to the adverse effects of the infection. Very young children seem to be infected rather less. You learn with every different infection.

In a sense, you have to do scenario planning. In other words, picking up a point that Sally made, if you limit yourself when you plan scenarios to one particular infection, you will work on a particular set of vulnerabilities. One should probably have a menu of different viral or other infection scenarios. Sally's point about antimicrobial resistance is important, because previously there have been pandemics, like the black

death, which were bacterial rather than viral. At the moment, the likelihood of a bacterial pandemic is much lower, but with antimicrobial resistance it could go up. Streptococcal disease, which was never pandemic as such but caused a lot of deaths in earlier generations, could come back as a problem. In a nutshell, it is about having different scenarios to plan against.

Q735 **Dean Russell:** In terms of the preparedness for this year, was preparation in place for different scenarios, for schools and so on, on the different potential pandemics that were possible? I appreciate that coronavirus was novel, but there were forms of it that had occurred previously in other areas. Was the preparation in place at the end of last year for what happened this year, in broad terms?

Professor Dame Sally Davies: No; we prepared for flu.

Q736 **Chair:** We are going to be talking to our next witnesses about Exercise Cygnus, which has been referred to by both witnesses already. Sir Mark, do you regard Exercise Cygnus as having been a success? What are the key lessons that you take from it?

Sir Mark Walport: Cygnus was predominantly an operational response. It was cross-government, with the Department of Health playing a major role. It was given a scenario that would have resulted in severe pressure on the NHS, and the question then was: how did the NHS cope in respect of that? The scientific advice, such as it was for that exercise, was about creating a particular set of scenarios that were modelled by Public Health England and the Department. SAGE was not specifically exercised as part of it. I think that Sally is probably in a better position to respond on that. In terms of the GO-Science involvement, my deputy at the time in the Government Office for Science, Dr Rupert Lewis, attended one of the mock Cobra meetings, but that was pretty much the GO-Science involvement.

Q737 **Chair:** Dame Sally?

Professor Dame Sally Davies: I think we learnt a lot. I would say it was a success. The fact that we still did not do all the things needed for coronavirus is a separate question.

What did we learn? We learnt that we would not have enough staff, and that led to the plans that have been activated to bring back retired staff and volunteers. We learnt that everyone would want different emergency powers, so we prepared an emergency powers Act. We learnt that we had to liaise between the devolved nations and England, very closely. The chief medical officers meet on a regular basis, and in emergencies they meet at least weekly, if not more. We knew that the local authorities would not be able to cope with the excess deaths, so a lot of work went into that.

There were concerns about the capacity of social care and how they would cope with the overwhelming work. We learnt a lot and the

Department changed a bit how it was going to run things. I think it was therefore a success in terms of learning—for flu.

Chair: For flu. Thank you.

Professor Dame Sally Davies: And useful for everything else.

Q738 **Chair:** Even on its own terms, one of the conclusions was that the UK was not well prepared to cope with the excess demands of a pandemic. Do you think the response to that, elements of which you have described, was adequate to address that finding of the exercise?

Professor Dame Sally Davies: Everyone in the room was used to and aware of the fact that the NHS runs, as I call it, hot in the winter—January, February—because of winter infections, particularly with a bad seasonal flu, and can almost fall over. We did not look at that, but, as it became clear that we had poor resilience, both the Secretary of State and Sir Simon Stevens, NHS England chief executive, went into bat asking for more funding. They got it for the NHS but I don't think they got it for social care. They picked it up in their way, but that was not what was being tested.

In the data at the beginning of Covid, if you look at Europe, we are in the bottom half dozen for number of doctors per head of population, number of hospital beds per head of population and number of ITU beds per head of population. We clearly had a less resilient system, and very little manufacturing.

Q739 **Chair:** One of the particular points that Exercise Cygnus raised was concern about the NHS moving patients back into care homes, which has been a major concern during the present pandemic. Were the lessons from Cygnus sufficiently learnt and applied in that respect?

Professor Dame Sally Davies: They were different. We never discussed the infectivity of patients leaving the NHS going to care homes. That has been the issue now: are they infective and should they be tested first? It was a capacity issue there was concern about, so we did not address the issue that became a problem in wave one, because it was not relevant. The view of the experts was that flu would be everywhere, and it was a question of helping people through it and out the other side. Of course, we have antivirals for use in care homes and things like that.

Chair: Thank you, Sir Mark and Dame Sally. It is very good of you to give evidence from your perspective, having occupied these positions. We have been very fortunate in this country to have people of your distinction occupying these advisory positions at the top of their profession. We are very grateful for your evidence today, and we hope to learn the lessons from that, as my colleague says, to guide us for future pandemics.

Examination of witnesses

Witnesses: Sir Oliver Letwin and Lord Sedwill.

Q740 **Chair:** We now turn to our second panel of witnesses. I am very pleased to welcome Sir Oliver Letwin. Sir Oliver was Minister for the Cabinet Office from 2010 to 2016. In that role, he was the Minister in charge of, among other things, the civil contingencies unit, part of the emergency response. I also welcome Lord Sedwill, who as Sir Mark Sedwill was Cabinet Secretary from 2018 to 2020, and National Security Adviser from 2017. Welcome both.

Perhaps I could start with, essentially, the same questions that I started with for the previous panel. Sir Oliver, how prepared was it possible to be for the pandemic that we are experiencing?

Sir Oliver Letwin: What came out in the last session is very clearly true. We were as well prepared as any country in the world for a pandemic flu, which turned out not to be the disease we were facing. Very clearly, we were not prepared for the disease we were facing to anything like the same extent that we were prepared for a disease we were not facing. The lesson I learn from that is that there are very great uncertainties. Yes, you can do a good deal by creating challenge and preventing what Dame Sally called groupthink. All the advice was that the flu was the serious one, which turned out to be not the whole truth, and perhaps we could have overcome some of that by having that challenged.

The truth, in my view, is that the underlying problem is deeper. Particularly in a democracy, government—politicians, administrators, civil servants and so on—is completely preoccupied with trying to deal with things that are actually happening. As you know, Chair, from your own experience as a Secretary of State, it is remorseless. The pressure to deal with real problems that are current is overwhelming. The result is that too little attention is paid, in every area, to building appropriate insurance policies against things that are uncertain, and working hard enough to identify all the things that might hit us and all the flexibilities and resilience we need to deal with them.

I do not believe that we are anything like as well prepared for future problems as we could be if we were, as a nation, to have some external body that is not subject to the pressures that are on Whitehall's Ministers and civil servants, that has its funding somehow enshrined in law, and has the sole task of looking at what is not happening but might happen, and to which we could respond better if we were better prepared to do so. At the moment, we do not have that sort of body, in common with very many other countries, and I think we lack it.

Q741 **Chair:** Thank you, Sir Oliver. That is very clear, and I am sure we will go into it in a bit more detail. As you say, the evidence from the previous session was clear that we were prepared for the flu but Covid was not flu, and therefore we were not prepared for what happened. If we had had the kind of structure that you have just recommended, do you think it would have been possible to prepare for what happened?

Sir Oliver Letwin: Yes; not that anyone would have been able to necessarily predict Covid-19. I am not aware of any fundamental science that would have enabled anybody to do that, but it has been pointed out

that countries like Korea and Vietnam were better able to handle this particular disease because they were geared up to prevent diseases more similar to it.

There was, I am sure, groupthink among the scientists who advised that those diseases were not likely to affect the UK, but the real point underlying that is that Whitehall in totality—Ministers and officials—and, while we are at it, Parliament and the media in totality, were all so preoccupied with current events that they were not going to sponsor setting out insurance policy practices and protocols, and setting up mechanisms, for dealing with things that the scientists did not think were as likely as the flu. If you have a body whose job is solely to focus on the uncertain, the improbable and the high impact that might not happen, it is much more likely, in my view, to look at things that the scientists do not regard as the main consideration, and to continue to test and fashion resilience, so that it is flexible and can deal with things that have not been predicted.

Q742 **Chair:** Lord Sedwill, it is very relevant to bring you in, as a former Cabinet Secretary. The life of Ministers, as Sir Oliver described, is busy and demanding. The life of senior officials in Whitehall is no less than that. Do you share Sir Oliver's analysis and diagnosis that, given that, we need a separate body that is not subject to those day-to-day pressures of immediacy?

Lord Sedwill: I certainly share the diagnosis and, indeed, the points made in the previous session. Coming into Covid-19, it is clear that there were significant elements of our preparations for flu that were useful and meant that we were able to respond in many areas better than we would have done without those preparations having been in place. We must learn the lessons from the things that went well, as well as from things that did not go as well.

The big difference between flu and Covid-19 is not so much the rate of transmission, but those most affected by it. With Covid-19, the prospect of interdicting that level of transmission through lockdowns, as we heard from the two medical scientists beforehand, was presumed not to be possible with flu. We have to ask ourselves, with the experience of Covid-19, whether it might have been possible, in a very serious outbreak of flu like Spanish flu, through the kinds of intensive lockdowns we have imposed through Covid-19. There will be lessons from that for future pandemics as well.

Cygnus, as we have heard, meant that we had the mechanisms in place to deal with a very high number of casualties, rather more casualties, thank goodness, than we have seen from Covid-19—including, for example, dealing with a level of excess deaths that simply could not have been coped with by the existing mortuary capacity. That said, the question that Sir Oliver and Dame Sally Davies referred to about our underlying resilience is a very profound one.

There is clearly an issue about capacity in our health system, compared, for example, with some of our European counterparts. As Dame Sally said, we are in the bottom quartile per head for a whole range of capacity questions—critical care beds, and so on. That meant that the point at which the NHS would be running hot, and unable to cope with the pressures on it, was always in the front of everyone's mind as we went into the spring, and the level of infections and the level of serious infections rose. I am also not aware that any scientist anywhere was quite predicting a disease of the nature of Covid. Of course, you cannot predict the exact virus.

There is something quite profound in the argument about scenario planning. We do it in national security, as you know from your time on the NSC. We should be asking ourselves not to predict what a certain virus might do. We should ask what if some kind of disease disproportionately affects the elderly, or disproportionately affects school-age children, which thank goodness this one did not, or has other disproportionate effects. Do we have agile resilient mechanisms in place to deal with that? I do not know whether a separate body of the kind Oliver Letwin describes is so much of the answer. There is a case for it, because, as he says, you need someone to have thinking about that kind of thing as their full-time job.

In the end, however, it comes down to resource choices. Ministers, Governments, spending reviews have to decide how much to invest in the insurance policy versus how much to invest in current priorities. We cannot disentangle that from the political process, whether it is flood defences, pandemic preparations, dealing with other kinds of extreme weather events or whatever. Those are fundamentally priority choices that have to be made in the mainstream of Government, in my view.

Q743 **Chair:** On a lot of these questions, the priority between short-term immediate demands on Government and the capacity to face long-term risks and unknown threats has a certain resonance with national security. You were the National Security Adviser, Sir Mark. Perhaps the existence of a national security adviser is a small reflection of the point that Sir Oliver is making; you have someone in a very senior and influential position who is charged with thinking about those things. Are there any reflections you would make? If this were being governed by the type of thinking that takes place in the national security world, would we be doing things differently?

Lord Sedwill: Some of the things you have addressed already are, as you know, features of the way we try to approach the big national security questions. Of course, there is always an element of responding with agility to a crisis, Salisbury being perhaps the most striking recent example. There are also lessons in that. In responding to Salisbury, we deployed a whole range of resources that had been designed to deal with terrorist events, including the nature of the investigation. That enabled us to respond more effectively to the Salisbury attack than we might otherwise have done.

I guess the point I am making is that when one is looking at capabilities in Government, being able to deploy capabilities against a range of issues, without hoping that somehow a crystal ball will enable us to anticipate the exact example, whether it is a pandemic or whether it is some other kind of national-level risk, is clearly part of the answer.

We have also had to develop some challenge to groupthink within the national security community. Just like the medical community, it is quite tight-knit, people know each other well and they are respectful of each other's views; therefore, there is always the risk of groupthink in that community. We have had to force explicit red teaming, challenge, and scenario planning, including forcing considerations of scenarios no one thinks are likely to happen, into the process as part of the discipline. Perhaps that is an example of the kind of thing that Mark Walport and Sally Davies were both driving at, and Oliver Letwin referred to in his first comments.

Q744 **Graham Stringer:** You make the very fair point that nobody could have prepared for Covid-19 because they did not know about it. That is self-evident. But when we knew about it, although not in great detail, in February and March this year, can you tell us how you approached the debate around that when there was no hard science one way or the other?

Lord Sedwill: Essentially, we took the pandemic flu plan and tried to adapt it for Covid-19. Obviously, the adaptation of that plan continued as we learnt more about the disease. As Dame Sally referred to earlier, for several months the scientists did not know about asymptomatic transmission, and therefore the focus in the early stages was on measures—social controls, social interventions—to try to impede transmission between people who were symptomatic and to identify early those who were symptomatic. We did not, early on, know that young children in particular were unlikely either to contract or, indeed, transmit the disease compared with others. We sought to adapt as we went.

There was a plan, set out back in the spring by Professor Whitty, the chief medical officer, to try to delay the arrival of the disease in the UK. We hoped of course that China would be able to get it under sufficient control that the numbers spilling out of China would be minimal. Regrettably, that turned out not to be possible, even with all the state capabilities they can bring to bear. Then we had to ensure that we had in place, in particular in the NHS, the capacity to deal with the serious incidence of the disease, in particular in the critical care system.

There was a range of things that we were trying to do in parallel. We were trying to understand the nature of the disease and work out which measures might be most effective in at least impeding, if not preventing, its transmission. We were ensuring that we had the systems in place, should the worst-case scenarios on the number of casualties be as high as they might be from pandemic flu; fortunately, they turned out at least not to be the worst case. We were also building up capacity, as we have

already heard, in a health system that already lacked resilience for this kind of disease.

Q745 **Graham Stringer:** In the early stages, there were two specific debates where the science was not hard. One was whether to ask people coming into the country from abroad to self-isolate when they arrived. If I remember correctly, we only isolated people from China at that stage. The other debate was whether to lock down or not and, if we were to lock down, when. Can you tell us how those two debates were approached?

Lord Sedwill: They were examined in much the way you have just set out in the question; we brought to the key Ministers the evidence, and of course the analysis, of the economic and social impact of the various measures being considered. At that time, the medical evidence suggested that it did not make sense, and would not have a significant effect on the transmission of the disease in the UK, to stop travel from a whole range of countries other than China. We were conscious, of course, that, particularly at that time, there were an awful lot of Brits travelling backwards and forwards who would have been affected by that, so the international dimension was a factor.

As we went into the lockdown, it was not really a binary question of whether to lock down or not, and when. It was whether there were measures short of a full lockdown, of the kind that we had seen in other European countries that were several weeks ahead of us in the progress of the disease, which would prove effective in stopping or at least reducing its transmission. At the time, the evidence from several other European countries—developing fast, so a lot of it was as much anecdotal as really strong analytical evidence—was that the disease was still spreading, including in countries or in cities where they had imposed very severe lockdown-type measures. It was not clear that a lockdown was going to be effective. Over quite a short period—a couple of weeks, I think, in early to mid-March—we introduced measures that resulted in the full lockdown at the end of March, as it became clear that that was going to prove necessary to try to bring the R level down and reduce the transmission of the disease. It was phased, and we were testing it as we went.

Q746 **Graham Stringer:** They were very difficult decisions, with inadequate information. Do you have any reflections you would share with the Committee about what you wish you had done over that period, or what advice you wish you had given over that period?

Lord Sedwill: I do not think it is right to talk about advice and what I might have done; it is only right that Ministers know that advice is not going to be revealed. The choices we had, in particular on the social controls element, were on how to mitigate the economic effects and whether there were more precise targeted measures, other than a national lockdown, that could have had the same effect. We were also conscious of maintaining public confidence. It was clear, for example, that parents were already withdrawing their children from schools, even though the scientific evidence suggested that children were not at

particular risk. There was so much uncertainty that people were simply making rational, risk-based decisions about the risks to their children.

If there is anything I wish we had been able to advise on, it is much of the evidence you heard in the previous session. Was there other material, other data, other experience, notably from east Asia but also from others, that we could have brought to bear, to enable us to make better informed decisions, and potentially earlier decisions, than we made at the time? We were watching the experience of other countries very closely, in particular other European countries, and that was a significant factor in the decisions Ministers made. Looking back, I would like to have had more knowledge of what was proving effective in east Asia—Taiwan and other countries of that kind—to bring that evidence to bear on the decision-making process. Of course, you always want more evidence to make better-informed decisions.

Q747 **Chair:** Wasn't that evidence available in international publications, Lord Sedwill?

Lord Sedwill: Some of it may well have been. This goes again to the earlier session; for the right interventions on public health grounds, we were, of course, relying on the synthesis of all the evidence—international, national—from the experts. I am not equipped, nor are Ministers, to make a judgment about whether a particular kind of measure is going to have the right kind of public health impact on reducing the rate of transmission of disease below its natural level. I think they were seeking to learn as much as they could from elsewhere, but we did not know at that stage exactly what was working elsewhere. Those countries did not know that the characteristics of Covid were quite as similar to some of the experiences they had had with SARS and MERS in the previous decade. They were trying to make their best judgment on the basis of incomplete evidence about the nature of the disease as well.

As Mark Walport said, we brought to bear behavioural science. A lesson we learnt from Cygnus was that we needed to think very carefully about maintaining not only public confidence in measures but public compliance with them. I can talk more about that if the Committee is interested. We were also seeking to understand the economic impact, and bring all those things to the ministerial table, for them to be able to balance off the various factors as they made the decisions.

Chair: This is clearly a matter that bridges the preparedness before the pandemic, and the early advice and decisions before it was pronounced here but was clearly happening in Asia.

Q748 **Andrew Griffith:** Good morning, Sir Oliver and Lord Sedwill. Thank you, particularly Mark, for your service to the country, including at the very early stages of this difficult pandemic.

I want to go back a little bit and pick up some of the comments that Oliver was making about risk and how it is managed generally. To give you time to answer, I will try to wrap a few points in one. There is at least an argument that foreseeing a zoonotic virus at scale was more

possible than it turned out to be. Hindsight is a wonderful thing, and no one is trying to be clever, but one is trying to learn from this process. You might address that, and how we might have exposed ourselves to a broader range of thoughts. Both of you touched on that.

Secondly, to be managed, risk has to be owned. In the past, we have done a lot of work as a Government on forcing the next largest and complex types of enterprise—companies at every level and of every size, although they do not compare with the diversity of government—to be very clear about their own risk management process and where that risk is owned. Ultimately, it is owned in a singular person. I am interested in where you think sign-off of the national risk register, short of the Prime Minister, actually sits. Where should he look to get that singular point of comfort and advice?

My final point on this round of questions is perhaps a little leading. Would you think it is fair to say with hindsight that having too much of that risk, which is a national risk that conflated every part of government, from the Home Office to the Ministry of Defence to the Housing Ministry—every part of government has been affected by this national risk—owned within Public Health England, or the perception that it was owned and dealt with within Public Health England, was probably wrong, and we were running around thinking we had bought an insurance policy that the small print would have revealed was never actually cashable?

Lord Sedwill: I will try to be fairly brisk, but I can develop any of the points if you wish. On your first question about zoonotic diseases, of course those were contained within the national risk register and the assessments. It was the experience of SARS and MERS that put that risk there. The big difference, and I know the Committee has been interested in this, was the assessment by the experts that the likely level of fatalities from zoonotic disease was going to be of the same order of magnitude as it had been with SARS and MERS, and not of the same order of magnitude as we were anticipating should we have been hit with a flu pandemic.

The curious thing is that we learnt in some ways the wrong lessons from looking at zoonotic diseases. This zoonotic disease had a level of fatalities and casualties of an order of magnitude higher than the zoonotic diseases that we had seen in the past, and, although there has been quite a lot of criticism about preparing for pandemic flu, at least it meant that we had the preparations in place to deal with a disease that would potentially have tens if not hundreds of thousands of fatalities, even though the nature of the disease was different. The missing piece in the epidemiology was understanding that a zoonotic disease could have flu-level casualties and what that would mean. That is the missing piece of that particular Venn diagram.

You are absolutely right on risk management and ownership. The national risk register is in the end owned by the centre of government. It has to be co-ordinated there. In Oliver Letwin’s time, he was the ministerial owner of it. It is owned at official level and run by the civil contingencies

secretariat, who work through the National Security Adviser to the Minister in the Cabinet Office. It was Francis Maude before that. The key point, as you know, is that there is a very wide range of risks in the register; pandemic of course is the one on which we are focused, but there are extreme weather events, civil disruption, malicious attacks of various kinds, and so on. Those risks are each allocated to a natural lead Department, pandemic obviously being the Department of Health, now DHSC, and the formal accountability for generating the contingency plans to deal with those risks lies with the Secretary of State and with that lead Department.

Q749 **Andrew Griffith:** Does that potentially augment the risk of groupthink? If the owner of that risk is the manager of that risk, and potentially framing the advice around that risk, is that of itself a piece of the process that one might usefully re-examine?

Lord Sedwill: We should ask that question, but the balance at the moment, which I think is probably about right, is that the civil contingencies secretariat at the centre of government runs the process to identify the risks and then says, "Department X is in charge of managing this risk." The Department does not get to decide whether we put something on the risk register, or indeed how high up the risk register we put it; that is a collective process. There is then a question about whether there is enough challenge in that process. I think there is quite a lot and it is quite a good process. The Department's job is to put together a plan to manage the risk, should it manifest itself—the insurance policy, if you like.

The Departments have a second job, which is that in many cases they are supporting others. The Home Office, where, as you know, I was for seven years, may well have to deal with public disorder that could arise from any number of the different risks playing out. You do not have lots of different plans. You say, "Okay, we could get public disorder. We need a plan for that." There are consequences that are also owned by the Departments. The ownership and the management of those is quite clear. The question then becomes the one that Oliver Letwin referred to right at the beginning. It is about relative priorities within inevitably constrained resources, in this case in health and social care, about the amount of investment in the insurance policy versus the amount of investment in immediate priorities, in a system that is already under significant pressure.

That leads to your final point about Public Health England. Public Health England is one of the three big institutions that DHSC is responsible for. There is the NHS, Public Health England and the social care sector. They are all really different. The NHS is a huge but very complex organisation. Social care is a quite fragmented public/private semi-market provision. We might want to come back to that. Public Health England is quite a specialist but much smaller body.

The question is not whether it was the right body, although there are definitely questions about whether it had the right structure for putting

together contingency planning for disease with, essentially, the campaigning role of trying to get people to become healthier. Those were put together only in the last decade and have now been separated again. There is a question about whether the structural change to put them together was right, because Public Health England's mission statement was much more focused, in terms of effort, on health inequalities than disease prevention and control, although that was within its remit. Then there is the question about whether it had sufficient resources, but, in terms of where risk lies, it is quite clear. Sorry, that was quite a long answer.

Q750 **Chair:** Sir Oliver, could you comment on the questions that Andrew asked?

Sir Oliver Letwin: The first point is that, yes, of course, it was predicted there could be zoonotic diseases. Indeed, we had had some, not only MERS and SARS but Ebola. The effects had been small, and the scientists were simply wrong in taking the view that they would continue to be small in all cases. The lesson we should learn from that is that we will never be able to predict these things perfectly; therefore, the attention has to be on what Mark was describing, which is the what ifs.

Somebody has to be asking the question, which we tried to ask in the series of scenario-planning exercises we did through the resilience review, what if something happens that causes X? Forget what is causing it, because we may not be able to predict what the cause will be. What we are more interested in is whether something is being caused that is going to be a terrible problem; the lights go out, there is horrible flooding, a lot of people are dying and need to be buried, or a lot of people are very ill and need to be cured. It is those sorts of things you need to plan for, rather than trying to think that you will be able to predict the future with enough certainty to have an inflexible response that is perfectly tailored to a known future. Life is not like that.

That brings me to what I think is a very good question on your part, which is the whole question of the ownership. Mark has set out how it all looks formally, but, when it comes down to it, the truth is that the management of these things is in the hands of people who are under the pressure. I sat for winter after winter with people from the Department of Health, including the Secretary of State, trying to work out how the hell we were going to deal with that winter's crisis in the NHS. I know that was absolutely front and foremost. That Department did not, therefore, have the capacity to put in the kind of effort that was needed, in retrospect, to plan for something that was not even on the risk register as a higher-level item.

It is remarkable that Exercise Cygnus occurred. There was at least some planning for, admittedly, not quite the right thing. We have a strategic problem of allocating to frontline Departments that are under huge pressure the main task of preparing for and dealing with events that are not occurring, and are not the main pressure. Somehow that will have to be resolved. That is a really important lesson.

There is one other lesson that emerges vis-à-vis the question of ownership, and it comes down to the question on PHE. Leave aside Mark's very justified points about how you structure the public health arena; there are arguments all sorts of ways. A lot of this is about logistics. A lot of it is about whether you can actually deliver quickly something you did not expect to have to deliver in quite that form, to deal with a situation you did not quite predict. That is true across a whole range of risks.

The military, as Mark was pointing out, are very good at this. They do an awful lot of thinking in advance about what might happen and how they might have to deal with it, without knowing quite why it will happen. They are also extraordinarily adept at working out quickly, on the basis of precedents they have worked through on many occasions, logistical solutions to practical problems. We saw that when they put up the hospitals at breakneck speed. We saw it with Ebola when they went out to Sierra Leone and helped the Sierra Leonese to stop it. I saw myself when I went out there just how effective they were at organising logistics.

We saw it in BSE and in foot and mouth. It was only when the Army was brought in that those were resolved. DEFRA was unable to do so on its own. Over and over again, I found, as Minister for resilience, that it was the Army we needed. When we had fuel tanker problems, we brought in the Army to design the logistics to deal with them, and we avoided those problems occurring. When we had massive flooding, it was the Army that was brought in to organise properly the distribution of things that other Ministries had available but did not know how to get to the scene of the action in the right way. The Army planned that and did it.

My view is that the armed forces are the place in Britain that is overwhelmingly best equipped to deal with logistical problems of the kind you are almost certain to face when unknown things happen to you on a major scale. Frontline Ministries, other than the Ministry of Defence, are, typically, extremely reluctant to see the Army brought in at an early stage and find it quite difficult, although there are established procedures for military assistance and civil powers, to work through all the Treasury constraints and all the issues about how you bring the Army in. I strongly believe that the lesson of all this is that, rather than relying on Serco—I do not mean to besmirch a particular firm—or other private sector providers, or just local authorities, or just Ministries, we need systems in place that mean that flexible responses, where they involve complex rapid logistics in the face of uncertainty, typically bring the Army in, and in a way that we have pre-co-ordinated. I do not believe we have done enough of that kind of planning yet.

Andrew Griffith: I will leave it there in the interests of colleagues having a chance to ask their questions.

Q751 **Chair:** We are talking about preparedness and preparedness for future pandemics, but does the advice you have just given, Sir Oliver, apply now? Should we be mobilising the Army in more of the effort, or have we

passed that point?

Sir Oliver Letwin: I am speaking here as an uninformed outside observer. I have no inside knowledge at the moment. I believe that it is extremely likely that the success of the vaccination programme will heavily depend on whether somebody is involving the Army in the logistics of doing that.

Q752 **Zarah Sultana:** I appreciate that we have touched on Exercise Cygnus quite a bit, but I want to ask Sir Oliver Letwin what his thoughts are on how the Government implemented the recommendations of the exercise, and if there are any lessons that could have been better learnt.

Sir Oliver Letwin: It is very unfortunate, and unfortunate for me at the time, but I was ejected from Government just before Cygnus occurred, so I do not know how it was conducted. I knew it was going to be conducted. I was much reassured that it was going to be conducted, because it was right at the top right-hand side of the risk register, but I do not know how it was done, and I do not know, therefore, anything about how it was implemented. I am very sorry about that. I only read the newspapers and know less than you do about it.

Q753 **Zarah Sultana:** That's absolutely fine. Lord Sedwill, do you want to come in on that question?

Lord Sedwill: Of course, but, before I do so, I agree entirely with Oliver Letwin about the need for dedicated resource within Departments. Whether it would need a separate body is a separate question, but we definitely need dedicated resource in Departments on this kind of thing, so that there is someone thinking about it who is not just caught up in the day to day. We have used the Army. We sent an awful lot of Army planners into DHSC to help it in the early days of this, for exactly the reasons he said, so he is right about that. One of the lessons that arose from Cygnus is that logistics will always be a challenge.

In terms of implementation, Sally Davies addressed this earlier, so I will be pretty brief. The legislation that Parliament adopted in the spring was based on legislation that had been designed, essentially, as a result of Cygnus. The areas that Cygnus identified around population behaviour, and some of the political factors in dealing with a disease with this scale of impact, notably population triage and dealing with mass casualties, were, although designed for flu, lessons and capabilities we were able to plug into dealing with Covid. We had latent capacity, should the number of fatalities have overwhelmed the mortuary system, for example. Thank goodness we did not need to do so, but that was available to us.

You heard from Sally Davies about the Vaccine Network. In particular, something that has not been touched on much yet, she mentioned being able to bring people out of retirement to increase capacity in the health system. Business continuity planning was another lesson from Cygnus that we applied. Every Government Department is required to be able to operate with 20% of its staff out, and in some cases 40% to 50% of its staff out. Briefly this spring, DWP and HMRC were operating with staff

absences of that level. We were also able, again because we realised that business continuity planning might require it, to switch staff to working from home at great speed. We did it in a matter of days.

All of those were lessons that arose either directly from Cygnus or from some of the smaller exercises that followed. The big thing we had not completed from Cygnus was a recommendation that was, essentially, for an overall concept of operations. That work was under way but was postponed because of Operation Yellowhammer and the planning that was required for that. That piece of work was under way but we diverted some of the resource into Yellowhammer, so the work is incomplete.

Q754 **Zarah Sultana:** Following up on Cygnus, why were the findings not released back in 2016, and why did it take a six-month legal challenge by an NHS doctor and a journalist for the full report to be published?

Lord Sedwill: To be honest, I genuinely don't know. I am slightly at a disadvantage, at the other side of this from Oliver Letwin. He left Government before the exercise happened. I was still at the Home Office when it was taking place and had not come to central Government, so I simply was not involved in those decisions, and I genuinely do not know what the basis for them was.

Q755 **Zarah Sultana:** Thank you. I will find some other ways to get the answer to that question. Why do the Government and the civil service not carry out simulation exercises more often, and do you think they should?

Lord Sedwill: We do quite a lot of exercising. I am a securocrat, so I would also like to do more of it and adopt more of the techniques that Oliver Letwin has just described the Army doing. They do an awful lot of planning. It is worth keeping in mind that, again, it is about resource. Cygnus was a major exercise. It took over a year to design and almost 1,000 people were involved in it. Ministers were taking exercise Cobras while still having an awful lot of the day-to-day pressures that Oliver Letwin was describing. Essentially, it is just another example of the underlying question we face, which is how we carve out sufficient resource, including that most precious of resources, ministerial time and attention, for contingency planning versus current priorities.

For someone with my background, you would expect that I would like us to do more of it, but I understand why it is hard to do things at that scale more frequently. We look at it across the piece, and there are exercises for floods and for major power disruptions, cyber-security attacks, and so on, but of course one would always want to do as much of it as feasible.

Sir Oliver Letwin: May I respond to the question from Ms Sultana? First of all, I know no more than Mark does about why the decision was made not to release the Cygnus papers, but I am quite clear that it was the wrong decision, and it was right to release them. Transparency there, including potentially embarrassing transparency, is critical, not so much because it is in the public interest that people should see what is going on, although that is true, but much more because it is only if the thing is open that the people participating in it know that it is going to be open

and, therefore, are doing it not in a sort of secret huddle but in the spirit of trying to challenge and ask questions of the kind that will be asked in public. It transforms the nature of those exercises if they are very open. That is an important point.

The gist of your question, the leading edge of it, is also right; we need to do more of what Mark describes. A lesson from this event, even though there was Cygnus, is that repeatedly doing large-scale exercises, albeit at the expense of taking some time from Ministers and senior officials and many others, and it certainly has a cost attached, is worth it. In doing those exercises, and continually doing them across a number of years in different domains, you begin to spot similarities as well as differences. Flexibilities emerge; you realise that, when you were doing exercise A, it had the same pattern in respect of PQR as exercise B, and you begin to focus on aspects of PQR that seem to be general to the different exercises. There is no substitute for doing that.

As I say and as Mark said, the Army does that endlessly. Armed forces around the world do it. Governments around the world, including ours, are much less prone to doing it, and we need to learn that from the military.

Lord Sedwill: If I may, I want to endorse both of those points; Oliver is right. Transparency also helps with the political argument about why contingency planning matters. If it is all happening behind closed doors and is seen as just a process that officials care about, it is never going to get the oxygen it needs. If we are to be able to allocate the resources to that kind of thing, we need to show why it is necessary, and transparency is part of that. He is absolutely right about exercises in the national security area, which we do all the time.

Q756 **Chair:** Were you agreeing with Sir Oliver's point about the use of the Army as well, for these logistical operations?

Lord Sedwill: Yes, I was, and in fact we did. Back in the spring, it was not particularly public at the time, and not people in large numbers, but we deployed a significant number of military planners and logisticians to DHSC to help them with the planning for the initial response.

Q757 **Chair:** I think Sir Oliver's point is broader. I think he was saying that often the solution is to give a more comprehensive role to the military. Do you concur?

Lord Sedwill: Yes, but using them in the ways that they know that they can best be used. There will be times when it is right to have large numbers of the military directly involved in the frontline provision of services as a reserve capacity. We have seen a lot of people in uniform, for example, in the testing programmes.

In many ways, there is huge value in the relatively small numbers of highly expert planners and logisticians and so on who can help other Departments. As Oliver Letwin says, the Home Office is used to that. We are used to thinking of military aid to the civil power, and we are quite

comfortable with it. Other Departments are less comfortable with it and do not have the same familiarity and confidence in their systems. That should be one of the lessons from this.

Q758 **Paul Bristow:** In the interests of time, I am going to ask just one question. We have talked about the decision-making structures during this emergency, but how would you assess the relationship between Ministers, those decision-making bodies and the public during the pandemic? What lessons can we learn?

Lord Sedwill: It is a difficult question. It is obviously quite a political question, and it is difficult for me to make an assessment. The decision-making bodies themselves brought together the people Ministers needed to be able to make the best-informed decisions they could. We can talk about structures in more detail if you wish, but, fundamentally, that is what we were seeking to do: make sure that Ministers had as much evidence as we could possibly put before them, in a form that enabled them to engage with the issues and make the decisions. We were always conscious of maintaining public confidence in the various measures, and of course public compliance with them.

There is then a question about how effective the communication has been. It is a complex issue. It has been good at some times and clearly less good at others. There have been events that sometimes affected that. Public awareness of the disease has always been high. Generally, public compliance, which is the real question in many ways, has also generally been high with the measures Ministers set out. Whether the communication could have been more or less effective is something on which I am probably no more expert than any other citizen to make a judgment.

Sir Oliver Letwin: I only see what somebody sitting at home sees looking at the moving scene, and I cannot give you any kind of expert insight into the communications that have gone on. What is clear is that, first, it is extraordinarily important that, if you want citizens to do certain things, the things you are asking them to do need to be very clear. It is very difficult for Government, faced with a great emergency and a changing scene, to find mechanisms that are clear and are also viewed by the experts as likely to be effective, but, unless they are clear, they will not be effective. However effective they might be in theory, if citizens do not understand what is being asked of them, they will not be able to do it. There was excess complexity of various kinds. I am sure the Committee will remember the various rules that concerned who you could meet and whether outside or inside, and in what numbers and so on, until the rule of six came in. There was clearly some excess complexity.

There was also a lack of simplicity in a different respect, which is a lesson I think we can learn for the future, and which I detect from the outside that the Government have been learning as we go along. In the early months, there was a rather alarming disparity between what the guidance told people to do—it did not sound much like advice; it sounded like ordering—and what the law actually compelled them to do. Being

rather anorakly inclined, I developed the habit of reading the statutory instruments. Very often they did not reflect the guidance. That is a crack that, apart from making enforcement very difficult, and in many cases, as we discovered, impossible, confuses people. Some journalists might go and read the regulations anyway. If they discover their difference from the guidance, it becomes very difficult for them, as an important medium of communication, to communicate to people what they are actually required to do.

One of the lessons that emerges from this is that transparency, consistency between statement, guidance and regulation, and simplicity are all important in conveying very significant messages to very large numbers of people about how you are demanding that they act to contain a disease. That would apply in many other kinds of emergency; it is not just diseases that require community response. There are many kinds of emergency that require community response.

Lord Sedwill: To amplify that last point, I think Sir Oliver is correct. For example, we were talking earlier about the phasing of the lockdown in the spring, and it was clear that most people—90% plus—were complying with the guidance not to do certain things, but there was a remaining group of people who said, "If you really don't want us to go to the pub or to a restaurant, you'd better close them down." We moved from voluntarism and guidance into more compulsion and legal measures, partly because, as he says, we were learning and we perceived that to be necessary for the message to really land and the behaviour to be countrywide, and partly to avoid the sense that some people were shrugging it off and free-riding when others were making sacrifices and complying. One of the lessons is that these things need to be aligned, probably from the start.

Q759 **Aaron Bell:** Thank you both for your time. Lord Sedwill, I asked the experts about the advice they would give to future Governments about assessing threats as they emerge. Do you think that perhaps the structures that we put in place, for good governance reasons, hampered our speed of response at the beginning of the pandemic? Some other Governments looked at what people were doing next door and immediately decided to lock down, whereas we went through all the processes we put in place. Was that potentially a problem?

Lord Sedwill: I don't think so because we were also looking pretty hard at what people were doing next door. That was an important factor. Of course, in the modern era, with modern communications, social media and so on, everyone is aware of that. It is setting a political context within which decisions are made.

I do not think it is wrong to try to ensure that decisions are made with all the evidence, of which the public position is a part, and at least give Ministers the opportunity to take different decisions from some of our neighbours should they wish to do so. I do not think that slowed us down. The right Ministers were around the table. The decision mechanisms were quick. Of course, that is a separate question from

whether, in anyone's view, the right decisions were taken at the right time, but I do not think the mechanisms themselves were a problem. I think they enhanced the way Ministers were able to take decisions and operate with some agility.

Q760 **Aaron Bell:** Sir Oliver, I was struck by what you said about managing risk and the way the Government need to address it. I spoke to the experts about the issue of avoiding the boy who cried wolf problem. In my lifetime, we have had a number of things that have had potentially millions of deaths associated with them like BSE, SARS, swine flu and bird flu. None of those things came to pass with millions of deaths in the UK. There is obviously a parallel relationship with those sorts of things, similarly with other threats like terrorism and so on. Is it realistic that we can build a structure that overcomes humanity's tendency to think it will be okay?

Sir Oliver Letwin: I do not know whether we can succeed in that, but I really think we have to try. I accept that there is always a danger of crying wolf and of exaggerating threats. The millennium bug was an interesting example of what turned out to be a wildly exaggerated threat. Who knows who got what wrong about BSE, but, clearly, there was not the consequence for human health that had originally been forecast by the experts. These things can be overdone, for sure.

There is a much bigger problem. None of us suffered terribly from the fact that we did not have the millennium bug and we had done various things that proved not to be necessary, or from the fact that we are not dead because of BSE. We can quietly celebrate and get on with our lives. However, when these things hit us, and we are not properly equipped to deal with them in a way that minimises the crisis, we live with the consequences for a very long time. We have to try to establish a mechanism that means that we are better insured against uncertain risks.

Let me give you one example that comes out of the previous conversation quite strikingly. Britain has the privilege, so to speak, of being an island. Therefore, in principle, it is fairly easy to stop people going in and out, much easier than it is if you have large land borders. As a precautionary principle, we could adopt as a national strategy that when there is something coming across the world, even if as a matter of fact it may not have a huge effect on us, we do what the New Zealanders did and clamp down on travel. Yes, of course, it would have all sorts of consequences for businesses and UK travellers and so on, but if we had an established principle that under certain circumstances we did that as a precaution, as a matter of fact, as things have turned out, had it been done at a very early stage, it might have prevented a very large part of what has afflicted us. By the time we got around to worrying about travel restrictions, we already had community transmission in the UK, so that is a very good example of where you could prepare in advance.

Chair: Thank you very much indeed, Sir Oliver.

Q761 **Carol Monaghan:** I am thinking of other countries that are perhaps more resilient than we are here in the UK, countries perhaps that are more used to dealing with natural disasters, be it a pandemic or some weather event. Do we take resilience seriously enough in the UK?

Sir Oliver Letwin: The answer is that we are much more resilient in some respects than in others. Countries differ in the things they are resilient to. What Sally Davies and Mark Walport were saying about the way in which our NHS has been run over many decades is of course true when you compare it with, say, the German system. There is a great deal of redundancy built into the German system. In any normal year, there is an enormous number of beds for which they are paying that are not occupied by anybody, and an enormous number of ICUs that are not occupied by anybody, whereas we run a health service where we try to keep very high occupancy levels. That means we have a less resilient health service than the Germans; also, therefore, we can spend more of our funds on providing cures for people that otherwise we would not be able so easily to afford.

In other respects, however, we take resilience and redundancy very seriously as a country. For many years, under successive Administrations, there has been a huge effort to build up flood defence, which is continuing, and which provides us with considerable resilience. We have taken that very seriously in trying to do something much more profound, which is to manage our rivers appropriately so that there is natural resilience. We are not just building walls to prevent water flowing into untoward places; we are actually trying to design the structures of our ecology in such a way as to minimise the chance of flooding, but Mark Walport was pointing out, and he is absolutely right, that we have no equivalent set of protections at the moment about what to do under certain circumstances of drought. We are less resilient to drought than we are to flooding. I am trying to explain that it is a patchwork.

Q762 **Carol Monaghan:** Could I come back at you on that? What you are talking about is resilience built up by Government, and I am probably talking more about resilience built up at an individual level, supported of course by Government structures.

I worry that some of the rhetoric we are hearing about restrictions is that restrictions are being imposed on individuals rather than individuals buying into them, as they did at the start of the pandemic, to be part of a national response. When we look at countries that are very resilient, possibly Scandinavian countries for example, every citizen takes responsibility for having certain things in their house ready to respond to whatever disaster may befall them. Do we need to be doing more work in that respect?

Sir Oliver Letwin: We need to be doing more work in that respect, but we should not understate the extent of community response and resilience, both in this crisis, and in many others. There is a huge amount of very localised community response, right down to literally looking after your neighbours. In my own village in Dorset, for example, there is a

plethora of things, social capital so to speak, that has been built up over many years that responds to every kind of emergency. The truth is that in many communities of every kind all over Britain there is much of that going on.

What both the national Government and the devolved Administrations could certainly do more of is to foster and build up community resilience. There have been efforts of that kind, but more attention being paid to that over a longer time, to make sure that in areas of the country where there is less of it there becomes more, would certainly be beneficial in a whole series of possible crises.

Q763 **Carol Monaghan:** This pandemic has been the greatest threat to the population across the world, but it seems as though many of the basics that we should have had in place we did not have in place. You have talked about the travel restrictions, but I am talking about even more basic things, for example, PPE. Is there an imbalance in funding when we consider possibly defence funding for a man-made threat as opposed to natural threats that have not had the same type of investment?

Sir Oliver Letwin: That comes back to the points that I was making in my very first remarks. Throughout this conversation, and indeed the previous session, there has been a recurrent theme of balancing how much we invest of our national resources in insurance policies against uncertain risk, and how much we spend on doing things that are known to be necessary right now—educating people, curing them and all the rest of it. That will go on being a debate. I agree with what Mark said at one point; we are never going to be able to remove that debate, in essence, from politics. It is for Parliament and for the electorate, at elections and so on, ultimately to decide how the nation spends its resources.

I do not think there is currently a strong enough, persistent enough voice built into our system in favour of insurance to counterbalance sufficiently the enormous pressures on every Administration, every political party and every local authority and so on, to get on with doing the things that are currently of concern, and that makes it extraordinarily difficult for them to devote sufficient resource to the insurance policies. It seems to me clear that we need some mechanism for dealing with that imbalance. My own preference is for an independent body that is established and properly funded by law. Whether that is the right solution or not can be debated. What is clear is something is needed to counterbalance the pressure of the every day.

Q764 **Carol Monaghan:** Lord Sedwill, do you want to come in on that?

Lord Sedwill: I agree with all the points Oliver Letwin has just made, and in particular about how we ensure that resilience is a more central feature of Government planning and policy.

On the point about societal resilience, both your question and his response make some very important points. We need to look quite carefully though at whether that societal resilience is even across the country. It works well in communities that are essentially stable, and

where there is a strong sense of community spirit; often those communities are quite well connected into local and national Government. It works much less well, in particular in some of the deprived parts of the country, where communities and individuals' relations with authority are much more challenged.

We should look carefully at society and community resilience countrywide, but we should also recognise how important it was, in one of the positive responses to this pandemic. The shielding programme and the programme to support the socially, as opposed to the medically, disadvantaged—those struggling with the lockdown—relied upon a huge voluntary effort, some of it organised, some of it simply people looking out for their neighbours. We have to work out how well that applies across the entire country and support, encourage, nudge, reward people who devote themselves to providing that broader societal resilience. You are right that we need to try to ensure that individual citizens, families, households and communities recognise that there is a responsibility on them as well to be prepared for whatever contingencies, but of course they need support from government whether national, devolved or local, to enable them to do that intelligently.

Q765 **Dr Davies:** Lord Sedwill, in relation to the legislation used to tackle the pandemic, why was the Civil Contingencies Act not used, in your view, as opposed to public health legislation? I ask that as a Welsh MP because I understand that the Civil Contingencies Act is UK-wide and might well have helped to overcome some of the political disagreement we have had during the last several months, which arguably, as a consequence, reduced confidence in the public carrying out the measures, with duplication, compliance issues and so forth.

Lord Sedwill: It is an important question. On the last point, of course, had we used it and imposed it country-wide, across the entire UK, I suspect there might have been a political row about that as well. In a sense, political frictions are inherent in dealing with something this challenging.

I think you are really referring, Dr Davies, to the Civil Contingencies Act part two, which is the emergency powers element. That was explicitly designed to enable Ministers to introduce through executive order, decree if you like, for a short period, under regular review by Parliament, measures that are necessary to deal with an emerging emergency. There are very significant checks and balances built into that, for all the obvious reasons.

It is explicit in that legislation, in my view rightly, that it should be used only if there isn't a legislative alternative, because we are talking about coercive and intrusive powers introduced in an emergency, where Parliament can only review them after a certain period. If we can, and we reckoned we had time to do this in the case of the pandemic, it is better to introduce powers, under proper scrutiny by Parliament—the Coronavirus Act legislation, and so on, in the spring—that are bespoke to

the circumstances at the time, and, frankly, are not too broad brush and could not be abused.

You are right of course that that inevitably meant that there was some difference in the legislative approach that was taken across the four nations and Administrations. Was that better or worse than having a UK-wide approach? We could have chosen, with everyone's agreement, to have done it on a UK-wide basis even as a bespoke piece of legislation. Essentially, it comes down to this: the Civil Contingencies Act could have been a sledgehammer, whereas we wanted to try to take targeted measures, if we had time to, as we did in this case, and give Parliament a proper opportunity to scrutinise and challenge them.

Q766 **Chair:** Lord Sedwill, I have a final point on the civil contingencies arrangements. Initially, Cobra was the governing Cabinet body that took the decisions and met to handle the pandemic. That was moved to a different structure of Cabinet Committees. One of the consequences of that is that the civil contingencies secretariat, which serves Cobra, does not serve the Cabinet Committees; they are serviced by the Cabinet Office generally. Is there anything to be read into that? Was it the right move, and why?

Lord Sedwill: That is the way civil contingencies are designed. To take a much more specific example, Grenfell, the civil contingencies secretariat and Cobra met to deal with Grenfell for the first two or three weeks. If something is ongoing, we seek to put it into the mainstream of government. That is partly because of the capacity and potential fatigue of the individuals concerned. It is partly, almost back to Dr Davies's question, because the civil contingencies secretariat is deliberately not an expert in any particular area, and we want to engage the expert Departments and their capabilities.

It is also because we need to maintain a reserve capacity within the central secretariat should some other event happen. We did not have a terrorist attack or an extreme weather event concurrent with this. We could easily have done in the spring, and could easily yet. We need the civil contingencies secretariat to have the capacity to be able to support a response to that.

For something at this scale, you have to move it into the mainstream structures and engage the wider Government. CCS, the secretariat, has been involved throughout and has been providing a great deal of the support, including some of the co-ordination that various questions have referred to. It is not that we switched it off; the balance was shifted. The senior governing body remains Cobra. There is a UK-wide Cobra, which is the senior governing body and involves the First Ministers of the devolved Administrations. We maintained those structures.

Q767 **Chair:** Is the civil contingencies secretariat still contributing?

Lord Sedwill: Yes.

Q768 **Chair:** Is it operational in support of the response? For example, for the

vaccine programme that Sir Oliver referred to, is the civil contingencies secretariat involved?

Lord Sedwill: I do not know whether they are still involved in that. They would be involved in helping co-ordinate the overall approach, but the vaccine programme, certainly when I left Government, was being run as a separate programme. It has its own SRO, and Kate Lampard as the supervising individual. It is a joint programme led out of BEIS but with support from DHSC. Certainly, that was the position when I left. There are about a dozen big programmes that we put together on the usual basis, because Cobra is just too big to lead in the emergency element of Government. It has to be a whole of Government effort.

Sir Oliver Letwin: As well as agreeing with what Sir Mark just said in general about the CCS and transfer to the mainstream, I want to tell the Committee a particular anecdote that I think is relevant to lessons learnt. Just after the Ebola crisis, which was of course an international rather than a national crisis, and just before I was removed from Government, I set up a small number of officials—I think it was in fact three but it may even have been two—within the civil contingencies secretariat specifically to scour the world for viruses that might be heading our way at any given time, and to report on a regular basis, I think it was monthly, or it may even have been weekly, on what they saw coming, and if something was coming, to accelerate the frequency of their report. That was so that, right across Government, and at the centre of Government, we were alerted. In fact, there was a Zika outbreak in the United States, which was the first time they alerted people to that in central Government. We had some discussion about whether to close off flights from the United States and decided eventually not to do so.

Interestingly, as I understand it, those people or their successors have been absorbed back into the generality of the CCS, and there was no scanning unit of that kind in place at the time this virus first came into partial view. That is quite an interesting, tiny example of the extent to which the mechanisms of government, even including the civil contingencies secretariat and the Cabinet Office itself, are inclined not to invest in long-term insurance and are more inclined to focus on the here and now. No doubt the people who were absorbed were absorbed into some important activity—just then—but that meant they were not available to do what could have been useful when we got there some years later.

Q769 **Chair:** It is an interesting anecdote. I do not want to put words in your mouth, Sir Oliver, but would it be fair to say you regard that as a regrettable development?

Sir Oliver Letwin: Yes. Of course, I have no means of knowing whether a small group of people of that kind would have spotted this earlier, would have usefully alerted people to it earlier, or would have permitted thinking about it in a more structured fashion some weeks earlier. I do not know. It is pretty clear that we should have some horizon-scanning capacity of that kind built in, and that to maintain that requires more

than simply setting it up. It requires some kind of enshrining to prevent its being reabsorbed into the here and now.

Chair: Sir Oliver and Lord Sedwill, that takes us right back to the beginning of your remarks and your very clear recollections of your time in office. We are very grateful for that, and for the expertise and experience it contributes, and for your very thoughtful and practical suggestions for how, as we want to do, we can learn lessons from this so that we can fare better next time, in all our interests. Thank you very much for your evidence today. That brings to a conclusion this session of the Committee.