Public Accounts Committee

Oral evidence: COVID-19: Test, track and trace (part 1), HC 932

Monday 18 January 2021

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Watch the meeting

Members present: Meg Hillier (Chair); Gareth Bacon; Barry Gardiner; Peter Grant; Mr Richard Holden; Sarah Olney; Nick Smith; James Wild.

Gareth Davies, Comptroller and Auditor General, NAO, Tim Phillips, Director, NAO, Robert White, Director, NAO, and David Fairbrother, Treasury Officer of Accounts, HM Treasury, were in attendance.

Questions 1-158

Witnesses

I: Sir Chris Wormald, Permanent Secretary, DHSC, Jonathan Marron, Director General, Public Health England, Baroness Dido Harding, Executive Chair, NHS Test and Trace, and Chair of NHS Improvement, and David Williams, Second Permanent Secretary, DHSC.
Chair: Welcome to the Public Accounts Committee on Monday 18 January 2021. We are here today to look at the test and trace programme and the agency that was set up in May to deliver testing and tracing to tackle the challenge of Covid-19. Of course, the Government had some testing going on up to March. That was suspended at the height of, or around the time of, the first lockdown, and then Baroness Dido Harding was installed, or requested to set up NHS Test and Trace, in May. The National Audit Office has done an early investigation of this work, which took it up to the end of last year, and we are now seeing where things are at in our third lockdown. So we are going to look at what has happened, what the legacy is and what challenges remain, as well as of course—as we are the Public Accounts Committee—probing the funding of this regime.

I welcome our witnesses today. We have Sir Chris Wormald, who is the permanent secretary at the Department of Health and Social Care, and David Williams, who is the second permanent secretary at the Department of Health and Social Care and, formally, the finance director there—both are accounting officers, in effect, but Sir Chris is the permanent secretary. Then we have Jonathan Marron, the director general for community and social care at the Department of Health and Social Care, and Baroness Dido Harding, the executive chair of NHS Test and Trace.

I want to come to you first, if I may, Baroness Harding, as head of this new system. You got a call in May to set it up. What did you see as your role at that point? What did you see your task as? Did you define it? Did the Prime Minister define it? What was your job at that moment?

Baroness Harding: When I was first asked to take on the role of leading Test and Trace by the Prime Minister, it was the first week in May, and the immediate task was to be able to launch an integrated NHS Test and Trace service by the end of the month.

Chair: One might be surprised that anyone said yes to that request, because that was the beginning of May to the end of May. Why did you say yes?

Baroness Harding: At the time, I was the chair of NHS Improvement, so very much part of the health family, and in the midst of the Covid crisis—now, as we look back, it seems like the early days—I take the view that,
when your Prime Minister calls you and asks you to serve, you should. That is why I took on the job.

Q3 **Chair:** Did you raise with him any concerns about the pace—presumably he set the challenge for that timeframe—or make any demands of him about what resources you would need to try to deliver on this enormous challenge?

**Baroness Harding:** I think the pace of our response has been set by the disease, not by any human being. The whole country has been throwing everything we possibly can at it to race to reduce the impact it is having.

Q4 **Chair:** Sorry, but just to be clear you said that by the end of May you had to have something set up. What exactly were you expecting to have set up by the end of May? Did you push back at all on the Prime Minister about what was possible in the timeframe available?

**Baroness Harding:** Sorry, I will be clearer. At the point at which I had been appointed, the decision to launch NHS Test and Trace by the end of May had already been taken. My role was to pull together the team of people from across the Department, the NHS, the wider public sector, the Army and the private sector who were working on that plan. So initially my job was to pull it all together, make sure that we had a service that was able to launch at the end of May and then to build a more medium-term two to three-month plan for scaling that and improving it, which was the essence of the business plan that we published in July.

Q5 **Chair:** We will obviously go into this in more detail during the session, but what lessons have you learned personally, and what lessons has NHS Test and Trace learned—or should it have learned—since that phone call in May?

**Baroness Harding:** Gosh. I think that the thousands of people working across NHS Test and Trace have all learned a huge amount. The first thing I would say is of the importance of this being an overall national effort. No one organisation, no one individual and no one team can do this on their own. That has been at the core of what we have done. We have learned more and more over the course of the nine months about how to build this coalition between local government and national Government, the NHS, the broader public sector and the private sector—and, ultimately, with the general public as a whole, because, in the end, test, trace and isolate is effective if everyone plays their part in isolating when contacted and if everyone plays their part by coming forward to be tested when they have symptoms. That is probably the biggest lesson: you can only deliver this sort of service as an integrated team of all the different organisations, institutions and individuals in the country.

Q6 **Chair:** Okay. Sir Chris Wormald, in March there was some testing going on through Public Health England and then that stopped once infection rates reached a certain amount. We were all advised that that was because it was not going to be effective in stopping the spread at that point. Could you give us a bit more detail about why testing stopped in March and then Test and Trace was set up as a separate, new body?
Sir Chris Wormald: Testing never stopped; contact tracing—

Chair: Contact tracing—forgive me.

Sir Chris Wormald: Contact tracing among the general public stopped. The rationale was set out in, I think, the very first strategy document we ever published on Covid. So the course of events was, as you say, Public Health England were instrumental in developing tests in the first place and had what at the time looked like extensive testing capacity—I remember they could do about 5,000 tests a day, and it rose towards 10,000. Contact tracing stopped when basically there were too many cases for us to do that among the general public with the capacity that we had at the time.

The testing capacity that we had was focused on clinical need in the NHS and in care homes—indeed, there was a bit of contact tracing in care homes. So it was not the case that testing stopped; we focused the capacity we had on our very top priorities. The objective, as I am sure everyone will remember, was the 100,000 capacity target that we set in April, before Dido’s arrival, which was to build up testing capacity, which we did during April, and then Dido—sorry, Baroness Harding—walked in in May, as she has just described, to build on that capacity and take it and turn it into the integrated system for the test, trace and contain system that she described.

Q7 Chair: Sir Chris, as the accounting officer in the Department with overall responsibility, were you surprised that the Prime Minister phoned Baroness Harding and asked her to do this? What was wrong with what was in place before?

Sir Chris Wormald: What was in place before was built on a much smaller system. As we have said in public before, we were not able to scale what we were doing at the speed that we would ideally have liked to be able to do.

Q8 Chair: Why, Sir Chris? Why weren’t you able to scale it?

Sir Chris Wormald: It was about what we were good at and not good at. As I say, we have said all this in public before. We did very, very well on the pure science, the R&D and the creation of tests in the first place, but when it came to scaling that up at the speed that we needed to, that was an enormous challenge. We did hit our target of 100,000 tests by the end of April, but, as everyone will remember, that was a huge all-hands-to-the-pump exercise. One of the things we learned, since you ask about learning, was that you obviously had to be able to have the capacity, but then there was the question of how you use that capacity best and create what is essentially a retail offer to the public, and we needed extra skills to do that.

Q9 Chair: Okay, so basically you are saying the Department was not capable of doing this scaling up, yet pandemic planning had been the top non-malicious risk that the Government was planning for. You head up the Department of Health and Social Care. If responsibility falls anywhere in
Whitehall for the element of testing and tracing, it falls into your Department, so why weren’t there better plans and an ability to scale up when a pandemic did finally hit?

Sir Chris Wormald: Again, this story has been set out in public several times. At the beginning of the pandemic, and before, it was not widely recognised that this type of pandemic at-scale test, trace and contain system was going to be one of the biggest weapons. Test and trace had been part of the pandemic planning, but it had not been previously envisaged that we would need to do it at such a scale. That story has been set out several times. The actual scaling up happened at enormous speed, given our relatively low starting point. As I say, the challenge was to scale up and build all the services around it that would make a success of the at-scale test, trace and contain system.

Chair: Okay. Others will be picking this up as we go through, but I want to ask about lateral flow testing in schools. The MHRA has refused to endorse that approach—well, it is a bit more complicated than that. It has said that the approach being used isn’t one that is as effective as the one that they would require regulation on. They are worried that testing pupils, teachers and other staff daily gives a false sense of security. I wondered whether that was a surprise and what impact it will have on schools.

Sir Chris Wormald: I will ask Baroness Harding to describe it, because she is closer to it than me, but that is not quite the story.

Baroness Harding: That is not quite our understanding of the situation. We work very closely with the MHRA on all the rolling out of different testing protocols. As we speak, schools have done an amazing job of testing teachers and students—the children of key workers and more vulnerable children—as they have come back to secondary schools. Up to 250,000 lateral flow tests were registered by schools in the last week. That has been initially testing all pupils and teachers as they have come back into the school environment, and then there has been regular weekly testing of teachers.

A number of schools are also testing children in bubbles when one person in the bubble has tested positive. We piloted that extensively in the autumn with a number of schools, and we are continuing to learn about that and share the evidence we are gathering with clinicians and the MHRA. It is essential and important that we all do everything in our power to support schools. We are working very closely with the MHRA and the Department for Education as they roll out these programmes.

Chair: I am referring to an article in the BMJ, which I am sure you have seen. It talks about 12 pilot schools and colleges in England, and a further two schools in Northern Ireland, for the pilot you just described, and there were an additional 14 pilots led by Public Health England and the city of Liverpool. Is that as far as it has got at this point? Is that still up to date for this evaluation?
Baroness Harding: There are a number of other schools that are engaged in the regular testing in bubbles. I am afraid I haven’t got the numbers to hand because of the speed at which the Department for Education and our teams have been working with schools to start rolling these out.

Q12 Chair: Okay, but you are saying that it is beyond the pilot stage now.

Baroness Harding: No, it is still very much in the pilot and evaluation stage. Remember that we are always guided—unfortunately—by the virus itself. Since the pilots that we ran in the autumn, for which the data has been published, the new variant has emerged, and we currently have much higher rates of infection. We are very mindful of that and we are working very closely with the MHRA to share the data regularly so that we are all aware of how these protocols need to evolve as the virus itself evolves.

Chair: Colleagues may well come back to this later. I am going to ask Nick Smith MP to come in next. Over to you, Mr Smith.

Q13 Nick Smith: Thank you, Chair. This is a question to Baroness Harding. To what extent has the test and trace programme succeeded in reducing new infections so far?

Baroness Harding: Perhaps I can answer that in a number of parts. We should start by thinking about the different ways in which NHS Test and Trace helps reduce the number of infections. Obviously, it is measured at the highest level by its impact on the R rate—the transmission rate. Independently verified analysis suggested that as of October, Test and Trace was impacting R by between 0.3 and 0.6. Our plans, which take us till the end of March when implemented, will take that up to between 0.5 and 0.8 in high-prevalence areas, so we have evidence of the immediate impact that we have been having.

In terms of numbers, to bring it to life a bit more, every time we break the chains of transmission, we stop other people being infected. Each one of the millions of people who are coming forward for tests each day and the millions of people we are contact tracing and are isolating as a result is an instance of breaking the chains of transmission and contributes to the impact on R.

In terms of numbers, yesterday, every minute throughout the day, 965 people were swabbed or were swabbing themselves. In the first two weeks of the new year, we tested over 7.5 million people. In the last week of published data—the first week of January—our contact tracers successfully reached 1 million people, both people who tested positive and their close contacts. That translates into 198 people a minute successfully contact traced, every minute of the working day, seven days a week.

That adds to the impact on R, but I would not focus just on the individual breaking of the chains of transmission. Test and Trace also contributes in two other ways. We are helping to make it safer for our health and social care workers in high-risk environments, such as care homes, hospitals and
GP practices across the country, to look after the rest of us. Our regular asymptomatic testing programmes in health and social care, which we are now rolling out to other key workers, are helping reduce the risk for those individuals and enabling them to keep working.

Finally, Test and Trace is contributing to the overall fight against covid by providing analysis and insight—tools that enable the chief medical officer and Government Ministers to take decisions. For example, the Office for National Statistics survey is run using the Test and Trace infrastructure, and the Joint Biosecurity Centre, part of my team, provides data and insight to support decision making in Government.

Think of the impact that Test and Trace is having in those three areas: the individual-by-individual breaking of the chains of transmission that contribute to the substantial impact we are having on R; the way that we are helping to protect people who are essential to keeping all of us safe; and how we are providing insight, advice and analysis for decision makers.

Q14 **Nick Smith:** Thank you for that. How does that square with SAGE’s assessment, albeit three months ago, in September, that Test and Trace was having only a marginal impact on transmission? I would like you to concentrate on transmission, please.

**Baroness Harding:** The first piece of context is to remember how fast things have been moving. The SAGE advice you refer to is now many months old and the R estimates that I have given you, which have been independently verified by a number of different scientific groups, come after that.

There is no doubt that as we have built and scaled this service, we have learned more and more. We are now hitting all the operational contact tracing targets that SAGE set us: we are reaching more than 80% of people who test positive, and more than 90% of their contacts. Of the 92% of all contacts that we reached last week—three quarters of a million people—we reached 97% of them in less than 24 hours. So I do not believe that we are having a marginal impact. As measured, we are having a material impact in the fight against covid.

Q15 **Nick Smith:** Thank you for the updated figures; they are important. However, set against the ONS’s estimates of the number of people with Covid-19, what percentage do NHST&T aim to identify through testing and tracing? I say that because at the end of October, I understand that NHST&T completed tracing only for an estimated third of people with Covid-19. How do you get to that?

**Baroness Harding:** The single most important part of the NHS Test and Trace service is that people come forward for tests if they have symptoms and that we all follow the guidance when we are asked to isolate by NHS Test and Trace. We measure the proportion of people who the ONS estimates are contracting the disease each day relative to the number of positive cases that we find. Our performance is on that metric. It is not a perfect science because the ONS itself is making an estimate of how many people are contracting the disease each day.
On average, we were originally reaching circa 40% to 50% of people contracting the disease—40% in the summer and it has risen to 50% through the autumn. We target to continually increase the proportion of people who we believe are contracting the disease each day by encouraging more people to come forward for testing.

The combination of symptomatic testing that is now available, with over 800,000 tests a day capacity, and the rolling out of asymptomatic, faster turnaround lateral flow testing across key workers and with community testing, is enabling us to find more and more of the people who do not even know they have the disease. So over the course of the next few months, as we implement the business plan that we published before Christmas, we expect the percentage of people who have the disease and who come into the system at the beginning to continue to grow.

Q16 **Nick Smith:** Can I pursue that a bit? What are you doing now to increase the proportion of people with Covid-19 and their contacts whom the system can reach?

**Baroness Harding:** The biggest thing that we are doing is rolling out regular asymptomatic testing for key workers—people who have to leave their home during lockdown—through to rolling out community testing, working now with virtually all local authorities across the country to expand the community testing programme. We are also now working with several hundred employers—the number is expanding every day—to put in place regular asymptomatic testing in workplaces where people cannot work from home. That should enable us to find more people who have no idea that they have the disease today, but are inadvertently spreading it to their friends, family or colleagues.

Q17 **Nick Smith:** Thank you. To pursue that a bit more, can you update us on the progress of mass asymptomatic testing in, say, the food-processing industry? What percentage of food-processing workplaces are you contacting every week for those tests, given that there have been many instances of Covid outbreaks in those places?

**Baroness Harding:** We have been working very closely with DEFRA and a number of food manufacturers. I do not have the percentage for that industry in my head, but I am very happy to write to the Committee with the details. That is moving every day as more food manufacturers come onstream. I think you saw one of Northern Ireland’s largest businesses, Moy Park, announce at the weekend that it has just started rolling out regular asymptomatic testing, so as we speak more businesses are joining the programme, literally every day.

Q18 **Nick Smith:** It has been an issue for many months now that there have been so many outbreaks of Covid-19 in the food-processing industry in particular. You have just talked about Moy Park, a big chicken-processing firm in Northern Ireland, but you cannot tell us exactly what percentage of workplaces are testing on a regular basis. Can I press you on that?

**Baroness Harding:** I cannot tell you only because it is moving so fast. I am very happy to share the detail, but I do not want to give a statistic
that will not be accurate. Lateral flow testing for regular asymptomatic testing in workplaces is something that we piloted with the food industry in the autumn through to November and December, and we announced the major national roll-out only in the last 10 days. I know that we all want everything to happen almost instantly in the fight on test and trace. I cannot tell you how hard and fast the team are working to scale it all up. The reality is that those tests were approved and made available to scale only relatively recently.

Q19 Nick Smith: I understand that—I know that you are working at pace and scale, but can you give us a number on food-processing workplaces up until the end of December?

Baroness Harding: That is not in my head; I am afraid I cannot. I am very happy to write to you, but I do not have that number in front of me.

Nick Smith: All right, but I would be grateful if we could have information on that through the autumn.

Baroness Harding: Of course.

Q20 Nick Smith: Thank you—I am really grateful. The other places where, unfortunately, there have been many issues with Covid-19 deaths are care homes. Can you tell us what percentage of the care home industry is receiving the two tests a week for staff and one test a week for residents, which I think is the policy for testing in care homes? Do you have to hand the numbers until the end of last year for those crucial places, please?

Baroness Harding: Can I break that down a little bit? A lot more testing has been conducted in care homes for a lot longer. Since July, all adult care homes caring for our elderly have had access to weekly PCR testing, and over the course of the summer the percentage of care homes that took the benefit of those services grew until virtually 100% were doing it on a weekly basis from September. That is the baseline of testing that we had in place when the only tests available were PCR tests that had to go to a laboratory.

As the capacity for PCR tests has expanded, and as the lateral flow tests—the rapid turnaround 30-minute tests—have become available, since early December we have been expanding the testing programme in care homes. So now, all domiciliary care providers—100% of them who are registered with the CQC—can access weekly PCR testing capacity, and at the last count 80% of them were doing so.

Now all adult care homes are also able to do twice-weekly lateral flow testing, in addition to the weekly PCR tests, and care homes are also testing. If there is an outbreak in the care home, all staff are then tested every day for a period of a week, to ensure that we are really helping to support them and manage that outbreak. This is now available to all of those care homes, and we are seeing very substantial take-up and very positive feedback from care home and domiciliary care staff across the sector. This is making them feel more secure and safer, and helping them to manage outbreaks.
Q21 Nick Smith: I absolutely accept that testing and tracing ought to be an important preventive measure. How do you square the increase in testing and tracing in care homes in the autumn—I am pleased to hear you say it has been a success—with the big increase in Covid-19 in care homes in the last two months?

Baroness Harding: First, of course, it is incredibly sad. Every infection and every serious illness is something that troubles all of us. I think the honest answer to your question, Mr Smith, is that testing and tracing is not, on its own, the single means of managing the disease. We see this the whole world over. As I have said, we can demonstrate that Test and Trace has a meaningful input into reducing the rate of infection, but it does not single-handedly reduce the R rate to below 1. Every country in the world currently going through the second wave is seeing exactly the same thing. It is only through the combination of Test and Trace, the first line of defence—hands, face and space—and, unfortunately, serious restrictions in all of our liberty that we are able to stop the spread of the infection completely. That is not unique to the English Test and Trace system. I am afraid that is a function of Covid.

Q22 Nick Smith: I want to press you on this. You pointed to increased testing in care homes, yet we have seen a dramatic increase in Covid-19 in care homes. Square that for me, please.

Baroness Harding: Unfortunately, every outbreak in a care home is a tragedy. We have seen since February, March, April time, because of the incredibly great and hard work that our care home staff are putting in, substantially fewer outbreaks in the second wave than we saw in the first wave. As I say, I do not particularly want to celebrate the fact that they are lower—obviously, all of us would like to see none—but the R rate is markedly down and we are seeing substantially fewer outbreaks than we would have done without the Test and Trace regime. As I say, it is not a solution on its own. It is a contributor and unfortunately nowhere in the world has been able to stop the spread of the virus relying only on it.

Sir Chris Wormald: Can I just add a bit on this point, because it is a very important question that Mr Smith has raised. The basic thing here—and the chief medical officer has been very clear on this point—is that if you have a rising tide of infections in the communities surrounding care homes, then your ability to completely stop the infection getting into care homes is very limited. That is one of the reasons why we have to have lockdowns—to protect the vulnerable, including those in care homes.

That is not the same as saying there is nothing you can do. The Department’s winter plan for care homes sets out the range of activities that assist, one of which is testing—but equally important are the infection control measures within care homes, limiting staff movement within care homes, all the other things set out in the winter plan, and then prioritising care homes for vaccinations, as you know and as we discussed with this Committee last week. They are all ways that we can mitigate the impact of Covid in care homes; but at its heart we have to get the community infection rate down. That is one of the justifications for the lockdowns that
the Government has been forced to do. It is exactly as Baroness Harding says: testing is one of our big measures in care homes, but by no means the only one.

Chair: Which we know, but we are obviously talking about Test and Trace today.

Q23 Nick Smith: This is the final question from me on this section on effectiveness. Baroness Harding, how long is the Test and Trace system currently taking to reach the contacts of people with the virus from the point at which they first develop symptoms? What is the timeline?

Baroness Harding: By definition, the contacts will not necessarily have symptoms. But we are reaching 92% of all contacts, and of that 92% we reach 97% within 24 hours of knowing that they were a contact of someone who has tested positive, which is substantially better than the targets we were set by SAGE when this service began.

Q24 Nick Smith: I have one further comment on that. Baroness Harding, I was looking at the tracing data that was presented to the Committee. I see that at the start of November the percentage of close contacts who were advised to self-isolate was 61%, but then there was a change in the measurement and it became about not the trace system contacting those people, but the original people contacted informing the contacts still further. Tell me, is there a quality issue on those people contacting through the tracing system after the initial contact to ensure that they do self-isolate, or are you happy with those systems and the data as presented?

Baroness Harding: Since the beginning of October, we have had a cross-functional and cross-Government improvement programme, which has been delivering the improvements that I just talked you through for contact tracing. I think the quality of the experience of contact tracing is considerably better than at the beginning of October.

We had feedback from a number of people that we were bombarding households with multiple phone calls for each contact in a household, so we made a change that if there were multiple contacts in a single family household, we would not continue to try to reach every single member of that household; we would reach one and work with them to discuss the need to isolate with their whole family. That has led to a better experience for families being asked to isolate and positive feedback.

We have also improved the digital experience. Of the people we reach through contact tracing, we reach about a third digitally, and they give us all their details online or via text. Our digital experience has improved and we have seen more people using that.

The third key improvement we have made is working with local authorities. We now have over 280 local authorities working with us in local contact tracing partnerships, where they also contact people who have tested positive directly themselves; they are able to use information that they hold locally and often even have people knocking on individual’s
doors. The combination of a better citizen experience, better use of digital
and collaborative working with local authorities means that not only are
the statistics substantially better—reaching 92% of contacts and 97% of
those within 24 hours is very good—but also the experience for citizens is
much improved.

Nick Smith: Thank you, Chair. That is all from me.

Q25 James Wild: I want to pick up on the impact of Test and Trace, Baroness
Harding. How do you know whether people who have been advised by
Test and Trace are complying with the rules and that is driving down
rates, or whether the general population is having fewer contacts and
that is what is bringing down the R rate? How are you in a position to
judge the impact Test and Trace is having?

Baroness Harding: The modelling I referred to is based on an
assumption of the proportion of people who do follow the isolation advice
and guidance. You hit upon the key element of this, which is that it is very
hard to accurately assess how much people are complying with that
guidance. There have been a number of different data points. A number of
different surveys that we and others have put together—I think the NAO
quotes this in its Report—range between 10% and 50% of complete
compliance, or 10% and 59%, I think. What we do know is that our
contacting individuals and our regular follow-up—we conduct regular
follow-up calls for people who have been asked to isolate—has been
improving compliance with isolation since the programme began, but I
would be the first to say that there is more that all of us need to do to
make sure that we are all providing the necessary support to individuals
who have to isolate.

I have had to do it as a contact, and I am sure that many of the
Committee have as well. I believe Mr Williams is currently isolating. It is
really difficult to do, and therefore the work that we put in working with
local authorities to improve the support for self-isolation is just as
important as the process of contacting people in the first place.

Q26 James Wild: So you do not have a particular method to check that
compliance at the moment. We have to rely on those estimates.

Baroness Harding: We have a series of surveys and we are looking
continually with the ONS to improve those surveys, but we will always be
reliant on individuals reporting their behaviour rather than tracking
individuals electronically in the way that some other overseas countries
might do.

Q27 James Wild: Obviously, pace is very important. From someone getting a
sore throat or one of the other symptoms and requesting a test, how long
does Test and Trace then take to reach that person’s contacts?

Baroness Harding: I have to break this down into the component parts,
I’m afraid. If you decide that you need to order a test, you will be able to
get a test anywhere in the country almost instantly now, and the average
distance that people have to travel is less than 2.4 miles, so there will be very little elapsed time once you have decided that you need to get a test.

As of last week, in our most recently published data, circa 60% of people who order a test in one of our face-to-face channels get the result the next day, and then, as I have just said to you, once we know that you have tested positive and you have entered our contact tracing system, we are contacting the vast majority of people within 24 hours of having their details. On average, we are delivering, as I said, on all the targets that SAGE has set us to reach people within 72 hours of them wanting to come forward for a test.

Q28 **James Wild:** I am looking at paragraph 3.17 on page 63, which talks about 119 hours, so five days from initially presenting symptoms to being traced. Do you have a target to reduce that 119 hours?

**Baroness Harding:** Yes and, as I have said, since the Report was published and the data used to create it, our contact tracing turnaround times have improved substantially, and we are more than delivering on the overall SAGE target of reaching, I think, 60% of contacts within 72 hours.

Q29 **Chair:** You say that since the Report things have got better. We often get that from witnesses, I have to say. What has changed then? What is different now?

**Baroness Harding:** Test and Trace is roughly twice as old as it was when the data from the Report was put together. Just remember how fast this system has been stood up and how big the growth trajectory has been. To put it into context, 10% of all the tests that we have done we have done in the last two weeks. In terms of contact tracing, we have contact traced circa 3 million people in total, and a million of them we contact traced last week. A lot of the reason things have improved is that the system has got better very, very fast.

Q30 **Chair:** Could you perhaps give us an update—perhaps a note; we would not expect you to have it in front of you now—on how that 119 hours is working on a like-for-like basis today, or whenever we fix the date?

**Baroness Harding:** If I could do that in a note, I can make sure that I am using exactly the same methodology as the NAO did for the Report.

**Chair:** That would be very helpful. Thank you.

Q31 **James Wild:** I have some questions for Sir Chris around the budget. Test and Trace’s budget this year is now £22 billion. The Home Office budget is £14 billion. Next year, it has been allocated £15 billion. Do you think the performance to date has justified that level of funding?

**Sir Chris Wormald:** I think I might ask Mr Williams to answer questions on the budget, as he is the accounting officer.

**David Williams:** First, it is worth noting that within that £22 billion envelope, the vast majority of spend is on testing infrastructure,
laboratory capacity and test consumables. Just over £18 billion of the £22 billion is directly linked to the volume of tests undertaken and the capacity that we have built up. In terms of overall value for money, at the macro level it goes back to the impact on transmission rates and the impact on frontline staff and on individuals, which Baroness Harding set out in response to Mr Smith’s questions, supported by the approach that we are taking on letting contracts and on managing contracts to try to get the best value for money that we can, in what has been an environment of some uncertainty and rapid expansion at pace over the last few months.

Q32 **James Wild**: How are you ensuring the value for money of this scheme? I am thinking particularly about the level of consultants. At the beginning of November, there were 2,300 consultants and contractors working on this project. Are you really getting value for money from that spend?

**David Williams**: If I think about the scaling up of the organisation, it has gone from next to nothing to an organisation of over 3,000 people. One way in which you ensure value for money in that is to have a rigorous gateway about the creation of new posts. We have deployed DHSC—Department of Health and Social Care—civil servants into the team. We have deployed civil servants from across Government, supplementing that with military colleagues, the use of contractors where they have skills that we do not have, and reliance on consultancy support, particularly in the operational delivery of the testing programme. It is a blended mix, in a context in which we have rapidly grown the organisation.

Within that, we are looking at what the balance between permanent employees and consultants is. We have plans to reduce reliance on consultancy over the coming year, and there are opportunities for us to continue to negotiate—often in conjunction with the Crown Commercial Service—favourable rates, particularly where we are accessing services at volume, but also to make sure that our demands of our colleagues in consultancies, in terms of volume and seniority, are kept under review.

But given the rapid expansion here, we would not have been able to deliver the testing service or the contact tracing service that we have without the support of a range of external consultancies.

Q33 **James Wild**: I do not think anyone would dispute that consultants can certainly add value, particularly in established organisations. It’s about the value for money. We have seen reports in the media that the highest day rate that has been paid is £7,000 a day. Can you confirm whether that is accurate?

**David Williams**: I do not want to get into the specific detail of individual contracts, but as part of our review of value for money and the management of our consultancy support, looking at the ask of individual companies and making sure that we are specifying service from staff at an appropriate grade, rather than at director or partner level, is all part and parcel of the approach.

Q34 **James Wild**: That was an interesting answer; it was not an answer to the question that I asked. Is it accurate that £7,000 is the highest day rate
that has been paid? This question is not asking you about an individual, named person; it is asking you the highest day rate that has been paid under this programme.

**David Williams:** I don’t have the detail on individual day rates to hand, I’m afraid.

**Q35 James Wild:** Can you come back to the Committee with a note that sets out the highest day rates, please?

**David Williams:** Yes.

**Q36 Chair:** And Mr Williams, do you think it is ever acceptable to have a £7,000 day rate? I have seen these contracts; I know how they are structured, but with something like Test and Trace in a national emergency, was someone lining their pockets at the taxpayer’s expense?

**David Williams:** Generally speaking, what we have seen is good evidence of registered consultancy companies dropping their normal public sector rate to rather lower levels as part of their support to our work on Covid, not only in Test and Trace but across the Department’s activity over the past year, so I don’t think that we are being taken advantage of.

**Q37 James Wild:** This is the final one from me in this section. Baroness Harding, how does the current lockdown affect your business plan?

**Baroness Harding:** At the most fundamental level, it reinforces how important it is that we deliver it and that Test and Trace need to play our part in continuing to bring down R and to provide more tools for the nation as we do come out of lockdown. If you look forward over the course of the next few months, as we continue to speed up our end-to-end service and continue to make better use and more use of our data, bringing onstream things like wastewater analysis as more early warning indicators and integrating the data that we have from the app into our existing Test and Trace data, so that we can inform, provide information and insight to the CMO and Government Ministers as they take decisions about the pace and nature of coming out of lockdown, there is a lot of work we are doing there.

We have already mentioned the work on expanding access to regular asymptomatic testing for people who have to leave home during lockdown, but also there is work that we are doing to extend and enhance the support we give to local authorities and regional public health teams in extended contact tracing. The new variant focuses all our minds on the need to be able to work out not just who individuals might have infected, once they have tested positive, but where they might have been infected themselves, to identify clusters and outbreaks as fast as possible. So this lockdown is focusing the team’s minds on the importance of implementing our business plan.

**Q38 Nick Smith:** I have a question for Mr Williams first, please. Last summer—last August—I went to a testing centre in Blaenau Gwent, my constituency. It was in Cwm, on the site of the old Marine colliery. Anyway, it was run, I think, by Mitie, and what I saw was a very well
organised offer—five parking bays spread out over the old colliery site. I came away thinking, “Oh, that’s really well done.” But while I was there, there were hardly any other people there being tested, so I came away scratching my head and thinking, “Oh, that’s good,” but also, “Hmm, I wonder what the cost per test is there.”

Then in the late autumn in my constituency of Blaenau Gwent and the Heads of the Valleys area, there was a real issue with community transmission, so I asked how many tests were being done at the Cwm testing centre. I was told that although there were, as far as I could see in the summer, 35 to 40 people working there—perhaps longer, over extended shifts—that they were still doing only 50 tests a day. For one thing, I wasn’t sure that the UK Government’s offer and the Welsh Government’s offer were terribly well knitted together, but most of all, I came away thinking, “Blimey, I wonder what the average cost per test is.” Can you answer that question, please, sir?

**David Williams:** On the specific question, for those tests that use our laboratory capacity—the PCR tests—they range from £15 to £45 a test, depending on quite which laboratory we are using and the logistic chain supporting them. It is in that range of £15 to £45 a go for a PCR test.

**Q39 Nick Smith:** Do you know what? That does not ring true with my experience. You talk about a range of £15 to £45, but with 50 tests a day and at least 30 people on site every day, it seems to me that the upper level of costs for tests in that place would be much higher.

**David Williams:** It is an average cost over a range of test sites and channels for delivery. I could probably give you some more detail in a note if you like. But more generally, we have looked to build our capacity for testing in advance of demand. We have been agile in trying to push testing resources—both fixed sites and mobile resources—closer to the public. Baroness Harding spoke about the limited distance that you need to travel to get a test. The particular footprint of testing sites across the country has evolved and changed over time, both to get that proximity to people who need a test and to ensure that we are getting the right sort of throughput.

**Q40 Nick Smith:** Okay, thank you. So can we please have a cost per test for the Mitie Cwm Marine colliery testing centre?

**David Williams:** Yes, we can do our best on that.

**Chair:** Thank you, Mr Williams. I am sure we can put it in context as well. I going to Richard Holden briefly—

**Nick Smith:** Two more questions, please, Chair.

**Chair:** I will come back to you, Mr Smith.

**Q41 Mr Holden:** Thank you, Chair. I have a couple of brief questions for Baroness Harding. One thing that is quite clear in the Report is that local hospitals were doing very well on testing, with 90% turnaround, and that at speed. Why did you not concentrate more effort on ensuring that local
hospitals had extra capacity, rather than shifting to testing centres?

Baroness Harding: Thank you, Mr Holden. To be honest, we have been expanding testing capacity in the NHS in all of their laboratories across a number of different hospitals—several hundred of them—as well as expanding the national testing sites. It has not been an either/or.

To give you some numbers, on pillar 1 testing—the NHS and Public Health England laboratories, all of which would have been in existence pre-Covid—capacity on 25 May was 48,000 tests a day, whereas the capacity in NHS and PHE labs as of last Thursday was 195,000 a day. The NHS and Public Health England have done a magnificent job of expanding testing capacity in those local sites, but on their own they would not have been able to expand to the level we have today of a total of 800,000 tests a day. It has been a question of doing both: expanding testing in hospitals and existing laboratories but also building dedicated capacity for the sheer volume of tests that we are now processing.

Q42 Mr Holden: I understand that, but it is quite clear from the Report that they are much quicker in getting that turnaround, particularly because the more localised they are, the quicker it is in terms of transport to get things out there. You have also often got people in hospitals and on site. So I wonder why you pushed so much on national testing facilities. I can see that testing in the NHS has gone up significantly, but why go for other routes than just tier 1, when it is quite clear that you were going to try to do as much testing as quickly as you could and you needed to get the results quickly?

Baroness Harding: The reason that we have built so many testing sites across the country is precisely the argument that you set out: to bring testing to communities and as close as possible to where people need it. We have 800 testing sites across the country. It is very clear that you wouldn’t want the best part of half a million people of extra footfall going into NHS hospitals at this critical time unless that was entirely necessary.

Q43 Mr Holden: I understand that. I think we get that bit, but why not concentrate the testing capacity, in terms of the turnaround to check whether the tests are positive or negative, in local NHS facilities?

Baroness Harding: Again, it is a function of scale. To build the ability to test 800,000 tests a day, as I said, our laboratories work 24 hours a day, seven days a week. Yesterday, we were processing 365 tests every minute of every hour of every day. These are very, very large processing facilities. The NHS laboratories do outstanding work in smaller volumes for patients who are in their care. We need to have both; it is not an either/or. Together, we have built an integrated system that is doing more testing per head of population than any other major European country.

Q44 Mr Holden: One final question on this. In terms of legacy, one of the issues that a lot of people are talking about is whether these facilities can be used in the longer term. Surely, tier 1 testing facilities, such as in our hospitals, are the natural place to have that increased capacity so that you can ramp it up very quickly in the future if there is another outbreak
of anything. Would it not make sense to ensure that the ramping up that we have seen to just under 200,000 a day in hospitals was maintained so that if there were a local outbreak of something, it could be dealt with, rather than just at the national assessing centres?

**Baroness Harding:** I honestly think it is a question of having a combination. Several of our laboratories are actually run in combination with the NHS. Our laboratory in Newcastle, which we are opening up, and our laboratory in Berkshire, with the Royal Berkshire trust, are in combination, but these are stand-alone buildings. For want of a better word, they are factories processing thousands of the same thing every day, whereas our laboratories in the NHS are running diagnostic tests on a variety of different assays. They are testing for different things. It is important that you think of those two as separate things. To fight Covid, we have needed to build this very large scale in a collaborative way with the NHS, so that they can also treat their patients. I don’t think it should be an either/or choice.

To get to the substance of your question, as we look forward, we have built the largest diagnostic industry that the UK has ever seen. As I say, as a country, we are doing more testing per head of population than any other major European country. I think there is a real opportunity for this in the future.

**Q45 Mr Holden:** One final question, Baroness Harding. I want to pick up something very quickly. You mentioned that you were doing 365 tests a minute yesterday, which equals just over half a million tests a day. That means that we have about a third of capacity that isn’t being used. Why aren’t we using that, for example, for testing asymptomatic individuals and for mass testing?

**Baroness Harding:** We look to run our laboratory network, including NHS labs, at less than 100% utilisation.

**Q46 Mr Holden:** Yes, but why only two thirds, Baroness Harding?

**Baroness Harding:** Best practice is to run between 60% and 85%. As you rightly say, as of yesterday, it was towards the lower end of that range, but in the run-up to Christmas and new year we ran considerably hotter. It is really important, as we unfortunately can’t predict the pace and direction of the disease itself, that we have that excess capacity so that at a local level, in the NHS and the national testing laboratories, we are able to respond instantly if people come forward for tests.

**Q47 Nick Smith:** This is for Mr Williams again. Picking up Mr Wild’s line of questioning, it was said in the media on 9 October that there were 1,000 Deloitte consultants on your books. Are there still approximately 1,000 Deloitte consultants on your books?

**David Williams:** The latest number I have suggests that that has come down to about 900. We have a plan in place with them to see that number reduce markedly over the next few months, although there is a dependency there on our ability to backfill with permanent civil servants a number of the roles that they are currently doing.
Q48 **Nick Smith:** Thank you. I know that these companies employ partners down to lesser-paid consultants. Have you got an average cost per consultant for Deloitte that you could explain to us?

**David Williams:** The average cost across our consultancy support—I imagine it is about the same for Deloitte—is around £1,000 a day.

Q49 **Nick Smith:** Okay, thank you. We have talked about the billions of pounds being spent on Test and Trace. How are you ensuring that there aren’t companies providing services relating to this that are not filling their boots? Give us some confidence that there is not profiteering occurring with this important service.

**David Williams:** That works in a number of ways. First, before contracts are let, business cases are drawn up and considered for value for money, deliverability and all the usual due diligence that you would expect. They go through a normal departmental business case approvals process, including Treasury and Cabinet Office sign-off over a particular financial threshold. The contracts themselves include a range of techniques or approaches to minimise waste. That could be committing not to fixed levels of volume, but to variable levels of volume and driving improvements over time as contracts are run. We have beefed up within the Test and Trace team the commercial function, with around 150 new Government commercial staff joining since the summer. The combination of the up-front approvals process, the structuring of the contracts and the contract management, as you would expect with any activity, albeit here done at scale and pace, is really the principal line of defence there.

Q50 **Nick Smith:** Thank you for outlining those checks and balances. Are you confident that no super-profits are being made out there as part of your programme?

**David Williams:** Yes, as confident as I can be, based on the information that I have seen and the regular reporting that comes up through the Test and Trace commercial and finance staff. Obviously, we are operating in an uncertain environment. We have been willing to invest in technologies at a relatively early stage, and some of those work, although not all of them do. In terms of profiteering, if that is what is at the heart of your question, I see no evidence that causes me concern on that front.

Q51 **Nick Smith:** It is profiteering that I am worried about. Have you had any red flags about possible profiteering from your contractors in the last three months?

**David Williams:** We engage the Department’s counter-fraud team and the NHS Counter Fraud Authority to provide us with an overview and sometimes deep-dive engagement on individual contracts. We go through a range of company due diligence before contracts are let—

**Nick Smith:** Sorry to interrupt—

**David Williams:** There are no red flags on the contracts we have let.

Q52 **Nick Smith:** Mr Williams, I have absolute confidence in your process
management. What I am worried about is whether you have had any red flags from companies profiteering from the Test and Trace system in the last three months. Have you had any of these? If so, how many?

**David Williams:** Not to my knowledge, no.

Q53  
**Nick Smith:** Sir Chris Wormald, Baroness Harding, the executive chair of NHST&T, is accountable to the Prime Minister and the Cabinet Secretary rather than you.

**Sir Chris Wormald:** Not now, no. I will explain the course of events. When Test and Trace was set up, the Prime Minister took the decision that he wanted it to report to him personally. From 7 May to 3 December, Test and Trace reported directly to the Prime Minister and the Cabinet Secretary. On 3 December, responsibility went back to the Secretary of State for Health. Throughout that period, regardless of where it reported, the accounting officer responsibilities for the spend remained with the Department, and ministerial accountability to Parliament and to the public remained with the Secretary of State for Health. It has shifted over time, but those two things have remained constant.

Q54  
**Nick Smith:** Blimey—that is complicated. Baroness Harding has talked about the speed at which you have been rolling out this huge, expensive initiative. How have you held Baroness Harding and her staff to account for the decisions that they made with taxpayers’ money?

**Sir Chris Wormald:** I will say several things. It is actually not very complicated. In terms of how we have managed the programme day to day, we have worked very closely with Test and Trace. Indeed, it has been, for practical purposes, embedded in the Department throughout. As I say, the ministerial responsibilities have changed over time, but the accounting officer responsibilities have remained identical.

In terms of our responsibilities—that is, our accounting officer responsibilities—they work in exactly the same way as they do for any other of our agencies or ALBs. We have a sponsorship arrangement within the core Department, which Mr Marron is responsible for, and then the accounting officer responsibilities go to either Mr Williams or directly to myself—in this case to Mr Williams, who signs off expenditure using all the same checks and balances and accounting officer rules that we would apply to any other part of the Department of Health and Social Care budget.

Q55  
**Nick Smith:** Baroness Harding, how were you held to account by the civil servants around you for the decisions you made around expenditure?

**Baroness Harding:** Rather than repeat what Sir Chris has just said, let me describe practically how that oversight manifests itself. I have a weekly executive committee meeting that I chair with the executive committee of NHS Test and Trace, which Mr Marron attends, so he observes our operational decision making on a weekly basis. I have an oversight meeting once a week with the Secretary of State, which all the civil servants on this call are also present at. We have regular oversight
and assessment check-ins with the Prime Minister as well, so I feel there is no shortage of both civil service and political oversight of the programme.

Q56  **Nick Smith:** Thank you for that. Were you surprised and perhaps a little embarrassed about the number of consultants involved and their overall cost? What do you think of that?

**Baroness Harding:** I think I said earlier that I view this as an extraordinary national effort where we have built an organisation that, as you have rightly said, is now very large—a £22 billion national service—from scratch in nine months. To do that, we have had to call on talent from across the whole of society, so actually, I am incredibly proud of the NHS colleagues and the public service colleagues, in our national Government, local government, the private sector and the military, all of whom have contributed to building NHS Test and Trace. I am very grateful for the work that all the many thousands of them have put into creating it.

Q57  **Nick Smith:** I think that’s a no. Mr Williams told us that there were about 900 Deloitte consultants earning on average £1,000 a day. Do you think that was right?

**Baroness Harding:** I think that it is appropriate to build a service in extreme emergency circumstances using short-term contingent labour and consultants for some of those roles. I think they have done very important work, alongside the public servants, the military, the healthcare professionals and the members of the private sector who have come and joined us as well. We couldn’t have built the service without all that combined expertise.

Q58  **Nick Smith:** Thank you. Leading on from that, Baroness Harding, have you changed your approach to procuring and managing contractors? What proportion of new contracts have been let following a competitive tendering process?

**Baroness Harding:** I wonder whether Mr Williams would like to answer that as he oversees the procurement, as accounting officer.

**David Williams:** Yes. As an update to the information provided in the NAO Report, we awarded a further 207 contracts in November and December. Some 166 of those were new awards and 30 were made as direct awards under regulation 32, so just under 20%. If we look ahead to our forecast for contracts between now and the end of the financial year, I can see maybe 25 to 30 additional contracts being made under regulation 32, but it is a diminishing proportion. That is largely now being used as an interim step while competitions or tendering exercises conclude.

**Nick Smith:** Chair, that’s it from me for now.

Q59  **Chair:** Mr Williams, can you tell us the value of those 207 contracts?

**David Williams:** The value of the 207 contracts is £1.3 billion. That takes us up from £4 billion in the Report—sorry, I am reading about spend to date. The value of the contacts is £1.3 billion.
Q60 Chair: Okay. To be absolutely clear on numbers, is that in addition to what was in the NAO Report?

David Williams: Yes. In the key facts, the NAO Report sets out 407 contacts with a value of £7 billion. We have made a further 207 awards since then, with an additional value of £1.3 billion.

Q61 Chair: And is that frontline testing capacity, lab capacity or a mixture?

David Williams: It is mostly testing related. Figure 9 of the NAO Report sets out the proportion across Test and Trace, the Joint Biosecurity Centre and so on. Those percentages, both by volume and value, are almost unchanged. As an example, the testing percentage has gone up from 48% to 50%.

Q62 Chair: That is very clear, thank you. The extra 207 contracts are a lot of extra contracts, but 166 were new awards. Are you saying that they are new companies that weren’t already contracted to do this work or were they new awards to existing companies? Or was it a mix?

David Williams: Not necessarily all new companies, but a new award as opposed to an extension of an existing contract.

Q63 Chair: Do you have a cost funding arrangement with the MoD to pay for Army support?

David Williams: Army support comes through the normal MACA—military aid to civil authorities—route. It is relatively low cost because it is only the net additional costs that get charged to us.

Q64 Chair: And have you had any conversations with local authorities about buying them in, instead of letting these contacts in this way? Are all 207 contacts let to private companies?

David Williams: These contracts are to a range of suppliers. Mostly it is around industries that provide test consumables, laboratory capacity and so on, but in the work of Test and Trace overall, looking at how contract tracing is now being run, information sharing through the Joint Biosecurity Centre, and the contain programme and support for people to self-isolate, local authorities are very important partners in the overall Test and Trace endeavour.

Chair: We will come back to that a bit later, so I will now hand over to Peter Grant MP.

Q65 Peter Grant: Baroness Harding, I want to go back to a comment you made earlier. You referred to a SAGE target to trace 60% of the contacts of a positive case with 72 hours. Can you write to the Committee to explain where that figure came from? I have looked at a number of different iterations of targets, and I cannot find that 60% target anywhere. I have to say that if that is the target, it seems very low, and it makes me wonder what we are doing with the other 40%, which could cause a lot of damage if not traced quickly.

At the very start of the process, the decision was made in Scotland that
most of the contact tracing and, in fact, a lot of the testing, would be carried out within the NHS. In England, the decision was that it would be almost entirely outsourced to the private sector. Can you tell us what specific benefits you expected to see in England from doing it through the private sector with little or no involvement of the NHS?

**Baroness Harding:** I wonder if I may intro and then hand over to Mr Williams to talk through the decision making in the original setting-up of the tracing services, as that was before I arrived. I can then pick up beyond that.

Before I hand over to Mr Williams, the testing service is one that my team runs on behalf of all four nations, and it is a similar approach with a combination of NHS and NHS Test and Trace capacity, so I am not aware of a distinct difference in any of the four nations on testing, as we are providing that service for all four nations. On contact tracing, as I say, I will hand over to David to talk through the rationale for the speed at which we stood up the programme, but I would say for context that it has been a collaboration with local authorities from the very beginning and remains so.

**David Williams:** The model that we set up and have continued to refine involves a number of different workgroups. At the top of the pyramid, if you like, are public health experts from Public Health England and local health protection teams. Pre-pandemic contact tracing in England was run through those Public Health England teams rather than the wider NHS. We then have a tier of health professionals identified and secured for us through NHS Professionals, one of the Department’s companies. In the bottom tier in the national construct, there is the outsourcing to the private sector of volume calls, primarily to contact, as expected at the outset, working through a pretty standard script. From the beginning, it was a blend of public health experts, broader health professionals, the private sector and, as it has developed over the summer, the increasing and very valuable direct engagement of local authority teams across the country as well.

**Peter Grant:** Thank you. I will come back to Baroness Harding. Earlier on, you spoke about the assurance and security being given to a number of people by the provision of lateral flow testing. How concerned are you about the reportedly very high level of false negative results coming from those tests?

**Baroness Harding:** I think the lateral flow tests are a very useful additional tool in our testing technology armoury. They are not a substitute for PCR tests, but they are much faster. They give you a 30-minutes or less read out of whether you are positive or negative, which means that they can be very effective when used in conjunction with PCR tests in care homes, for example. They provide added and very rapid information that would not be available through other testing technology. It is important that we use each of the different types of test in the appropriate way—no one test does everything—but lateral flow tests are a
very useful additional way of finding more people who have the disease but do not know that they have it at all.

Q67 Peter Grant: How do you then ensure that we do not create a problem from the unknown number of people who have got the disease who have just been told they probably haven’t? Doesn’t it concern you that that gives them a false sense of security?

Baroness Harding: Well, of course, without lateral flow testing of the scale that we are now rolling out across the country none of the people who would be taking lateral flow tests would know at all, so any test that helps us find more people who do not have any symptoms, do not know that they have disease: any test that helps us find those people is additive to our fight against Covid. I think you are absolutely right that it is important that we are being clear what these tests are, and what they are not, which is why if you do have symptoms it is very important that you come forward to an NHS Test and Trace symptomatic testing site and come forward for a PCR test. So they need to be seen in the round, not on their own.

Q68 Peter Grant: When you referred to the performance of the contact tracing—I think it was Nick Smith’s questions—you explained that you had changed the way that these numbers are reported, so that now when you report the number of people who have been traced, some of them, you will have spoken to one person in the household and explained to them the importance of passing the message on to others. So, if you quote a figure of, for example, a million people have been traced today, or a million have been traced in the last hour, how many of those million people have actually been spoken to directly by a contact tracer, and with how many of them are we relying on somebody else passing on the message?

Baroness Harding: First, roughly a third of them will have been in contact with Test and Trace electronically, rather than having spoken to a contact tracer at all. The digital channel is a very swift and effective means of us reaching people and for them to confirm that they have received our message. I would say, on the digital, one difference between the English contact tracing system and the Scottish—once an SMS message has been sent out, the Scottish system counts that as a successful contact trace. Our digital system: we only count a successful digital contact trace when we have received a digital response from the individual we sent the SMS to, so I would argue that on the digital side we are actually being quite tough compared with other contact tracing systems. On the human side, I am afraid I don’t have the number in my head of the proportion that are a single person in a household. I am very happy to write with that detail; but it will vary literally day by day based on the proportion of contacts that are household contacts versus non-household contacts. There isn’t a standard percentage, but I can send you the latest data separately.

Q69 Peter Grant: Thank you. That would be very helpful. Do you have information to tell you whether a multiple-adult household is actually a family living together, as opposed to several people who may be living in
a house in multiple occupancy which has been divided up into several different apartments? Do you have that information?

**Baroness Harding:** That is the information that the contact tracer, usually an NHS professional, who talks to the person who tested positive, would gather. So, yes, we would have that information to understand whether it was a family or whether it was a group of individuals who were in a multi-dwelling household—non-household, sorry.

**Peter Grant:** Thank you. I want to look briefly at the performance of the NHS app.

**Baroness Harding:** Mr Grant, may I just add that we introduced the change on the basis of feedback from citizens that the continual calls for households that had three or four children were incredibly intrusive and were making them less willing to comply, so it is not just an accounting change we have made. We made it on the back of citizen feedback.

**Chair:** We are clear on that.

Q70 **Peter Grant:** Thank you for that clarification, Baroness Harding. I want to look briefly at the NHS app. I know different apps apply in different parts of the United Kingdom. We have heard some anecdotal accounts of some people having a significant number of false alerts, and there is some anecdotal evidence that people have now started to deactivate the app, because they are getting fed up with that. Do you have a way of recording how many false alerts are being sent out, and, secondly, do you have a way of knowing whether somebody who has downloaded the app still has it active, as opposed to somebody who has downloaded it and has either switched it off or deactivated it so that it is not doing any good any more?

**Baroness Harding:** As you say, I can only speak for the English app, as, obviously, this is something that is devolved, with some differences in our respective approaches. The English app has been downloaded by over 21 million people so far. We are very soon about to publish more detailed data on the way that people are using the app and its effectiveness. Yes, we have that analysis of the proportion of people who have deactivated or de-installed it, and of the alerts that have been generated and the impact that we assess it is having. We expect to publish that very soon.

Q71 **Peter Grant:** Thank you. One of the features built into the English app, which I do not think has an exact equivalent in the Scottish one, is that it alerts you if the address that you have registered moves into a more severe tier or level of restrictions. I have the English app on my phone, to use on the few times that I have been down in Westminster recently. I was in Westminster on the day before and the day after London went into a much higher tier of restrictions just before Christmas. It was exactly 19 hours after that became effective that the app alerted me to the fact that I was now living or working in a higher level of restrictions. Do you have a target for how quickly the app should alert people to the fact that the restrictions where they live or work have changed?
Baroness Harding: Our fundamental target is to be able to implement those changes as fast as possible. That is both a function of the speed at which policy changes which, in turn, is a function of the disease and can happen very swiftly, and a function of how quickly our technology partners—both Apple and Google platforms take some time to upload changes in apps. That is beyond our control. Finally, it is a function of the speed at which you log on to a network that enables the app to download the latest version. The time you refer to will be different for different individuals, based on how quickly their app downloads and whether they are running an Android or Apple version. I do not have a single target for the time period, other than to be able to align as fast as we possibly can.

Peter Grant: Thank you. I have one final question. Would those same considerations have an impact on how quickly the app sends out an alert to somebody to tell them that they may have been in close contact with somebody who has tested positive?

Baroness Harding: One of the great strengths of the app is that if, as an individual, you test positive and either you have used the app to book your test in the first place or you are an app user and you get your test result, once you, as the person who tested positive, gives the app permission to share that information with any of the close contacts that are known to your phone, that is instant. The app’s real benefit—this is true of every app using the Google/Apple API—is that it is much faster than any human or traditional contact tracing service. That is why I am sure many of us are using it and rely it.

Peter Grant: Thank you. Nothing more from me, Chair.

Chair: I am just going to chip in on the app, Baroness Harding. It is not your app; Test and Trace has not designed this. That’s right, isn’t it? Just to be absolutely clear.

Baroness Harding: Actually, no, I think it is the NHS Test and Trace app, in the sense that we have built an app that uses some functionality from Google and Apple. We have developed other elements of functionality, including, as Mr Grant points out, the functionality that tells you the alert level that you reside in, and also the QR checking code system. It is the only app in the world that integrates all those services, and it is the NHS Test and Trace team who have done that integration.

Chair: I recently had cause to deep-dive into some of the data background. I understand that a medical and technical team are still looking at glitches in the app—it is now 10 months in—and people are being pinged by the app even when it is clear that they were never anywhere near anybody, because the data shows where, what time of day and approximately somewhere is through Bluetooth. Do you recognise those glitches? What are you doing about it, and do you think that is undermining confidence? There is anecdotal evidence—we have had quite a lot of it from constituents—that, frankly, people are not trusting it always and are sometimes turning off the Bluetooth tracing.
Baroness Harding: First, the app is four months old. The English app was the second most-downloaded free app in the UK last year—second only to Zoom.

Chair: Downloading is not what I am asking about. We all downloaded it, because we wanted it to work, but do you recognise that there are glitches?

Baroness Harding: As I stand today, there are 21 million people who have downloaded it, and we see more people downloading it each week. Like all products and services, it can always improve. I think there would be something to worry about if there was not a team continually investigating any issues, looking to get to root-cause analysis and to keep improving the product. As I say, we will be publishing more data very soon on the impact it is having.

Chair: When is very soon?

Baroness Harding: Very, very soon.

Chair: You are getting like a civil servant, Baroness Harding—no date permitted.

Baroness Harding: What a compliment!

Chair: I am not sure whether you think that is a compliment or an insult. I will move on to brief questions from Mr Holden and then Sarah Olney.

Mr Holden: Baroness Harding, on Test and Trace, one of the big issues in my constituency, and I am sure across the country, has been in schools, particularly for teachers on different levels of the same building. Why didn’t you have somebody from an education basis on the board of Test and Trace?

Baroness Harding: I am sorry if I pause for a second, in the sense that there isn’t a board of Test and Trace. Are you asking whether or not we should have an education team?

Mr Holden: Somebody with an education background feeding into you as chairman.

Baroness Harding: We have worked really closely with the Department for Education in our work over the last few months and continue to do so. I wonder whether Sir Chris would wish to elaborate on how we work collaboratively with the Department for Education.

Sir Chris Wormald: It is also true to say that we have always had very senior people from local government who have significant education responsibilities as part of the Test and Trace team, particularly on the “contain” side. Inevitably, you cannot have every senior group represented in these sorts of things, but I think it was very important right from the beginning to have significant local authority input. We work very closely with our colleagues at the DfE—a Department, of course, very close to my
heart from my previous role. We have ongoing discussions with them around a whole range of these issues.

Q78 Mr Holden: Just to make that clear, you were basically relying for your education expertise on the people who were involved in local government on the board.

Sir Chris Wormald: No. I mean the answer in exactly the terms that I said. We have local government represented at very senior levels within Test and Trace, which brings us a whole range of expertise, and then we supplement that with our very close contact with my previous Department.

Q79 Mr Holden: I understand that. It was a combination of your contacts into the Department, then, and the people from local government.

Sir Chris Wormald: We work at all levels with the Department for Education. They get considerable amounts of advice from the chief medical officer and the deputy chief medical officers. We have contacts at official level. I have contacts at permanent secretary level, and Ministers of course discuss this. Then, of course, the whole thing is brought together via the Cabinet Committee system, on which many Departments are represented. There is a whole range of ways in which we interact with the DfE.

Q80 Mr Holden: Just to be clear, though, one of the issues where we have seen a lot of concern from the education institutions is the testing and tracing that they were due to roll out themselves. What input did you have from the Department, or from education institutions, for making those decisions around testing and tracing?

Sir Chris Wormald: Baroness Harding, do you want to pick that one up?

Baroness Harding: We have had a joint working team with the Department for Education. First, we were rolling out testing to all university students as they went home at the end of last term, which was a major collaborative effort run by a joint team. We have also had joint teams working on a number of pilots for school testing in the autumn as the lateral flow testing technology became available, and we continue to work, as Sir Chris says, both at an operational level with joint teams staffed by civil servants and clinicians and scientists from across Education and Health, and at a more senior level. We are working collaboratively with all sectors across Government, and I would say that the Education joint working is some of the strongest.

Q81 Mr Holden: And you now have a joint team looking at the testing roll-out for when schools return.

Baroness Harding: Yes.

Q82 Mr Holden: The only issue here, I suppose, is why there are six NHS people, three civil servants and people from local government on there but nobody from education, when it is quite clear that education settings have been a huge vector and were a huge concern from quite early on.
Baroness Harding: I would not want you to take the backgrounds of the leadership team delivering the testing as indicative of our focus on specific sectors. On each of the sectors where we are increasingly providing services, we have established joint working teams at junior, senior and ministerial level.

Mr Holden: Okay. Thank you.

Sir Chris Wormald: I think Mr Holden raises a very important point. Test and Trace has to do two things: it has to have the expertise within it to allow it to do its job, and it has to be good at reaching out. Mr Smith raised the issues around food processing in his earlier questions, and there are many sectors where we have to have expertise—we cannot have it all within Test and Trace—so the reaching out that Baroness Harding just described is an important part of how it works.

Chair: I refer people to our hearing on 17 December with the permanent secretary at the Department for Education and to some of the feedback we have had since then. Sarah Olney will pick up some of this.

Q83 Sarah Olney: Just to pick up some of Mr Holden’s questioning, Baroness Harding, why were you surprised by the September spike in demand for testing, given that that is when schools and students were going back and education was already a known transmission risk?

Baroness Harding: We had forecast an increase in demand for testing in early September, so we were not surprised in that way. That increase was larger than we had forecast.

Q84 Sarah Olney: Why do you think that was?

Baroness Harding: I think because we are all learning about how the disease spreads and how all of us react. That was the first time schools had come back in the crisis, and all of us—NHS Test and Trace, teachers, students and parents—were learning how to adapt to the new world.

Q85 Sarah Olney: So your forecast did not include the fact that there would naturally be a big increase in symptoms in, say, primary or secondary schoolchildren, which may or may not have been Covid-related symptoms and therefore there would be a big demand for tests.

Baroness Harding: Our forecast did include that, but, as history shows, that forecast was not as big as turned out to happen. I would say that over the very short life—the nine-month life—of Test and Trace, our ability to predict and forecast keeps improving. The surge in demand in the run-up to Christmas and in the return to work and school after Christmas is again one that we forecast, and we have been able to meet the demand. But this is something that we are refining and improving with every season that the service has to face into.

Q86 Sarah Olney: You talked earlier about the positive impact that local authorities up and down the country have had on contact tracing, but from the outset it was very much designed as a centralised system; you did not involve local authorities right from the start. Can you tell me
more about why that decision was made?

**Baroness Harding:** Maybe I can talk about my role and then we will hand over to Mr Williams again to reflect on it very much from the start. From a personal perspective, I really disagree that we did not design in local authorities from the beginning. One of the very first appointments I made—the weekend after I was appointed—was Tom Riordon, the chief executive of Leeds City Council, to come in and lead the “contain” function. Tom did three months’ brilliant work for us and then was succeeded by Carolyn Wilkins, the chief executive of Oldham Council, who is in the job at the moment. So we have had local authority leaders absolutely at the heart of Test and Trace from the very beginning.

**Sarah Olney:** Were local authorities actually involved in the delivery of contact tracing at the start?

**Baroness Harding:** As I think Mr Williams said earlier, prior to the pandemic, local contact tracing was done by Public Health England’s regional health protection teams. Local authorities were directly involved in the creation of the service. With that, I will hand over to Mr Williams to talk through how they were consulted and engaged with.

**David Williams:** I would not characterise this as a binary national or local; from the beginning, the question really was about getting the best blend of expertise. We particularly wanted to do the rapid scaling up of the call centre aspect of the overall contact tracing response at the national level, in an environment in which the scale of resource needed there was quite uncertain, but we wanted to be able to build that rapidly.

We took the decision to build the call centre nationally, but in parallel with that there was a series of conversations through Public Health England’s national and regional teams, and with local authorities and their directors of public health. In particular, those conversations looked at how local authority staff could supplement some of that public health expertise at the top of the pyramid that I talked about in my previous answers, as well as thinking about how we can support local authorities in the “contain” function supporting people who were testing positive or were identifying for isolation, and about openness to include local authorities in the design of the system, albeit with a decision that we wanted to rapidly scale up the call centre element of contact tracing nationally. Since then, the engagement with local authorities has developed, with the local teams undertaking a range of the harder to reach contact tracing, if you like, based on their local knowledge of their own communities.

**Sarah Olney:** Can we talk about that scaling up of the call centre, Mr Williams? The Report finds that, at some points in the summer, call handlers were being utilised only about 1% of their time. It feels as if that rapid scale-up of a centralised call handling system was not being utilised very effectively.

**David Williams:** With hindsight we did not need to scale up that third tier of the pyramid as quickly as we did. If you think back to the situation in late April/early May, as we were setting the requirement for this service,
the ONS prevalence surveys had only just started, based on the increase in testing capacity that we had introduced. Variable one was that we did not really understand the prevalence of the disease in society. We had a range of potential assumptions on how many contacts there might be for each person testing positive. SAGE advice was to model the requirement on 20 to 30 contacts, in part looking at some international experience, but also, in the first phases of the disease, relying on previous PHE experience in other disease contact tracing. Two or three people to contact was our previous experience.

**Q89** Sarah Olney: Sorry to interrupt, but given that level of uncertainty—everyone accepts that at the outset there was a very high degree of uncertainty, and you were setting this up without an accurate forecast of how many people would be contacted—how did you go about procuring those resources? What level of flexibility was built into contracts for engaging those people?

**David Williams:** First, just to nail that point on uncertainty, the central requirement that we ran with was plus or minus an order of magnitude. A plus in order of magnitude produces a lot more upside, as it were, than in the other direction. So, in setting a central requirement, we looked, in conjunction with the Cabinet Office and our Crown Commercial Service colleagues, at a range of potential suppliers and a range of existing call centre capacity in central Government. We selected Serco and Sitel off an existing Government framework, and they will have been through a competitive process to get on to that.

Although we did not build into the initial period of the contract a specific ability either to grow or reduce the volume of call handlers, we did build break points and review points into the contract. At the first review point, after three months—in the summer—based on experience of the first three months of operation of the contact tracing system, we reduced the volume of call handlers through the Serco and Sitel contracts and agreed a process by which they could be flexed up or down with the appropriate notice. It is less important to give the companies notice; it is to ensure that the individuals involved had the right training and some certainty that, as they had signed up to this, there would be something for them to do without it being very volatile from their perspective.

We built in a degree of flexibility once we had a couple of months of experience of how the service was running in practice, and steadily through the year we have seen utilisation rates increasing. It is a bit like Baroness Harding set out earlier in the hearing on the utilisation of laboratory capacity. This isn’t really a service that we want to run at very high utilisation rates. We want to be able to surge.

**Q90** Sarah Olney: Can I quickly ask you about that, Mr Williams? The target utilisation rate was only 50%, which is in itself quite low. Do you think that was a suitable utilisation rate to be setting?

**David Williams:** It think it recognises that we are trying to deliver a different service from one that you might in a private sector call centre. As
we have already touched on, you want the defining metric to be the response time, rather than capping at a volume of calls. If you look at the rate of growth between the beginning of December and the beginning of January of contacts being handled through contact tracing through the call centres, having a degree of flexibility built in is really important. You can have an argument about the precise level, but our judgment was that 50% was reasonable in the circumstances to aim for.

**Baroness Harding:** I can add some detail on that. Over the last month, the number of positive cases a week has grown from 92,000 to 388,000, and the number of contacts needing to be traced has grown from 197,000 to 737,000, so it is really important that we have the ability to surge on a week-by-week basis. As Mr Williams says, you can’t train people up or get them available fast enough for that sort of exponential growth. We also see great volatility during the day, during the week and geographically. Although 50% sounds like a lot of spare capacity, the disease unfortunately grows and declines exponentially, so we have to have a lot of slack to be able to reach the very stringent targets of reaching people very quickly.

**Q91 Sarah Olney:** Baroness Harding, did you just say 737,000 contacts?

**Baroness Harding:** Yes.

**Q92 Sarah Olney:** Is that just the people who have been contacted centrally, or are some of those being contacted by local authority teams?

**Baroness Harding:** That is the total. A third of them will have been contacted digitally and about 70% will have been contacted through a mix of the call centre staff and local authority teams.

**Q93 Sarah Olney:** How are resources for contact tracing being split between central and local authorities? The Report says that one of the barriers to effective local contact tracing, which you yourself have said has been a really important component, is that it has been hampered by the lack of resources made available to local authorities for doing their own contact tracing. We have heard about the difference it can make when local authorities are there on the ground knocking on doors, because they understand the local environment and how outbreaks are occurring. How are the resources getting to local authorities to enable them to do those harder to reach cases on the ground?

**Baroness Harding:** I would say, firstly, that the Local Government Association and the Society of Local Authority Chief Executives have welcomed and endorsed our approach to partnership working on contact tracing. We now have just shy of 300 lower-tier local authorities in contact tracing partnerships, where we are doing exactly as you say. It needs to be a real partnership because, at the sorts of volumes that I have just described, it would be unrealistic to have three quarters of a million people being contact-traced physically on the ground across the country, not least because the disease shifts from one part of the country to another on a day-by-day basis. So we need to work collaboratively together.
In terms of funding, through the local outbreak management plans that we first launched in May, there has been a total of just over £900 million made available to local authorities to implement those plans, and they are implementing them in different ways in different parts of the country. We have been very active in piloting and learning with a number of them. We began this with Leicester in the summer, but we have done a lot of work, and we are doing a lot of work at the moment, piloting different approaches with Greater Manchester, with councils in the north-east and with Blackburn with Darwen, for example.

**Q94 Sarah Olney:** Is that £900 million that you just talked about a part of the overall Test and Trace budget, or does that come from elsewhere?

**Baroness Harding:** I will leave my accounting officer to talk through the different pots of funding that that has been drawn from.

**David Williams:** Firstly, just on a point of detail, the £925 million is an update to the figure of £785 million in paragraph 3.23 of the Report, just to give a more up-to-date number. It comes partly from within the £22 billion budget. We put £300 million out early to local authorities in the summer. We also have a ring-fenced fund of about £1.4 billion outside of the £22 billion Test and Trace budget, so some elements of the local support come from that fund. They are all within the Department.

**Q95 Sarah Olney:** This is my last question on the call centres. You have talked about how there is a lot of slack. I understand that, but you are deliberately paying for a lot of spare capacity and a lot of slack. I understand those contrasts you have just given me, but how is that being controlled? Are you just running a big call centre that is already scaled up to deliver the maximum, and that is how it is running all the time, or are you managing the spare capacity and reallocating resources to other parts of health and social care where they might be needed?

**Baroness Harding:** Maybe I can talk first on what we are doing within NHS Test and Trace, and then Mr Williams might want to come in. We are managing this in real time every day in order to make sure that we make maximum use of all of the resources. Precisely because this is a collaboration with local authorities across the country, and because the disease does not predictably move up and down in every part of the country in the same way, we are on a daily basis moving cases to and from local and national teams, with the primary objective being that we reach people who have tested positive and their contacts as fast as we possibly can. We are dynamically managing this with our partners across the country every single day.

Also, the contract has a number of break clauses, and we have used them to reduce the number of tier 3—the bottom of the pyramid—call centre agents through the autumn, and we are continually looking at forecasting and re-forecasting to be able to make sure that we can meet the demand. “Slack” suggests that this is a bad thing. What we have built is a system that is able to meet the surge requirements of exponential growth in the disease, which is what you see the contact tracing teams across the
country doing day in, day out at the moment. They are all working flat out. These are not easy jobs. I am incredibly grateful—

**Chair:** Baroness Harding, we know that lots of people are working flat out at all levels—testing, vaccinating, in our hospitals and so on—so of course all our thanks go to them.

**David Williams:** On the specifics of the commercial contracts for the call centre, we are currently underspending our plans there by about 20% to 25%, and that money is available to reprioritise within the overall Test and Trace budget. So that is the financial end of Baroness Harding’s active management of the resourcing requirements.

Q96 **Sarah Olney:** Thank you. Baroness Harding, you have talked a lot about the testing, the upscaling of the testing, the tracing and the contacts, but the really important part of test, trace and isolate is the “isolate”. That is the bit that keeps contacts down and reduces the R rate. I have heard concerning stories in direct conversations that I have had with supermarket workers, for example, who have told me that they have not even downloaded the app because they do not want to be contacted and told to isolate. I have heard similar stories in the press about other sectors, such as care workers. Are you concerned that a lack of compliance with the isolate element is causing Test and Trace to be less effective than it might be?

**Baroness Harding:** As I said earlier, I recognise how hard it is to self-isolate. I have done it myself; it is really difficult. It goes against all our instincts and how all of us live our lives. It is important that through NHS Test and Trace, our partners in local government and broader society, we are supporting people to do the right thing and to isolate when they are asked to. That is something that we have contributed to in NHS Test and Trace, but we are part of the overall support package, not single-handedly delivering it.

Q97 **Sarah Olney:** What research has your team done into the factors that are more likely to cause people to not isolate in the way they should?

**Baroness Harding:** We have done quite a lot of work with the behavioural insights team, amongst others.

Q98 **Sarah Olney:** What are the main factors that you have found?

**Baroness Harding:** Practical factors, such as, “I haven’t got food in the fridge to be able to feed myself for the next 10 days. How am I going to do that?” Or, “I’ve got caring responsibilities,” either for children or elderly relatives. “How do I walk my dog if I’m not allowed to go out?” Those very practical considerations are a real barrier. As you have said, there is fear of financial consequences as well: “How am I going to put food on the family table? How can I afford to?” So it is financial and non-financial.

Once people start self-isolating, it is quite stressful. The evidence we have shows that the vast majority—over 80%—of people haven’t been within two metres of someone outside their household while they have been isolating, but a number of them have gone out late at night just to get
some fresh air, which is very human, but when you ask them, “Have you complied with the isolation guidance?” most honest people said, “Well, I didn’t because I went out to get some fresh air at midnight.”

I would describe them as three different main barriers: the practical considerations, the financial considerations and the mental health considerations that cause us all to find this so difficult.

Q99 Sarah Olney: Do you think enough is being done in other areas of Government to tackle these reasons for lack of compliance with the isolation instructions?

Baroness Harding: I think it is something that all of us have to keep working on. A huge amount has been done on this over the course of the last six months, and I know other Government Departments continue to work on it.

Q100 Sarah Olney: But are you concerned that lack of compliance is undermining the efforts of the rest of your Test and Trace work? Is all the work and the money we have discussed today being undermined by the lack of compliance on isolation?

Baroness Harding: All the evidence would show that Test and Trace is making a material difference to the fight against Covid now. A straightforward answer to your question would be no. I am also saying that it is something that we all have to keep working on as a society, because this gets harder not easier, if you have already had to isolate once and you are being asked to do it again.

Q101 Sarah Olney: But a material difference is made only when people obey the instruction to isolate, isn’t it? That’s the bit that makes the difference; Test and Trace is preliminary to that.

Baroness Harding: That is factored into the estimates of the impact that we have been having on R. We are not assuming that there is perfect behaviour.

Q102 Sarah Olney: Have you flagged to either the Prime Minister or anyone in his office your concerns about lack of compliance with isolation?

Baroness Harding: As with everything to do with Test and Trace, all the issues are debated in public and in private on a fairly constant basis. I would just flag that we have done a lot in the last six months to reduce the financial barriers to self-isolation. There is a £50 million fund, and an additional £20 million for local authorities to fund £500 payments for individuals already claiming benefits and discretionary funds for specific circumstances. There has been consistent dialogue on how to keep improving financial and non-financial support. I can see Sir Chris wants to add something.

Sir Chris Wormald: Yes, I want to add a little. I think the issues of the importance of compliance and the challenges to compliance are well understood, right across Government, as Baroness Harding has set out.
I do not think that thinking of compliance as undermining is the right way to think about it. Quite clearly, the higher the compliance, the bigger the impact, but every single member of the public who complies—millions and millions have—helps us to fight the disease. Every bit of compliance is helping us to fight the disease, and we are very grateful to people for the measures that they have taken. That said, as you say, the better the compliance, and the easier we can make it for people to comply, the better the impact.

Q103 Chair: Baroness Harding, you are very coy about advice to the Prime Minister. I do not think he gave you the phone call to ask you to do this job because he thought you were shy and retiring and would not want to be forthright in your opinion. Can you tell us whether you have been forthright with the Prime Minister, and did you raise in particular the issue of people not isolating?

Baroness Harding: You and I have known one another for a long time, Chair. I am very straightforward in all my relationships, and have absolutely said what I think on all issues.

Q104 Chair: So that is a yes, then?

Baroness Harding: It is what it is: I am straightforward and have stated my views on all issues.

Q105 Chair: You may report to the Prime Minister, but you are a Conservative peer, so you are obviously loyal to the Whip to some extent. Do you feel constrained in being able to tell us something like what you said to the Prime Minister, or do you feel that you should be able to speak freely?

Baroness Harding: I do not feel constrained at all. I am here trying to do a public service to support the fight against Covid. I am very comfortable saying what I think.

Q106 Chair: Okay, so just to be clear, you have been candid with the Prime Minister?

Baroness Harding: As ever.

Q107 James Wild: I have a few questions about the budget. The budget through to the end of this financial year is £22 billion. At the time of the Report, £4 billion had been spent. Mr Williams has talked about a further £1.3 billion of contracts that have been signed. How much of that £22 billion do you expect to spend by the end of the financial year? That is to either Mr Williams or Baroness Harding.

David Williams: Let me pick that up. In terms of the spend year to date, I can update it by another month. We have data until the end of November, and we have now spent £5.7 billion. The forecast is backloaded. The central assessment of the team is that they will spend more than £20 billion of that £22 billion, but we continue to develop new use cases, particularly for community testing, the use of lateral flow devices, and so on. Some of that currently identified forecast underspend
is being repurposed by the team. My best estimate is that the low 20s, or maybe the very high teens, is where we will probably end up.

Q108 **James Wild:** That, potentially, is another £15 billion-worth in the next three months—that is quite an impressive run rate. How does that break down in terms of the spend on testing and tracing elements? At the moment, tracing is a very small proportion of the overall budget spend.

**David Williams:** In the increase in the budget from £15 billion to £22 billion, of that additional £7 billion funding £6.2 billion is earmarked for testing, which continues to be the principle driver of cost. The difference here is that a much greater proportion of that uplift is around lateral flow devices and new technologies to support community testing and asymptomatic testing, rather than further material scaling up of laboratory capacity or PCR testing. Obviously, if you are running an 800,000 a day capacity, as Baroness Harding set out, the spend on that over a three-month period stacks up pretty quickly compared with a period where we grew from 100 to 200 to 500 to 800. Around 90% of the budget is for testing capacity in one form or another.

Q109 **James Wild:** Of the 207 contracts that you referred to earlier, about 10%, or rather 15%, have been awarded under emergency regulation 32. What proportion of the £15 billion to be spent do you think will be under those provisions rather than a new award or, preferably, a competitive award?

**David Williams:** It remains to be seen, and the circumstances may well change. The current central estimate from the commercial team is that, in terms of new contract awards coming between now and the end of the financial year, there will be maybe another 25 to 30 direct awards. We are moving more into tenders. We have been running a tender for 200 million lateral flow devices, which reached an important decision stage on Friday last week. With a bit of stability in the programme, we have been able to run competitive processes as we see contracts coming to an end, so that will be more of a feature going forward.

Q110 **James Wild:** What happens with any underspend? Does that stay within Test and Trace or go into the wider health budget? I have near me a hospital that needs to be rebuilt, so if there is an underspend, I would be interested to have some of that come my way.

**Chair:** Mr Wild gets a bingo point for arguing for his local hospital!

**David Williams:** The £22 billion will be ring-fenced for Test and Trace activity, I’m afraid.

**James Wild:** That’s disappointing.

**Chair:** I’m glad to hear that, Mr Williams. It was a good try though, Mr Wild.

Q111 **James Wild:** In the spending review, it was said that this spending and the allocation would be kept under review, taking into account what was referred to then as the possibility of a vaccine. Obviously, we now have
three vaccines licensed and approved to be—very welcomely—pumped into people’s arms across the country. What impact do the vaccine and the plans to have done all the priority groups by the end of April and the rest of the population by September mean for your planned spend and roll-out? Perhaps that’s one for you, Baroness Harding.

**Baroness Harding:** I will kick off and then I might hand over to Mr Marron for a bit more of the broader context and planning in a vaccine roll-out world. From a Test and Trace perspective, I think it is important that we see testing and tracing sitting alongside the vaccine programme; this is not an either/or. It is very important that we continue—that if people have Covid-like symptoms, they are coming forward to get tested and then there is contact tracing for any of their recent close contacts. So I would expect that for quite some time we will want to have a scale test and trace service, partly to make sure that we are breaking those chains of transmission among those of us who have not been vaccinated, partly to make sure that we have got the scale surveillance in place to understand how the vaccine is working and partly, as we are learning about the importance of tracking new variants, to make sure that we have got that very early warning system in place.

It is because of the scale test and trace and the integration between Test and Trace and Public Health England that we are able to do so much genomic sequencing. The UK has done over 50% of all the whole-genome sequences of Covid in the world, and we are looking to continually expand that—it is an end-to-end, integrated process—as we hunt down those new variants, so I would expect there to be scale operations going into the forthcoming year and we will have to work through how to adapt as the virus itself adapts.

I don’t know whether you want to talk more about the broader position, Mr Marron?

**Jonathan Marron:** Thank you, Baroness Harding. The first thing to say is that obviously there are things we still don’t know about the vaccine. There were very encouraging results in the clinical trials. We continue to use our surveillance to work out the key question of whether the vaccine actually stops people spreading the disease, because that, obviously, will make a massive difference to what we can then do in the way of both testing and tracing and other NPIs. That work is ongoing, with a very effective surveillance programme in place now to give us those numbers as early as possible.

As Baroness Harding says, if we are able to reduce the numbers of people with serious illness and, indeed, if vaccination stops transmission, then as cases fall, it may be possible to switch testing from a real focus on symptomatic patients to doing much more asymptomatic testing. That work, I think, will be important.

If you look further ahead, obviously we are thinking about establishing the new National Institute for Health Protection and making sure that it takes on the level of testing and tracing capability that will be needed in the
longer term, to make sure that we remain resilient both through this wave of this pandemic and any subsequent waves and, indeed, are ready to deal with further epidemics and other threats to health that might arise in the future.

**Baroness Harding:** I will add finally that the economic and human cost of the restrictions that we are all living under now is obviously so much greater than maintaining a Test and Trace service that is reducing R substantially, so I would expect us to want to continue to do that and to be able to release other restrictions earlier.

**Sir Chris Wormald:** The only thing I was going to add—I think it relates to Mr Holden’s questions right at the beginning—is that obviously there are lots of decisions still to be taken, but I would be very surprised if one of our conclusions was not that, beyond the pandemic, we want to have a much bigger standing diagnostics industry in both the public and the private sector. So I think it goes wider than just the current Test and Trace position. As Mr Marron said, that would be a key issue for the new NIHP.

**Q112 James Wild:** The Report refers to the Government “working to reach daily testing capacity of 800,000 tests by the end of January.” Looking at the excellent Covid statistics gov.uk website, clearly you have already met that target. Is the ambition to go higher than 800,000? Is there a new target beyond that, or is this the capacity you think we need?

**Baroness Harding:** I think that we will look to blend our different laboratories rather than necessarily look to continually expand. For example, we have announced the opening of a mega-lab in Leamington Spa, using a new technology called end point PCR, which is a PCR test done in much greater scale, which therefore brings the cost per test down substantially. I think you will see new investments, but in order to be able to build a more efficient scale operation, rather than necessarily to continue to expand. That is all on the PCR testing capacity. I would expect also to see continued expansion of asymptomatic testing using lateral flow testing at its core.

**Q113 James Wild:** You talked earlier about the legacy and about the diagnostics industry, but the Lighthouse labs are now up and running. Are those NHS Test and Trace owned and operated? Are they privately owned? How will you ensure that that capacity is there going forward?

**Baroness Harding:** There is no one single model. The Lighthouse labs, although we talk about them as a group, have been created and established in different ways, from entirely private Randox in Northern Ireland to partnerships with NHS trusts in Newcastle and Royal Berks, and partnerships with universities—Glasgow, for example. There is not a single model, and part of the work that we are starting to do now, as we look towards the National Institute for Health Protection, is to work through how that model should evolve in a post-Covid world. It is too early to give you a definitive answer, but it is very much on our minds to start working through now.
Q114 **James Wild:** Mr Williams, do you have a sense of cost? If these sites are mothballed at some point in the future and then we need to have the capacity there, ready to switch on, has the Department done any work on the costs of having that capacity sat there waiting?

**David Williams:** That is one of the things that we will need to do, probably over the course of this year, to look at the balance between a lower-level throughput to keep facilities ticking over or whether we put some into extended readiness, to use the military metaphor; but also, just picking up on Mr Smith’s line of questioning earlier, the sort of end point PCR tests we ought to be able to deliver for £8 to £10 a test. Thinking about the balance of at-scale testing, the capacity in the network of Lighthouse labs and, as Mr Holden was asking about earlier, lab capacity within the NHS in pillar 1, it is really all in the mix for decisions this year.

Q115 **James Wild:** The Report refers to a pilot in September on using sample pooling as a way to speed up the testing process. Is that something that has been rolled out since the Report was written?

**Baroness Harding:** Unfortunately, sample pooling as a technique is only really effective when you have relatively low prevalence, because obviously it relies on there being a large number of pools where there will be no positive cases—therefore, you do not need to test each individual. As we stand currently, it is not appropriate to use, but it is a technology that has been used successfully in parts of the network, and I am sure it is something that we will come back to as infection rates come down again.

Q116 **James Wild:** Okay. I want to ask a few questions about the mass testing programme. How accurate are the lateral flow tests? There are reports that they range from 50% accuracy up to some claiming 99%. What is your view? I think there are three primary tests that we use. What is the accuracy of each?

**Baroness Harding:** I would refer you to the document that Public Health England, Porton Down and Oxford University published in the autumn, setting out the evidence from their validation of the three tests. Clearly, this is important—it is the scientific evidence. In layman’s terms, the lateral flow tests that have passed the assessment of the team in Porton Down are over 99% specific, but with lower sensitivity. What that means in more layman’s terms is that, if the test says that you are positive, you are highly likely—over 99% likely—to be Covid-positive. If you get a negative result—it is a slightly different result for each of the three tests that have successfully been through the process—you are circa 78% likely to be negative.

As we were describing earlier, it means these tests are a very useful addition to our overall testing toolkit. If you have symptoms, we would want you to come forward for a PCR test. But if, like all our colleagues in the NHS and social care are now doing, you are taking a lateral flow test twice a week as part of a regular testing regime, it finds people who would not otherwise know that they have the disease.

Q117 **James Wild:** How many lateral flow tests do we have in warehouses and
currently available?

**Baroness Harding:** We have a very large number of lateral flow tests—sorry, I do not have the precise number to hand. It is in the hundreds of millions rather than the millions. We have a very large stock, in order to be able to deploy them across all key workers and people who have to leave home now, but also in health, social care, schools and other sectors. As a country, we are in a very strong position to be able to use this new technology.

**David Williams:** If it helps, from the procurement over the summer of the three tests that you have already mentioned, Mr Wild, we bought 384 million tests. We have just made a direct award for a further 239 million tests, which will be delivered from now through to mid-February, in advance of delivery through a tender process of up to a further 200 million tests from mid-February through to early March.

**Q118 James Wild:** Great. So to come back to the point that Mr Smith made earlier, there is no reason why food processing plants or others should not have access to lateral flow tests.

**Baroness Harding:** That is absolutely right, and we are working with many of the sectors.

**Q119 James Wild:** Is the concept of testing an entire region as we lift the restrictions, in order to come down the tiers, something that is being considered?

**Baroness Harding:** We are looking at a number of different ways of making use of this technology. Obviously, we piloted exactly what you have described with the Liverpool city region before Christmas. It is definitely one of the suites of options that this new technology, and the growing distribution networks through community testing and employers, gives us.

**Q120 James Wild:** I am coming to the end of my questions. What does your tracing strategy look like over the next six months, particularly with mass testing and looking at increased local authority and public health director involvement? What changes might we see?

**Baroness Harding:** Two big changes. The first one is making more and more use of what we call extended contact tracing: looking backwards from each positive case to identify where that individual was infected in order to be able to stamp out clusters even faster. That is a technique that is most effective when you are at much lower infection rates and it requires much more collaboration and ownership locally with local health protection teams and local authorities doing that detective work. That is the first thing. We are working with a number of local directors of public health on piloting improved tools to help them do that as we speak.

The other big theme for contact tracing going forward will be genomics. As the virus mutates and new variants are identified—you can see us doing this now—it is about being able to identify contacts very rapidly and sequence whole viral genomes in order to understand where you are
seeing new variants take hold that might have risks for us as a country, and then being able to take very swift action. Those are the two big themes that I would point to for contact tracing going forward.

Q121 James Wild: Okay, this is the final question from me. On schools, teachers in my constituency have raised concerns about pupils taking daily tests if they are in close contact, rather than self-isolating, and the risk there. Are you considering that approach—giving people the option to take a test every day and, if they have a negative test, they can carry on about their business rather than asking them to isolate for 10 days—for other settings, or is that unique for schools?

Baroness Harding: It is something that we are looking at in a number of different settings and have been piloting since November or December with both private sector and public sector employers. It is something that—

Q122 Chair: Can you name some settings where you are piloting it other than schools?

Baroness Harding: Yes. It is being piloted with John Lewis at the moment, and we have been working with the Prison Service as well. You can see how incredibly appealing it is for all of us as human beings, but we must be guided by the science and build the evidence. We do not want to take risks with the disease, so we are working very collaboratively on a number of extended pilots.

James Wild: Thank you very much.

Q123 Mr Holden: Some very quick questions. Baroness Harding, you just mentioned the new strains. Do we have the laboratory provision to cope with the current testing targets? What happens if we need to increase testing rapidly with these new strains?

Baroness Harding: Yes. As we stand today, our laboratories have been well able to identify new variants and, as I said, as a country we do more than half of all genomic sequencing in the world, so I think we can confidently say that we are in one of the leading positions worldwide to cope with mutations. That does not mean that it is perfect, but we are very well placed.

Q124 Mr Holden: I understand. On that basis, we have that extra testing capacity and, if we were in a situation of an even more rapidly spreading strain, could we pick that up at short notice? Is the extra capacity there in the system if we need to do that?

Baroness Harding: Yes, it is, and that is exactly why we aim not to run our laboratories at 100% utilisation—so that we are able to surge quickly.

Q125 Mr Holden: I understand. Regarding testing capacity, have you a good idea of who to turn to based on the capability of current and previous providers? Are there good providers and worse providers? Basically, have you learnt lessons from some of the people you have been working with as far as testing is going?
Baroness Harding: We always learn lessons and a good large-scale service like this is looking to actively go out and learn lessons and share that learning across all of our different providers as well. We are constantly learning what works and what does not and improving, and you see that in our performance as it continues to improve.

Q126 Mr Holden: For the long term, is one of those lessons we are going to learn that we should build hospital tier 1 provision for the future and—

Baroness Harding: No, I think the biggest lesson we have learnt is that you need a mixed economy. It is really important to have surge capacity and the ability to do very flexible testing. Our hospital labs are doing tests on a wide variety of different diseases, but in a crisis such as this we need more manufacturing-like testing capacity for a single disease that can produce the scale that we have been able to grow in the past nine months.

Q127 Mr Holden: Baroness Harding, we have heard about the John Lewis test, which you have just outlined there, which is part of the roll-out of this. One thing I know many constituents are worried about, especially those who work in the aviation sector and jobs down the line in manufacturing that depend on that sector, is around international travel. While we are doing mass vaccination here, there is a concern for international travel in respect of people in other countries not having those vaccines or that testing capacity. When will we have that full capacity at airports and is there a plan for provision of that testing in the UK on arrival? We know that there are issues around lateral flow testing and its quality when individuals do it themselves before they arrive. Is that something that you are looking at for the future?

Baroness Harding: We have to be careful. I know how all of us want a test to be a solution to containing the virus, but Government policy for international travel today is that while you must have a negative test to come into the country, that does not absolve you from needing to quarantine. I think it is unlikely that we will have high prevalence countries, with people coming from those high prevalence areas, where the science will suddenly change and a test on arrival will mean that you don’t need to quarantine. Unfortunately, a test at a moment in time only tells you that you do not have the disease or are not infectious at that moment in time, regardless of whether it is a PCR test or a lateral flow test. Therefore, the need to quarantine is likely to be there still.

Mr Holden: Thank you, Baroness Harding.

Q128 Chair: Thank you, Mr Holden. I have some quickfire questions, so if we could have reasonably brisk answers, that would be helpful. Baroness Harding, one of the key elements is the turnaround time for the tests. In the last week, 32% of in-person test results were returned in 24 hours and 18% of all pillar 2 tests—that is, people who are not working in the frontline in the NHS. The target is 100%. Can you tell us what has gone wrong? What has been so difficult about getting that test result turnaround in real time, so to speak?

Baroness Harding: We continue to work incredibly hard at improving—
Q129 Chair: Baroness Harding, I think we can take it as read at this point in the hearing that everyone is working incredibly hard. Why is it not delivering what it should do?

Baroness Harding: In our latest data, 63% of people who came in person for a test got their test result the next day. That is 625,000 people last week who got their test results.

Q130 Chair: Look, we recognise that even one third is a lot of people, but your target is 100%. Is that an impossible target? Otherwise, what has gone wrong, such that you are not meeting that target?

Baroness Harding: Nothing is impossible. We continue to work on getting to that target. As you can see, the number of people who get their test results the next day has been growing substantially, week-in, week-out, over the course of the past six weeks and we expect that to continue.

Q131 Chair: You say it is going up, right? You are confident, from what you say, that you will get to 100%. First, when do you think that you will get to 100% turnaround in 24 hours? Do you have a target date?

Baroness Harding: I would be careful not to have words put in my mouth. I did not say that. I said that we are continuing to work on it, that nothing is impossible and that you see the performance in turnaround times improving every week. What you have here is an enormous system—

Q132 Chair: Sorry, but you do have a target of 100%, yes?

Baroness Harding: I have a target to get the test results back as fast as I possibly can, not just within 24 hours, but as fast as we can. We know that the faster we break the chains of transmission, the better. The 24-hour target is not a meaningful target for a lateral flow test, for example. It is one of the reasons why lateral flow tests have a real advantage, because their turnaround is 30 minutes.

Q133 Chair: My question is very specifically about PCR tests. You are trying to get all of them back to people within 24 hours.

Baroness Harding: For face to face. Just to be clear, for someone ordering a home test, or having a PCR test in a care home, it is not physically possible to get a test back within 24 hours.

Q134 Chair: Okay. It is very helpful to identify the difference. So you expect all those face-to-face ones within 24 hours, but if you are not meeting the target, what is the brake? What is the issue stopping you meeting it? Is it lab capacity? What is it? What’s the reason?

Baroness Harding: Chair, if you let me elaborate a little bit, I look more at whether you get the results the next day, rather than specifically at 24 hours. These operations work 24/7, and for a citizen, getting the results when they wake up in the morning, rather than them arriving at 3 in the morning, is perfectly acceptable; it is more than adequate. If you look at the percentage of in-person tests that came back the next day, on 9 December, 92% of all tests taken in person came back the next day. That
dipped as we went into Christmas and is now improving again. I would expect within the next few weeks to get back to the sorts of levels we were delivering before Christmas.

Q135 **Chair:** But that still brings me to the question of why it has dipped. Is it lab capacity? What is the challenge in the system that is stopping it happening?

**Baroness Harding:** It is a function of the sheer volume and the complexity of the system.

Q136 **Chair:** Fine. That is all I needed to know—so it is volume. When you ramped up, you had problems hitting that turnaround time.

**Baroness Harding:** In Christmas week, we conducted more than 1 million tests face to face. That was a roughly 50% increase over a two-week period. We consciously chose to make sure that no one was turned away and that everyone was able to get their tests, and the turnaround times went down a little bit as a result.

Q137 **Chair:** You talk about labs not running hot, and you talk about capacity in the contact tracing. Why were you unable to manage that surge and what have you done to make sure you could cope with a future surge if you had more people testing face to face?

**Baroness Harding:** Again, let me challenge your assumption there. I think the Test and Trace system managed the surge over Christmas extraordinarily well, while at the same time doubling the number of tests conducted over Christmas week. We were also able to test many thousands of hauliers at Dover.

Q138 **Chair:** Baroness Harding, my point about these questions is not the sheer volume. We know that the speed of getting the tests back is vital to making sure somebody is not spreading the virus. We hope that there is an assumption that people would self-isolate, but as you have covered before, people with financial difficulties who may worry about losing their job and may feel well because they are asymptomatic might be struggling to stay at home. Once they have a positive test, it is definitely more of a reason to stay. It is a really clear scientific fact that the quicker you get the result to somebody, the less likely they are to spread the virus. Are there any issues or challenges going ahead that, looking back, you think, “We could have done that better,” or, “In the future, we need to do it differently to make sure people are getting their results in a timely fashion”?

**Baroness Harding:** Given the forecast growth in demand that we saw and delivered to over Christmas and new year, I think the system delivered extremely well in the round. It was able to deliver the volume and deliver a very substantial number of tests the next day. Although testing volumes doubled over Christmas, still 45% of people got their result the next day. As we come out of the Christmas period, we are starting to see a return to the performance that we saw before. In all my working life working in large citizens’ services over the Christmas period, I would expect to see those sorts of changes over the Christmas and new
year period, so I think that the system actually coped extremely well with the holiday season.

Q139 Chair: A moment ago, you said that your labs were running 24/7.

Baroness Harding: Yes, they are.

Q140 Chair: And they were over Christmas as well?

Baroness Harding: They were indeed over Christmas.

Q141 Chair: At the same capacity?

Baroness Harding: We report the capacity daily, so you can see where it ebbed and flowed.

Q142 Chair: Sorry, but the correlation with citizens’ services generally over Christmas isn’t quite the same, is it?

Baroness Harding: Well, no. My past life was supermarkets, which shut on Christmas day, whereas the testing sites and laboratories didn’t. I know that you don’t want me to keep acknowledging it, but I thought that we should have closed for the thousands of people who do amazing work.

Q143 Chair: Absolutely, I am happy to acknowledge that, but my point is that you have just contradicted yourself. If people were working very hard 24/7, the labs were open 24/7 to turn around this high volume of tests, and you had planned for a surge, I am just asking what the issues were.

Baroness Harding: All of us know that this is, at the risk of being technical, a queuing theory challenge. When you suddenly see a doubling of volumes on the road, you get some bunching in the traffic. I am afraid that that is exactly what you see when, in the space of a week, you double the volume going through the end-to-end system.

Q144 Chair: To go back to my question, if this were to happen again—we are in horrendous lockdown No. 3 and there is a real surge affecting the NHS—we know your service is crucial to protect our frontline workers. If there is a surge in a couple of weeks’ time or a month’s time, are you able to deal with that better as a result of what you have learned from the surge over Christmas?

Baroness Harding: This is a very new service, so of course we are learning every single day. It would be foolish of me to suggest otherwise. We will keep learning and keep improving, which is what you have seen in our results.

Q145 Chair: Okay. I want to ask about how you are reaching groups of people who might not have technical access to the app, or who linguistically or culturally are nervous about making contact with officialdom. Many of my constituents will not be aware of what is going on in the mainstream news, but they will listen to other channels in their mother tongue or from their own community. How are you reaching those people, and have you assessed whether there is a differential between groups in being
reached effectively by your service?

**Baroness Harding:** Yes. We are working really hard in this space. To give you a few facts, on the NHS 111 service, our call centre operates in 200 different languages. As you know, the app operates in 12 different languages. We have worked very collaboratively with a number of third-sector groups, local authorities and faith groups to reach into the communities that we in central Government probably find the hardest to hear. I was up in Wolverhampton just before Christmas at a Sikh gurdwara, which hosted an all-faiths staffed pilot asymptomatic testing site. That demonstrated the power of those local authority partnerships. There are fantastic examples of that.

Q146 **Chair:** I think we all know of good examples, but are you concerned at all? Is there a gap in service, take-up or compliance by any groups?

**Baroness Harding:** It is why we are working so collaboratively with local authorities in our local contact tracing partnerships and community testing, recognising that it is local authorities on the ground that will have the relationships with local community groups and faith groups, in order to make sure that our offer reaches most effectively into the communities that need us most. I can see that Sir Chris wants to come in.

**Sir Chris Wormald:** I was going to add that the role of directors of public health in local authorities is absolutely key. This is, of course, their day job, and it goes across Covid and across wider public health: having people whose role it is to understand local communities in a way that national Government cannot, and ensure that the right services reach the right people. That is why the local authority role here is absolutely key.

Q147 **Chair:** It is important, of course, that people take it up, so are you monitoring take-up by income, ethnic background, language and so on? Is any research going on?

**Baroness Harding:** Yes, there is a huge amount of research going on. One of the encouraging things that we see from the early results of community testing is a higher test positivity rate from the locally targeted testing. The Liverpool City region in particular has documented that very well indeed from the mass testing work that they have been doing.

Q148 **Chair:** One of the key issues, of course, is the impact on people from some ethnic minority backgrounds—the exponential increase for some of them of serious illness or likelihood of death. Are you assessing the relative rate of positive tests in different communities as well? Is that something that you are able to do?

**Baroness Harding:** Absolutely, and the Joint Biosecurity Centre publishes that as part of our overall data assessment on a regular basis.

Q149 **Chair:** That is something that we will all keep an eye on. A last couple of quick ones from me. We talked earlier about universities and students. I think a lot of us were surprised that it was a surprise that there was a spike in September, as others have highlighted, but our colleague from York, Rachael Maskell MP, has highlighted that in York the city council did
a very good job working closely with the university to make sure that students isolated quickly, and the outbreak there was lower than in some other university towns and cities. Have you looked at what different universities in different areas have done around students, bearing in mind that students will hope to go back, probably for the summer term?

**Baroness Harding:** Yes, very much so. This is another area where local directors of public health play a hugely important role in sharing best practice around the country and supporting universities, sharing around what is working best.

**Sir Chris Whitty:** Again, we work very closely with the DfE on that question, and we look at this university by university.

Q150 **Chair:** There were different outcomes, but some very serious issues around universities. Can I ask about the NHS title? Earlier, Baroness Harding, you talked about NHS labs and working with the NHS? Do you consider yourself, or Test and Trace, to be part of the NHS?

**Baroness Harding:** Absolutely. We are a free-at-the-point-of-need clinical service that is a unique part of British culture, just like NHS Blood and Transplant and other NHS services made up of a variety of directly employed NHS staff and partners.

Q151 **Chair:** Are you accountable to anyone directly, or do you report to anyone directly, in the NHS, rather than in the Department of Health and Social Care?

**Baroness Harding:** Just like other bodies such as NHS Blood and Transplant, I am overseen by the Department of Health, as we discussed earlier.

Q152 **Chair:** Thank you. Personally, what have you learnt about this and what keeps you awake at night? Would you do it again? That’s really what I am saying.

**Baroness Harding:** That is a large question.

Q153 **Chair:** If you got a call from the Prime Minister, would you take this up, knowing what you know now?

**Baroness Harding:** Yes, I would. It has been and continues to be an honour and a privilege to work with the huge array of national talent that is trying to help us all get back to the lives that we want to lead and to beat Covid. In any small way that I have been able to contribute to that, I would do it all again in a heartbeat if I could help.

Q154 **Chair:** Were you surprised when you got the phone call from the Prime Minister?

**Baroness Harding:** Yes. That is not an everyday occurrence in anybody’s life, is it? Certainly not mine.

Q155 **Chair:** Did you think that you were the only person who could do this job, or the best person to do it?
Baroness Harding: I am not arrogant enough ever to think that about anything. I had been the chair of NHS Improvement for two and a half years at the point at which I started doing this, so I am from the NHS family, and my background prior to public service was in large citizen/consumer services in retail and in telecoms. So, when you look at the skills needed in this role, I have some of them, but I am sure there are other people who are equally well qualified.

Q156 Chair: Thank you. Can I ask what does keep you awake at night at the moment? We are in the middle of a very tough tier 3. The NHS is overwhelmed. You are running Test and Trace. What keeps you awake at night?

Baroness Harding: Oh, gosh—other than my dog, who is very sick, what keeps me awake at night with the job? I tend to sleep quite well. I know that is the trite answer, but the things that I am worried about we have covered in all this. It is so tempting to believe that we can somehow force Covid-19 to behave in a way that we have predetermined, yet this is still a very new disease and our brilliant scientists and clinicians are still continuing to learn about it. What keeps me awake at night is what we do not yet know about the path of Covid-19. Continuing to build this collaborative, agile partnership across all the public and private sector to fight Covid is the only way forward, because I am certain the disease is going to throw some stuff at us that we have not been able to anticipate.

Q157 Chair: I think we all anticipate that it will last for some time yet, for sure. My last question is to David Williams. Mr Williams, earlier you and Sir Chris Wormald, the Permanent Secretary, talked about the extra capacity in the tracing system—that 50% target, rather than a 100% target. With intensive care, there was never that spare capacity. Given what we know now and your pivotal role in working through the finances of the NHS as the money man at the Department, do you think that there now needs to be spare capacity in intensive care for any future outbreaks or variations of this virus, or anything else that might come that way?

David Williams: I would expect capacity in the NHS, both critical care and general acute capacity in hospitals, to be an area that is looked at as part of wider lessons from the response to the pandemic.

Q158 Chair: That is saying you will find a way to fund it if it is determined by the political masters? Is that a fair summary?

David Williams: The investment in the NHS and the capacity that it has, in the end, matters for decisions by Ministers and funding through spending reviews. There are clearly some questions that we will want to examine to judge what the right peacetime capacity is and how we surge when we need to.

Chair: Thank you very much indeed for your time, and thank you again to all those on the frontline in whatever capacity they work in to support us all through Covid-19 and this difficult lockdown. Thank you.