HOUSE OF COMMONS

Select Committee on Science and Technology

Oral evidence: UK science, research and technology capability and influence in global disease outbreaks, HC 136

Wednesday 27 January 2021

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Watch the meeting

Members present: Greg Clark (Chair); Aaron Bell; Dawn Butler; Mark Logan; Graham Stringer; Zarah Sultana.

Questions 1788 - 1829

Witnesses

I: Greg Fell, Director of Public Health, Sheffield City Council; and Dr Richard Harling MBE, Director of Health and Care, Staffordshire County Council.

Examination of witnesses

Witnesses: Greg Fell and Dr Harling.

Q1788 **Chair:** This morning we are continuing our inquiry into the response to the coronavirus pandemic to learn lessons that can be applied now and in the future. In the context of over 100,000 lives having been lost from Covid as of yesterday, the importance of doing everything we can to learn and apply those lessons is very much at the forefront of our minds.

Today, we have a short session to add to our understanding of the role of directors of public health in the response to the pandemic. That is in advance of a session that we will have at 9.30 am next Wednesday with Baroness Dido Harding of NHS Test and Trace; Mark Hewlett, director of testing at NHS Test and Trace; and Steve McManus, director of tracing at NHS Test and Trace.

This morning, we are very pleased to welcome two distinguished directors of public health: Greg Fell is director of public health in Sheffield and secretary of the Association of Directors of Public Health, and Dr Richard Harling is director of health and care at Staffordshire County Council and was previously an A&E and hospital doctor. Thank you very much indeed, both of you, for giving your time at what we know is a very busy and important moment.

Directors of public health have standing responsibility to deal with notifiable diseases, of which Covid is one. Mr Fell, will you say a bit about how this pandemic has operated compared with other times when you have dealt with Public Health England? How has the way you have worked differed?

Greg Fell: This has been the first serious pandemic in the past 10 years. We all remember swine flu. This has been much worse than that, but the basic operating procedure has been the same. As for the way in which we have managed the situation, in everything from prevention, messaging comms, managing local incidents so that small outbreaks do not become big ones, and ensuring we have pretty good contact tracing and coverage and vaccination, those tools are basically the same for this compared with any other outbreak of infectious disease. The difference is scale. In most outbreaks of infectious disease a local DPH has pretty much control over all the levers, whereas here we are working in a national and local system and local DPHs do not have control over all the levers. The two key differences are scale and control of the levers, but the response is the same.

Q1789 **Chair:** Is it true to say that normally, if I may put it that way, you take the lead in the response? Has that differed here? Was it accepted from the outset that it was a national lead rather than a director of public health lead?

Greg Fell: It is a national and international incident, so there was never any doubt that it had to be a national Government lead. There was no

question about it. Locally—I think most DPHs would be in the same position—the DPH is on point for their place in organising the implementation and orchestration of the local strategy. In that respect, the DPH has the same role for this infectious disease as for any other, but again the difference here is scale. Most outbreaks involve 20 or 30 people and are fairly localised. This one has affected many hundreds of thousands of people and is definitely not localised.

Q1790 **Chair:** Dr Harling, I put the same question to you.

Dr Harling: I agree with Greg. The basic operating model, which is a partnership between Public Health England as a national body and local authorities as the lead local bodies, is the same. This is an issue of scale. The role that directors of public health and local authorities play in the Covid pandemic is as a lynchpin to access all the many local resources. While there is considerable expertise at national level, what we bring is a very detailed knowledge of the local patch, our local people and how things work around here, so we can get things done usually very quickly just because of who we know and the contacts we have in our communities.

Chair: Let us go into that in more detail, starting with Dawn Butler.

Q1791 **Dawn Butler:** I want to ask some general questions about the national lever of test and trace. Greg, do you know what number appears when the national test and trace system is used and is calling individuals?

Greg Fell: It is not a local number. I do not know the precise number, but what we have found—we have stood up a local contact tracing service to support the national contact tracing effort—is that people respond much better to a local number, for reasons I do not know. I do not know the precise number that appears on somebody's mobile phone because I have not experienced it myself yet.

Q1792 **Dawn Butler:** That was exactly where I was getting to. People are more likely to pick up a local number than a national or unknown one.

Greg Fell: That is certainly our experience.

Q1793 **Dawn Butler:** Many local authorities, including my own, Brent, have set up a local system. Not only has it worked really well but it has enabled them to understand their residents a lot better. What has been your experience of local authorities stepping up in this regard?

Dr Harling: Staffordshire has set up its own local contact tracing arrangements. We contact trace two cohorts of people. The first are those NHS Test and Trace has been unable to reach, and we are currently dealing with about 250 of those per week. We manage to reach about one third to one half of those.

As for the other cohort, we do primary contact tracing for all new cases. Currently, we are doing about 450 per day. We are doing that in parallel with NHS Test and Trace.

The advantages that we think we can bring to bear are, first, local knowledge. The people doing the contact tracing understand the area and we think they can have a more informed conversation than someone who is more remote.

Secondly, the information that we get about cases and contacts links directly to action. For example, we have conversations with people about whether they need any support in terms of food supplies or care. If the answer is yes, we can link that directly to that support and get that provided within a matter of hours.

Where people do not respond and we suspect they are not isolating, we can refer them to the police. We do not visit them at home to check whether they are isolating as they are supposed to.

Where we detect outbreaks, we can also put that information straight through to our outbreak management cells rather than having to wait for it to come through the national chain.

The other key point we would make is that our efforts are directly accountable to our residents. If our residents believe that there are problems with our systems and processes, they can pick up the phone directly to the county council. They know who we are and where we are and can give us their feedback, and we can learn and develop our systems on the basis of that.

Greg Fell: My answer would be pretty much a mirror image of that. We focus on the so-called failed contacts—the people NHS Test and Trace is unable to reach in 48 hours. There is a legitimate argument that we should take that on sooner. That is a resourcing issue, but it is a mirror image of Richard's answer.

We have the capacity to take on about 50 cases a day. The number varies from day to day, and we very much tie our offer with welfare support, checking as best we can that people have the support they need for complete isolation, and tie the intelligence we get from our contact tracing with outbreak and incident management and the broader epidemiological picture.

That works pretty well. We manage to reach 75% to 80% of contacts who are unable to be reached by NHS Test and Trace. It works reasonably well. It works with NHS Test and Trace; it is not working parallel to it.

Q1794 **Dawn Butler:** Dr Harling, if local authorities had been able to step up their test and trace at a faster rate and had been given the resources they needed to do that, do you think they could have isolated more people more quickly?

Dr Harling: It is very difficult to comment retrospectively. The important thing is to understand that we will be doing this for a very long time. I expect to be dealing with cases of coronavirus throughout the 2020s and

into the 2030s. The only question is how many. Under a best-case scenario, hopefully it will be relatively unusual and akin to other communicable diseases. In a more pessimistic scenario, we might be dealing with much larger volumes.

I think there is now an opportunity to think about how we continue the test and trace and isolate endeavour for years and decades and start to think ahead, in particular to reflect on what I think is a really crucial role for local authorities. I think that given the resource we could do this very effectively. We are quite prepared to be held accountable to some key performance metrics. The national system may continue to struggle with local knowledge and flavour.

Q1795 **Dawn Butler:** In layman's terms, does that mean essentially yes? You are talking about the sustainability of something that we will need to do for many, many months to come, as far as we know. Are you saying, therefore, that the way to enable that sustainability is for it to be more locally administered?

Dr Harling: Yes. I think we would make the case from a local authority perspective that, given the tools and resources, this is something we could do pretty effectively over the next few months and years, and that is the best way to make this a sustainable system.

Q1796 **Chair:** Mr Fell, did I hear correctly that you told Dawn your capacity is to trace about 50 cases a day?

Greg Fell: That is the current capacity. We have a model that is scalable. Our rate-limiting step is that we are staffing our service with staff redeployed from other parts of the council. Like Richard, I am expecting to be in this phase for at least this calendar year—probably beyond—so we will need to think long and hard about our ability to stand up such a level of response over a period, but we will do that and work out how to resource it afterwards.

Q1797 **Chair:** Looking at the latest figures, yesterday Sheffield had 279 cases. That means that, even if you were to expand from your 50 capacity, with the best will in the world you will need some extra national support to cope. Is that a fair reflection?

Greg Fell: Yes. There are two broad options. One is that we can continue to redeploy more and more staff from other services, but that impacts on other services that the council operates and will have consequences. Which service do we use to staff our model? The other is that we localise the resources currently within NHS Test and Trace. That has been a consistent ask of most directors of public health for quite some time. Conversations on that continue, and hopefully we will see those come to fruition.

Q1798 **Chair:** Let me turn the question round the other way. You had 279 cases reported yesterday. We hope it will fall over time, but let us make the assumption that it continues at that level. Ideally and most efficiently,

how would you trace those contacts? Would it be by taking on more yourself, or would it need a big national tracing and contacting component?

Greg Fell: Most directors of public health would give a biased answer because we focus on our places, but we have demonstrated that arguably we can more effectively reach people with local knowledge and intelligence and add a richer picture to everything else. Therefore, in an ideal world we would scale up our capacity and take on cases and their contacts at hour zero or in 24 hours. Currently, we are taking people on at 48 hours. In an ideal world, we would do the totality of contact tracing, but that needs to be part of a national system, because if we all go off in different directions that equally becomes problematic.

For most directors of public health it is not an either/or; it is both. How do we work within a national system and framework that has maximum reach and impact within our communities and be accountable to our communities for the outcomes, as Richard has said?

Q1799 **Chair:** The last time we had Baroness Harding before the Committee she said that the very effective performance of the local teams was based on the fact that, relative to the national number, they had a small number to contact. If you had responsibility for, say, 279 people—five times what you currently have—you would not be able to be as effective as you are currently. Do you think you could scale up your operation to take on more of those 279?

Greg Fell: Most of us would say yes. We do not know because we are not in that space. I am speculating, but most of us would say that we would scale up our operation and maintain the operational effectiveness we have currently, but it is untested.

Q1800 **Zarah Sultana:** My first question touches on a report by the National Audit Office that noted that the Association of Directors of Public Health had found it difficult to liaise effectively with test and trace due to a lack of clarity about individual roles and reliance on short-term secondments and consultants. Is that a finding that either of you agrees with or disagrees with?

Greg Fell: Honestly, I agree. I think it is fair to say that most DPHs have very good relationships with Public Health England, which is essentially tier 1 of NHS Test and Trace. That is a long-standing relationship that for most of us works really well, and credit goes to PHE for making that so. For tiers 2 and 3 it is improving, but there is still a long way to go to be able to navigate our way through that system. However, that is improving over time. To be clear, it is not fundamentally broken as perhaps it was six or eight months ago.

Dr Harling: I agree. The relationship with NHS Test and Trace has improved over the past few months, but it is still relatively remote. We do not have well-developed relationships with a local account manager, for example, who we could turn to with issues and problems.

If residents raise queries or issues with NHS Test and Trace, there is quite a long chain of command for it to go all the way up and then for an answer to come all the way back down. It is perhaps not as responsive yet as we would like to see it.

To go back to the previous question, in terms of scalability we are already contacting everyone NHS Test and Trace is contacting. We are doing our primary contact tracing in parallel with the same numbers and getting about the same outcomes in proportion of cases and contacts reached. I have every confidence that local authorities can scale this quite easily given a sustainable resource.

Greg Fell: One observation is that the siloed nature of NHS Test and Trace needs better connection nationally and locally. The trace bit and test bit are different from each other, and most directors of public health spend a lot of time trying to stitch it all together locally with the rest of the response to the pandemic, because test and trace is only one component; there is a whole bunch of other components. Addressing the silos is one of the issues that needs attention.

Q1801 **Zarah Sultana:** Reference has already been made to the disparity between national test and trace and local contact tracing. Drawing on your experiences at local level, what do you think the reasons are for this? Is it about trusting national agencies or trusting more local agencies instead? What is the difficulty that the national team is having in tracing contacts? What do you think it comes down to?

Greg Fell: Local knowledge and intelligence. Our experience is that the response to the Sheffield number, an 0114 number, in phoning people up is much better. I am told consistently that local accents matter quite a lot in developing trust. Some of those things have made a difference.

The scale and complexity of the national operation means that people will fall through the cracks; that is just the reality of a large-scale national operation. What we will do locally is try to connect up some of those cracks so there are fewer for people to fall through.

Dr Harling: For me, that local knowledge is very important. We would also argue that our staff are invested in this, by which I mean that if they are successful in isolating cases and contacts it benefits them directly. This is their community, their friends and families. That is not quite true in the same way of a national operation that is very remote.

I fully understand why at the outset of the pandemic this was set up as a national endeavour. Thinking forward, in terms of sustainability I cannot think of very many other health and care services that are entirely led and managed at national level. Pretty much everything else is done locally, either through the local NHS or local authority, and, if this is to be a sustainable endeavour, that local leadership, management and ability to co-ordinate response locally will be crucial.

Q1802 **Zarah Sultana:** One point that we have heard several times on this Committee is that, going forward, if future pandemics arise, it is important to have a more decentralised approach, especially with local contact tracing. What powers would be useful for local councils in contact tracing resources to improve performance?

Greg Fell: I am not sure that local authorities would need more powers. We probably have all the powers we need. On this one, the difference was the scale of what was needed as quickly as it was needed. As Richard said, I also understand why there was a need to set this up nationally very quickly.

The other point to make is that testing and contact tracing is one component of a much broader response. It is the broader response that collectively has made the difference, not just contact tracing.

To answer the question directly, I am not sure that more powers are needed; it is the ability to deploy those powers and resource their deployment quickly. The reality is that most of us have cut our budgets over the past 10 or so years. There is no doubt that that has had an impact.

Dr Harling: For me, I can think of two sets of powers that might be considered. The first one is our ability to offer incentives to people to engage with the system. There has been quite a lot of speculation recently that going to get a test is not something people necessarily have an incentive to do because, if you test positive, you end up having to isolate, which is disruptive to your life. Therefore, the ability of local authorities to offer perhaps a financial inducement to get tested, or some other incentive to encourage people to come forward if they have symptoms, or even if they do not, so that we are maximising the number of cases we detect could be helpful.

The other matter is powers of enforcement in respect of people who fail to comply. We have the health protection regulations to fall back on. They are a little clumsy and overbearing in their usefulness, but otherwise we rely on the police for enforcement. Again, thinking about sustainability long term I am not sure that we would want to be tying up police resources in chasing down Covid non-isolators. Local authorities perhaps could do that if they had the powers.

Q1803 **Zarah Sultana:** Greg mentioned financial pressures. Councils have taken on additional responsibilities. After a decade of cuts by central Government what is the financial situation of the councils for which you are responsible? Do they need more support? I think I know the answer, but I give you an opportunity to respond to that.

Dr Harling: Staffordshire has a financial strategy over the next few years that does balance. There are some assumptions in there about the sustainability of national pots of money.

As for our contribution to the Covid pandemic, we have had quite a number of pots of money from Government that we are using to fund things like our contact tracing and outbreak management, so I do not think that in year we have any complaints on that count. What we do need to think about is how we make that sustainable longer term. I would make the case for a very prominent role for local authorities over the next decade, but that would have to be appropriately funded.

Greg Fell: Finances are tight in all local authorities. That is the non-expert way of saying it. Most authorities are in fairly risky financial positions. We have been as prudent as we can be, but finances are exceptionally tight.

With regard to the response to Covid, my response is the same as Richard's. Government has been pretty generous with the support to local authorities and we have used that wisely.

One observation is that lots of different pots of money have come from different Government Departments. Our problem, which we need to address, is stitching all of that together into a coherent whole. If that were done at central level it would lead to a much more coherent financial strategy, but the financial sustainability of local government is undeniably an issue in the medium to long term. There are no two ways about that.

Q1804 **Graham Stringer:** To follow up Zarah's questions and try to get some comparative numbers, eye-wateringly large sums of money are being spent on national systems. In terms of your public health departments, what has been the increase in expenditure over the past 12 months?

Greg Fell: Core public health expenditure is unchanged. While all of this is going on we are maintaining all the other things on which we spend the public health grant: health visiting, school nursing, sexual health, et cetera. That is unchanged; we are maintaining that as business as usual. That is in quite a tight position.

In the order of £10 million to £12 million has been put into the pandemic response locally from different Government Departments at different moments in time. One of our roles is to try to stitch that together into a coherent whole. If we are responding to Covid-19 for a long period of time, our response is reliant on that additional money put in by Government over the past year or so at various points in time. The sustainability of the response is absolutely dependent upon that; otherwise, all local authorities will have other services whose funding will need to be maintained.

Q1805 **Graham Stringer:** Some of that £10 million or £12 million is not going into public health, is it; it is going into business support, housing support and support for individuals?

Greg Fell: Yes. That is the totality of our focus.

Q1806 **Graham Stringer:** I want to find out how much money has flowed through directly into public health—temporary contracts for tracing or extra for public health.

Greg Fell: I will find the figure. I have the precise answer, but Richard is able to add up quicker than I can.

Q1807 **Chair:** If you have it there, can you give it to us? Have you found it?

Greg Fell: It is split across a number of work streams. I will provide a written response to the Committee, but it is in the order of £6 million.

Dr Harling: So far in respect of outbreak control we have had three tranches of funding. The first one was called the local outbreak control fund, in July; we then had part 1 of the contain outbreak management fund in November, to the value of £8 per head of population; we had part 2 of the contain outbreak management fund in December, to the value of £4 per head of population. The total value of those three so far is about £13 million. We expect part 3 of the contain outbreak management fund in January to the same value of £4 per head of population. That would be a further £3.5 million.

Q1808 **Graham Stringer:** All of that has flowed into your public health department; it is not going in under other headings.

Dr Harling: It has all contributed to the Covid response. This is a corporate county council endeavour for us, so the money comes into public health. If we use the example of contact tracing, we have operationalised that by using our existing telephone contact centre, where we have people who are good at using the phone to contact people about a variety of things. We have augmented that with 20 to 30 people to do contact tracing.

Q1809 **Graham Stringer:** Can I go back to the very beginning when it was agreed that there would be a national approach? I accept what Mr Fell says. People are dying all over the country and the Secretary of State for Health needs to respond to that, but there was a hiatus between setting up a central system and local public health authorities being funded. Were you consulted on how the national system was set up, and do you think that if you had got immediate resourcing for tracing at local level you could have been more effective than the system turned out to be?

Greg Fell: The quick answer is no. I do not recall being consulted about the establishment of NHS Test and Trace and the contact tracing system as it now is. I guess we will have been told but probably not consulted.

A speculative answer to your question on whether we would have been in a better position had we deployed local contact tracing immediately is: probably. That is speculative and we genuinely do not know that.

It is important to say that NHS Test and Trace is working and the challenge for us is to make it maximally operationally effective, and

locally we are supporting that, but speculatively we probably would have been in a better place.

Q1810 **Graham Stringer:** Covid is a notifiable disease. During the period when communication between the centre and public health officials was not as good as it should have been, were you being notified of every case of Covid in Sheffield or Staffordshire?

Dr Harling: During the first wave a lot of things were done very quickly. With the benefit of hindsight, you could make a critique of those. The important thing for us now is to think about what happens looking forward.

On the gap between the official and actual figures, the main issue during the first wave was the laboratory capacity to do the tests. If you look at the epidemic curve, the first wave looks relatively small. That is not its real size; it is just because most cases were undetected, whereas in the third wave, as now, a much higher proportion of cases is being detected, so we have a much better understanding of the spread of the virus.

Q1811 **Graham Stringer:** It is our responsibility to look at what has happened as well as what will happen. What I am trying to find out is whether, because the central system had some information that it was finding difficult, for whatever reason, to pass down to local public health officials, you were missing out on your statutory responsibility to be notified of people who had been found to be suffering from Covid. The centre knew, but they did not tell you as public health officials. Did that happen?

Dr Harling: Almost certainly, we knew about only a very small proportion of cases. I think the majority of the deficit was due to laboratory capacity and a lack of diagnostic ability, which was not surprising given that this was a new virus.

There were almost certainly communication problems. Those are entirely understandable given the circumstances at the time.

The focus now is on making sure that we have a sustainable system that detects the highest proportion of cases as possible and makes sure that the people who need to do something about it get that information really quickly.

Greg Fell: I give the same answer. I agree that we almost certainly did not find out about all the cases in wave 1. It was a lab capacity issue.

Going forward, the level of intelligence is really good. Most DPHs get daily feeds of pretty much all the intelligence that is available. Arguably, that should have been in place from the start, but again scale and speed precluded that happening and it took some time for the formal systems to catch up with what was happening on the ground.

We can look back with hindsight and say it was not as good as it should have been. That is correct, but going forward I think we are in a pretty good position with regard to notification and intelligence.

Q1812 **Chair:** To pursue Graham's point about financial budgets, it is clear from what you said that this will always be, and should be, a joint national and local enterprise. In evidence to the Committee, Baroness Harding talked about it being a team of teams, but there is a question about whether it is a budget of budgets and whether you have access to it and distribute the budgets proportionately.

The budget for NHS Test and Trace this year is £22 billion—a huge sum of money. Were you part of discussions about how that should be divided up locally and nationally, or were the funding streams simply reported to you as to what you were going to get?

Dr Harling: It was the latter. The decisions about allocations of money were made nationally and the vast majority of that £22 billion has gone into national infrastructure. The fact that the labs are set up nationally is probably not surprising. That is unlikely to be something we would have the expertise or specialism to do locally.

Looking forward, we would want to make the case for a greater share of funding for contact tracing and outbreak management to come to local authorities because we believe we are in the best position to be doing that.

Greg Fell: Again, it is the latter. I give largely the same answer. Early on we had a really good response from Sheffield teaching hospital's lab. That was very early in large-scale testing, so much so that there was an assumption that Sheffield was a hotspot. That was not the case; it was just that we were detecting a lot more than anywhere else, but we quickly got to a stage where we needed the large-scale labs that we now have, which, to be fair, work pretty well. Test turnaround times are pretty good at the moment. It varies a bit over time, but test turnaround times are pretty good.

I understand that most of the test and trace budget is in the test bit, but I would make the same argument as Richard. A larger proportion of the trace component and the wider containment, which we use for managing outbreaks and so on, should be organised, orchestrated and resourced locally.

Q1813 **Chair:** If it is to be done on a team basis you expect to be part of those discussions rather than just recipients of what is decided nationally.

Dr Harling: Yes.

Greg Fell: We would hope so. The challenge for NHS Test and Trace is that it is probably in a position where it can negotiate and have 152 upper-tier local authorities as part of that team. That would be a really

big team and quite difficult to manage, but agreeing some core principles by which the budget should be used would probably help and serve us all.

Q1814 **Chair:** You are the secretary of the Association of Directors of Public Health. Could your organisation not facilitate a means by which directors of public health could talk regularly and intensively on budgets with the Government and NHS Test and Trace in particular?

Greg Fell: The ADPH is involved in those discussions and negotiations. That and what are currently the PHE regional teams are a key part of the efforts to localise many aspects of the response, so ADPH is having those ongoing conversations.

Q1815 **Aaron Bell:** I should probably place it on record that as a Staffordshire MP Dr Harling is my local DPH and that he has been very assiduous in communicating with all Staffordshire and Stoke MPs during the pandemic.

Today, we are talking mostly about testing and tracing, but I want to broaden it out briefly. You have both made the case that there should be more local involvement in the response. I was thinking particularly about the tiering decisions, local lockdowns and so on. Could both of you give your reflections on how you have been involved in the decisions made for your areas in the past year, and how you see that role as, hopefully, case numbers come down and we can start to move down through the tiers?

Greg Fell: We have not been involved in the decisions about tiering. Rightly, I think those are national decisions. We have not been consulted on them. We were informed about the decisions, but I think they are rightly made nationally. As numbers come down—the level to which numbers will come down is a moot point; we have a new variant that is significantly more infectious, and I think we will reach quite a high plateau—a legitimate conversation needs to be had about a much more aggressive locally led approach either to managing this as an endemic disease at a very low level or heading for a zero Covid-type strategy, which is clearly ambitious but is probably the right thing to do. That will require an awful lot more local discretion and flexibility quickly to crack down on small outbreaks before they turn into big ones, but to date the tiering process has been national— appropriately so.

Q1816 **Aaron Bell:** Some councils have clearly lobbied to be moved up or kept in a lower tier. We have seen that played out in the national news. Has that been the case in Sheffield, or have you just accepted the decisions that have come from the centre?

Greg Fell: We have not lobbied terribly hard. Where we have been asked for our views through the regional convenor framework we have tended to take a very precautionary approach. We have not asked for de-escalation when the epidemiology suggests that would not be a sensible thing to do. We have not lobbied terribly hard for one position or another, but occasionally we have been asked what we do think.

Dr Harling: When the decisions have been made to allocate local authorities to tiers, we have been asked for our local views. It is not immediately clear how our views have been taken into account. If we do see a return to tiering, we would like to see much more transparency about the decision-making process and the criteria by which decisions are reached. At the moment, it feels a little opaque.

Looking forward over the next decade, we will need layers of Covid defences: vaccination could well become annual; a level of basic Covid security, so social distancing and good hygiene in workplaces and public spaces; test, trace and isolation, which will need to be an ongoing endeavour; and some support for vulnerable people. That is underpinned by communication.

Under a best-case scenario, that might be sufficient to control the levels of infection down to a background level. For example, the epidemiology might be similar to something like measles. We would have ongoing sporadic cases punctuated by occasional outbreaks, probably in communities with low vaccination uptake. Under a more pessimistic scenario we would see ongoing transmission at relatively high levels.

There is a big question about the extent to which we maintain more stringent and intrusive societal restrictions. That is a matter of profound debate with the public. People's compliance thus far has been remarkable and the public should be congratulated for that. If that were to become more long term, we would need to be clear that we had a mandate for that and had thought through the benefits and harms of societal restrictions very thoroughly, and we would have a debate with the public about the relative priorities of protecting the vulnerable and the NHS against education, the economy and all the other freedoms and rights that we used to take for granted.

Q1817 **Aaron Bell:** To be clear, in your more optimistic scenario where you might get local outbreaks, I presume the case for local mini-lockdowns should be dealt with at local level.

Dr Harling: Absolutely. If we are restricting people's movements and freedoms, we need a mandate from the public for that. It is difficult to see how those conversations could be had, national to hyper-local. For example, we might be restricting the movement of people on a particular housing estate where cases are very high. We would want to be able to have a proper discussion with the public about the reasons for that, what we expect them to do and how long we expect them to do it. Again, our relationships with our local communities would be crucial in that scenario.

Greg Fell: Richard has made my point. It is the local relationships, local knowledge and the ability to be a credible and trusted leader locally that will probably make a difference. Compliance has been high, but the public's patience will wear thin eventually. I think we will need to come back to that.

Q1818 **Dawn Butler:** Dr Harling, on the back of the last question, as I understand it, local authorities were given the power to act locally if there was a local outbreak, but they were not given any funding to enable them to do that. You could say to somebody on an estate, "You need to self-isolate," but local authorities were not given any funding. Is that correct?

Dr Harling: Under the health protection regulations there are two sets of powers that are probably relevant. The first one is powers in respect of individuals. Where people are non-compliant, we have the power to remove them and detain them to a place of safety that protects the public. That is quite difficult to do; certainly in Staffordshire we have not used it, and I do not think it has been used nationally.

The second set of powers that we have relates to businesses. Where businesses are non-compliant with the expectations around Covid security, we have the power to issue directions to limit their activities or close them. That is a power we use sparingly. Our approach is very much to help businesses to understand what they need to do and encourage and support them, and use those powers only as a last resort for the worst offenders. We have used them in a handful of cases thus far.

Q1819 **Dawn Butler:** Mr Fell, how long did it take you to get access to the NHS system, CTAS?

Greg Fell: From April/May when it was established to approximately September/October. Basically, when we stood up our local contact tracing service, which from memory was in early October, we had access to CTAS. Most of us have been asking for it for quite a considerable time. The problem in the main was technical rather than a political block.

Dr Harling: If I recall, access to the CTAS was around summer to autumn. We now get pretty good data coming through CTAS. I do not think we yet have the right capacity. If this was a national system locally delivered, we would need to make sure that we cannot just see the data but can also enter data ourselves.

Q1820 **Dawn Butler:** In Brent there was frustration about getting access to the data needed in order to be effective.

We have heard a lot about stepping up test and trace from a standing start. It has been equated to stepping up a supermarket chain. We are hearing that when it comes to vaccinations it is essentially the same. If local authorities had been given more control and responsibility, would it have been so hard to step up what needed to be done in regard to vaccinations?

I dovetail that with the fact that when the NHS itself, not private companies taking the title of the NHS, works with local authorities we have seen how much smoother the roll-out can be compared with vaccinations. I do not know whether either of you has a view on that.

Greg Fell: Operationally, vaccinations are going at some scale really quickly, and credit goes to the NHS for having done it. It is clear that

many tens of thousands of people have been vaccinated, and that is making a big difference. Our job is to ensure we have the right tactical support to enable the NHS to do its job—tents, marquees, transport, gritting roads and all those kinds of things—stitch together the comms and local and regional engagement with communities that may be hesitant or fear safety problems and address the inequalities in vaccinations. Sticking needles in people's arms is one thing, but we need to make sure that we are not missing people.

Collectively, the NHS effort has been astounding. The local authority and combined NHS effort will get to where we need to be, which is a pretty high rate of vaccination, reasonably quickly.

Had we been in the same space with regard to NHS and local authority involvement in testing and contact tracing, yes, we might have been in a different space. As Richard said, there was not the local capacity to scale up the lab to the same level as needed. We needed large national assets. They could have been NHS assets, but as it is they are not NHS assets, but what we have demonstrated is that the interface of local authority and local NHS—clearly, the NHS fits within a national system—has made a difference with regard to vaccination. Arguably, we may have adopted the same approach to NHS Test and Trace, but I can only speculate on what it might have been like because we are looking backwards.

Dr Harling: The vaccination programme has made a really good start. One of the lessons, if you contrast the approaches, is that the vaccination programme has used existing organisations and systems. We are using NHS staff to do most of the clinical procedures, and local authorities are supporting with premises, logistics and administrative staff, so we are building on what is already there.

One of the lessons from Covid is that that approach is more likely to be successful than reinventing organisations and new systems, which inevitably require a period of several months to bed in.

Q1821 **Dawn Butler:** That really hits the nail on the head. If we focus on using the public health infrastructure that is already there rather than try to recreate something, like an app that does not work, we end up spending billions of pounds on something that is not sustainable.

My last question is about behaviour. Right from the very beginning we were told that if people got mixed messages they would be less likely to comply with what they need to do. What has been your experience of dealing with national messaging, as opposed to trying to get out your local messaging?

Greg Fell: On compliance per se, police, environmental health and others tell me that compliance is pretty good. I have seen other evidence that tells me compliance is pretty good. I have two concerns about "compliance". One is people's financial ability to comply, which has been well trodden. The second one is household-to-household mixing.

On comms, someone told me the other day that there had been 280 changes to the guidelines over the course of the pandemic. I do not know whether that number is true, but there have been a lot and there are some inconsistencies between different guidelines.

Locally, to be clear we have not ignored the national guidelines, but we have taken an approach to try to simplify them. You boil down all the guidance to the basic fundamentals of disease transmission. What we have tried to do is focus on the core messages that transcend all the guidance and be really clear about communicating why some of these things about washing hands, wearing face coverings and so on remain really important.

There have undoubtedly been mixed messages from different parts of government. The government comms challenge is really difficult. Our job locally has been to try to convey the right and consistent message throughout the course of the pandemic. I think we have managed to achieve that. We have done it by simplifying and cutting through some of the confusion.

Dr Harling: I agree with Greg. On the whole, compliance has been good. Most of the people are following most of the rules most of the time, and the sacrifices people have made have been quite remarkable.

Looking forward, one of the lessons is for communications to focus on key principles. "Hands, face, space" is an effective message; I think people get that. Sometimes people are tripped up where the guidance gets too detailed and too far down into the micro-management of whether particular types of club can open or close. People can get confused if they get too bogged down in the detail. I would suggest keeping to a core set of principles and reiterating that consistently. That will be the best way to keep compliance as good as possible.

Q1822 **Zarah Sultana:** I want to touch quickly on testing in different workplace settings. The Government have paused lateral flow tests being rolled out within education settings. What are your thoughts on the use of lateral flow tests, which have divided many in the scientific community?

Dr Harling: I think they are an opportunity. The opportunity they present is to detect more cases and to do so quickly. They have limitations and they are not without risk. The risk is that they have a relatively high false negative rate. The official statistics from the Government show a false negative rate of approximately 25%. I think the experience in Liverpool suggests that it might be higher, albeit that the cases missed are less likely to be infectious and, therefore, less likely to be significant.

Where it is used as a case-finding tool I can see potential upsides and relatively few downsides. For example, if 100 people are following the background rules and we test them and find 10 cases, we benefit in all those 10 cases because those are 10 people we can isolate. If we miss

five cases, they are the ones following the rules, so nothing has changed. We do not introduce any additional risk.

Things get more difficult where we use it as a tool for what we call "test to enable", which means people's behaviour changes based on the results and they are given certain permissions. The example in schools—what is called serial testing of close contacts as an alternative to isolation—was suggested. The risk is that we fail to detect cases and they continue to access school and the virus spreads. I would not necessarily suggest that that stratification is never introduced, but it would have to be done quite carefully and cautiously in the context of a careful risk assessment of benefits and the potential harms that could arise.

Greg Fell: I would give the same answer. Asymptomatic testing with lateral flow devices is one component of testing. By far the most important component for testing is a rapid test for those with symptoms, which goes to a lab for PCR. Testing in itself is one component of everything else, and it is the "everything else" that makes the difference. Lots of emphasis is placed on lateral flow testing as the answer. By itself it is helpful, but it is not the answer.

My views are largely the same as Richard's. It can reduce but will not eliminate risk. It is one part of a much, much broader system and we forget the broader system at our peril. It needs to be carefully used and in the context of fairly standardised operating procedures. Most directors of public health worry about the false negatives and the false reassurance that can give. That can be risk-managed, but the risk cannot be eliminated. It can be used as a tool to reduce but not eliminate risk.

I agree with Richard that it can be a tool for case finding. In both contexts you can find cases and interrupt disease transmission chains, but it needs to be carefully managed and should not be used indiscriminately.

Q1823 **Zarah Sultana:** What are your thoughts on the use of pooled testing, for example, as an alternative approach within education settings?

Dr Harling: If you are referring to pooled saliva testing, sometimes referred to as LAMP testing, I believe, I have not seen very much in the way of formal evaluation. I have seen some early scientific papers that suggest it has promise. I know that some universities were thinking of doing it in halls of residence; in other words, all the students provide a saliva sample in a communal pot. That pot is tested. If there are no positive results, it means you can exclude a whole hall of residence.

It has some potential advantages of convenience and speed, but if it were to be introduced at scale we would want to make sure we understood the benefits and potential risks arising from it.

Q1824 **Zarah Sultana:** I want to ask about your experience of the roll-out of rapid testing for social care workers. Have you experienced any issues

locally?

Greg Fell: We are rolling out rapid testing in various social care contexts. The tests have proved to be popular. The "but" is that the rate-limiting step is the resources to undertake the test because it is another process introduced into a system of care that is fairly poorly resourced.

The thing that has made a difference—for example, in care homes—is weekly staff testing. That has certainly made a difference in the reduction of disease. Adding lateral flow device testing to that on a more regular than weekly basis can undoubtedly add to further risk reduction. The rate-limiting step is the resourcing and ability of care homes to undertake that, which is proving problematic for some care homes for understandable reasons.

Dr Harling: The policy is that all care home workers are tested twice weekly with a lateral flow device. We are also introducing it locally for workers in home care and other care settings. There is significant potential benefit in identifying more cases, particularly in care homes where there have been so many outbreaks and, unfortunately, so many deaths.

Greg's point about the capacity of care homes to be able to do these tests is something we have also experienced. The Government have mitigated that in the past couple of weeks with £149 million across England, which has come down to local authorities. That will help to fund this endeavour, although care homes will have to think about where they get these people from.

Longer term I think we will have to consider this in the context of the care workforce. This is a sector that over past decades has struggled with recruitment. Doing lateral flow tests and PCR tests can be a little unpleasant. I have done it myself; it is not the most fun I have ever had, and if we are doing it three times weekly on all members of staff that might be another disincentive to work in the sector. We might need to consider how we mitigate that longer term.

Q1825 **Zarah Sultana:** The Government have indicated that Test and Trace is working with Departments and businesses to support regular workplace testing. Have you been involved in any of these discussions?

Dr Harling: We are aware of a series of national asymptomatic testing programmes. For schools, it is managed through the DFE; there is university testing at the beginning and end of every term; there are care homes, which are managed by the Department of Health and Social Care; and there is a programme for businesses as well.

A bit of an issue is that those programmes do not join up perhaps as well as we would like and they operate to slightly different rules in terms of the standard operating procedures.

It is not clear to us which businesses locally have been selected for inclusion. We have come across a number of businesses locally—typically, relatively large nationals or multinationals. It is not obvious to us that it is being done in a particularly systematic way.

We are also looking to roll out national flow testing to our local businesses. It would be really helpful to understand what the Government are doing so we do not waste time and duplicate that with our own local effort.

Greg Fell: As a local DPH I give the same answer as Richard. We are sighted on some but by no means all of what is happening across the business sector within each of our patches. Some businesses will contact us, but not many, so we are not sighted on what we do not see.

Nationally, ADPH is involved in ongoing conversations with NHS Test and Trace and government more broadly. The ask—we are all in this space—is for a common strategy across the whole of government for the roll-out of lateral flow device testing as one component of a wider testing strategy, which is easy to say but hard to do, so that all stakeholders are clear about who is being offered what and what the standard operating protocols are. That is work in progress and it needs to be brought together.

Q1826 **Aaron Bell:** I want to ask about the impact of new variants on your work. First, on the variant that originated in Kent, do you have access to data on how prevalent that is in your areas? Secondly, given that it is more infectious, what implications does it have for local contact tracing?

Greg Fell: We have pretty much all the data we need. From memory, 67% of cases are new variant in Sheffield. That has been going up and we expect it will continue to do so. PHE supplies us with that data on at least a weekly basis. That works as it should.

On the impact, my sense is that it is more infectious and, therefore, as rates come down they will settle at a higher new baseline than would have been the case before the new variant emerged. I am speculating, but that appears to be what is happening now. Therefore, we will end up with a higher baseline, which means we have to work a lot harder. The control measures are exactly the same. The issue at point is the vigilance with which we implement the control measures, both state-funded services but also individual behaviours.

Dr Harling: Similarly, we have data on the proportion of new variant cases, which is currently estimated to be 75%.

As for our control efforts, I do not think we are doing very much differently. I agree with Greg that this is likely to mean that the number of cases settles at a higher level and that we will need to maintain those Covid percentages for the longer term.

More generally, unfortunately Covid has demonstrated that it is a relatively versatile pathogen and will continue to evolve in ways that may confound our control efforts. I think the risk of vaccine escape is the greatest one.

As we understand it, the vaccine will protect against the Kent variant, but there is less confidence about the South African and Manaus variants, and they certainly will not be the last. Therefore, updating vaccination, reformulating it and administering it annually, or perhaps even more frequently, will I suspect become a feature of life over the next few years.

Q1827 **Aaron Bell:** The Secretary of State for Health and Social Care said that "we have enhanced contact tracing" to stop the new South African and Brazilian variants spreading. Is that something in which you have been involved? Have your local teams had to do any enhanced contact tracing with regard to these variants?

Dr Harling: I do not think we are doing contact tracing any differently in the light of the new variant. I just think we are doing more of it because there are more cases to contact trace. The referral to enhanced contact tracing is sometimes used to mean a more detailed exploration of where people might have caught the virus, as well as finding out to whom they may have passed it on. We have been doing that for many months now. We had some very good data on sources of exposure. At the moment the main one appears to be workplaces; in the previous lockdown it was household transmission. That is very useful information to help shape our control efforts both in prevention and response.

Q1828 **Aaron Bell:** Mr Fell, have you had any experience of the South African and Brazilian variants in Sheffield? If so, has that experience been any different in terms of what you do?

Greg Fell: The response is the same. I am not aware that there is the South African or Brazilian variant within Sheffield. It may be there, but I am not aware of it yet. That will probably come. The border control measures clearly are important in that context.

As for enhanced contact tracing, we are in the same space. We make great use of the common exposures dataset. Enhanced contact tracing is sometimes also called reverse contact tracing, which is, "Where did I get it?", instead of, "Whom did I give it to?" You can track infections back to a point source. Arguably, there are too many cases at the moment for reverse contact tracing to be optimally effective, but if and when the case rate comes down reverse contact tracing will have a big role. It is certainly one of the things we want to get into, probably by the summer of 2021.

Q1829 **Aaron Bell:** On reverse contact tracing, one of the controversies last year was about the extent to which hospitality settings were the sources of outbreaks. Hospitality pointed to some very low numbers; other people pointed to cases that could not be traced to anywhere, and the

assumption was that they were perhaps coming from hospitality. What thought do both of you have based on your own local experience of how important hospitality has been as a vector for transmission of this disease?

Greg Fell: Most of the transmission events are household-to-household transmissions. Hospitality does not crop up as a terribly big factor on our risk radar. When we look at the common exposures dataset, hospitality is not a huge risk. Hospitality is largely closed at the moment. There will have been transmission events within hospitality, but it is nowhere near the top of my risk radar.

Dr Harling: Similarly, back in the summer and autumn, once you put transmission between household members aside, the next most important one was transmission between different households. The hospitality sector did feature, but much lower down the list. At the moment, with the hospitality sector closed our main one is other businesses and workplaces.

Chair: I thank our witnesses for their time this morning and for their very important work. It has been very challenging for a year now. As has been very clear from the evidence session today, we will be relying on you and your colleagues across the country for some time to come. We are very grateful for what you do, and perhaps you would convey our thanks to your fellow members and colleagues.