

TUESDAY 17 MARCH 2009

Present

Crickhowell, L
Haskel, L
Jenkin of Roding, L
May of Oxford, L
Methuen, L
Neuberger, B
Selborne, E of
Sutherland of Houndwood, L (Chairman)
Whitaker, B

Witnesses: **Professor Lindsey Davies**, CBE, National Director of Pandemic Influenza Preparedness, **Mr Bruce Taylor**, Deputy Director for Pandemic Influenza, **Ms Janet Meacham**, CBE, Deputy Director for Pandemic Influenza, and **Dr Becky Kirby**, Head of Human Health, Civil Contingencies Secretariat, Cabinet Office, examined.

Q47 Chairman: May I say welcome to the four witnesses, two of you at least coming back, and we appreciate your taking the trouble to do so. Our regrets that the Minister is unwell. I do hope you will send her our good wishes. We anticipate her getting better and coming in at a later date, which we would find very helpful to the work of the Committee. Can I simply remind you that everything is on the record, the microphones are voice activated and you know the implications of that, and we have a series of questions we want to put to you over the next hour or so. If there are some matters that we do not get to that we are very keen to have a comment on, we may ask for a written response, but knowing that we will be inviting the Minister in, there is a bit of leeway for us to follow up there. So again thank you very much for coming. I wonder if you could introduce yourself simply for the oral record?

Professor Davies: Certainly. I am Lindsey Davies, I am the Director of Pandemic Preparedness at the Department of Health.

Mr Taylor: I am Bruce Taylor, I am one of the deputy directors of the Pandemic programme.

Dr Kirby: I am Becky Kirby, I am the Head of the Human Health desk in the Civil Contingencies Secretariat of the Cabinet Office.

Ms Meacham: I am Janet Meacham, another deputy director of the Pandemic Flu programme and my area of responsibility is NHS and social care implementation.

Q48 Chairman: Thank you very much indeed. We wanted to start with a few questions about preparedness UK, and the first one which I want to raise is to ask you about the emerging outcomes of the review of preparedness in the NHS following the primary care trusts' preparedness survey. What has come out of that, and have there been gaps identified and possible remedies if they have?

Professor Davies: I would be very happy to talk about that in a moment. The Minister very much regrets that she is unable to be here, and we did have one or two words that she was hoping to say to you had she been here, so if I could just perhaps take a moment or two?

Q49 Chairman: Yes, please. Sorry, I should have asked. Do put that on the record, that would be helpful.

Professor Davies: Thank you. She does very much regret that she is unable to be here today due to ill-health, and this of course is not a decision that she took lightly. It is a very difficult one for her.

Q50 Chairman: We understand.

Professor Davies: She was very pleased that she was able to meet you last November, and I think we are conscious that you have taken evidence from a number of experts since then. As she mentioned when she appeared before your Lordships last year, the Government's national risk register of 2008 highlights pandemic flu as one of the biggest risks facing the

UK, and to address this very real risk, the Government has concentrated on putting in place effective plans across the entire NHS, but also on ensuring that other sectors of commerce, industry and public services are well prepared. Now having developed these plans over the last few years in fact, we have largely moved on now from formulating strategy into the operational phase, and that is really where we are positioned at the moment, in terms of the programme. Our plans are really firmly rooted in the best available evidence, and we are constantly refreshing those. They are, wherever possible, based on existing services and systems, and in fact, we are already finding that the work we have done on preparedness is strengthening many of those systems across the NHS and elsewhere, so that is a very nice side effect. Our plans are also proportionate, we are very conscious of the context of the many other pressures facing government and society and indeed the NHS, but above all, our plans are very practical. We are taking implementation of the plans very seriously indeed, and we have made a lot of progress. We tested our plans in Winter Willow in 2007, we have a suite of further exercises planned for 2009, but we do remain very vigilant and we recognise the need for challenge, so we very much welcome this sort of opportunity. We are also taking forward now our procurement of countermeasures, including antivirals, pre-pandemic vaccine, antibiotics and face masks, and also the infrastructure to make sure that all of these things get to the right people at the right time. We are not interested in just having stockpiles that sit there, they are for use, and we want to make sure that we have confidence in the way they are going to be used. This year we are also planning to update the national framework. As you know, this was prepared in 2007, a lot has happened since then, so we will be refreshing and revising it, and we hope to be able to publish the revised framework by the end of this year. We are, of course, also very aware of the pressures on the NHS, this year and every year, but particularly the concerns about the pressures a pandemic will put on NHS services, and that is why we have been taking the advice of a whole range of experts in the

field, including some of those who came along to see you, I think, in February. We are really grateful to all these people for the help they have given us, we could not do it without them, and we do want to put our thanks on the record, because without them, as I say, we could not have made the great strides that we have. So on behalf of the Minister I really would like to assure the Committee that we are equipping the UK to respond to the pandemic quickly and effectively. The UK is recognised as being at the forefront of preparedness internationally. In fact, other countries are now coming to us for advice. No other country in the world has done more than we have to ensure that we protect the population and that we minimise the pandemic's impact, and we are delighted to have this opportunity to talk to you about that this afternoon. Thank you.

Q51 Chairman: Thank you very much, and we share with you the gratitude for the generosity of specialists who have come along, not least our own specialist adviser, Sandra Mounier-Jack. We had a very important and worthwhile seminar. All that you have reported, so to speak, on behalf of the Minister I am sure are points that will come up in the discussion as we go through that are fundamental to many of our concerns, but perhaps we could simply go back to the review of preparedness, and the questions I raised about that in relation to primary care trusts, and identifying gaps and so on.

Professor Davies: Indeed. As we mentioned before, we have just been undergoing a self-assessment process across the NHS, where all primary care trusts and other NHS organisations have been asked to submit their own self-assessments. They submitted those by mid-February, and they are currently being reviewed by the relevant strategic health authority for their area. Once those reviews are complete, because obviously we want to make sure that the self-assessments are suitably challenged, to be honest, we will then be reviewing those with each SHA during April. So I will be meeting each SHA with a colleague from the NHS performance management side to explore with each strategic health authority how things have

gone in their patch, and part of that process is ensuring consistency in the assessment across the country. So by the end of April, we should have a clear picture of where the strengths and weaknesses are. We do not have that picture for you yet, but as soon as we do, we will be able to reflect more effectively on it. We did go through a similar process last year. The questions were not exactly identical, we have revised them in the light of experience, but we did have some learning from that, and we have been using that to inform our plans, and we know that within the NHS the whole process of self-assessment this year is helping all NHS organisations to improve the plans they already have in place. It really crystallises the mind when you see the questions that you perhaps are not able to answer as strongly as you would like. So that is the overall picture. We can give you more detail about how we used last year's assessments if that would be helpful, and how we plan to use these.

Q52 Chairman: So effectively you are saying of this year's assessment, it is too early to tell yet. I wonder if the most useful thing to do therefore would be to ask if you can put together a report when you have the results in that we could share with the Committee, because we have had the opportunity to talk about last year's assessment, but it is whether there was progress being made was really the interesting point. So I wonder if that is the best way to handle that one, to ask you for your own reflections perhaps at the end of April, when you have looked at all the evidence?

Professor Davies: We will happily do that.

Chairman: Because I am keen to move on, we have a lot of ground to cover, and I will ask Lord Selborne to pick up the discussion.

Q53 Earl of Selborne: I was going to ask how many local authorities have held joint testing of preparedness between resilience fora and the National Health Service, and have any lessons been learned from this?

Dr Kirby: I will take this question on behalf of the panel. I can tell you that 35 out of 43 local resilience forums in England and Wales have taken part in joint testing of preparedness between the health and non-health strands of pandemic planning. If you do the maths, this equates to approximately 350 local authorities, which I think was what your question specifically asked. I do need to caveat that figure slightly, the 350 figure, in that we cannot be sure that every local authority in the 35 LRFs I mentioned actively took part in the exercise. All of those exercises have lessons identified reports. As a result, those are owned by the LRFs themselves and so they are not held centrally by the Cabinet Office or the departments. There is also a Cabinet Office led exercise programme which is underway which is exercising one local resilience forum in each of the nine English regions, and these are multi-agency exercises which test NHS alongside local authority colleagues and others involved in the multi-agency response. These exercises include 94 local authorities by the time the exercise programme is complete, which is the end of this week. We are heavily involved in the lessons identified process from this programme, and we are planning on publishing a summary of the lessons identified from each of those exercises, and also some details on how we plan to address those nationally.

Q54 Earl of Selborne: Could you just give us a feel as to the lessons learned from the fora? Is there an overarching theme which comes out of it?

Dr Kirby: The overarching theme that comes out of the exercises we have been involved in is a need for a clearer defined decision-making process around the management of excess deaths and how strategic co-ordination groups move from phase one to phase three, different ways of working to cope with excess deaths. Off the back of that, we have developed a question and answer document which aims to address those issues which we plan to circulate to local resilience forums within the next few weeks. Communications messaging is coming out as a clear gap for them, and the need for us centrally to provide them with an indication of what

the Government's messages would be at different WHO phases, again work is underway to address that; and finally, the sort of key lesson coming out is our social care planning and linking up between local authorities and primary care trusts in order to address that social care need. Again, I think that particular gap is the result of the fact that guidance was issued but issued quite recently, so it did not have time to embed before we started our exercise programme, but we are certainly seeing advances in that area now.

Q55 Lord Jenkin of Roding: Could you give us an impression of roughly how many people in each of the local authorities that you have described to us have actually been involved in this? How far down does it go? Is this at the management level, or has it involved anybody below that?

Dr Kirby: The local resilience forums have clear guidance about who should sit on their planning committees and who should be involved in exercises. In terms of local authorities, our guidance is it should be people who are involved in deaths management, social care and forming those linkages between health and non-health response. I could not give you a clearer picture than that on the exact level of engagement.

Q56 Lord Jenkin of Roding: Are we talking about 20 or 200 or 2,000? How far down does this go?

Dr Kirby: The level of awareness within local authorities goes very far down, and the level of engagement on planning committees would be much fewer, sort of individuals, key leads within local authorities for each local resilience forum.

Q57 Lord Crickhowell: A very quick supplementary on that. You referred to the lessons from English regions. Is the Cabinet Office co-ordinating the same lessons from Wales and Scotland, and if so, are there any additional lessons?

Dr Kirby: Yes, Wales has a regional level exercise planned for later this year, which will involve local resilience forum equivalents in Wales, and those lessons identified will also be made available in the public domain. Scotland also have their own exercise programme and will be conducting their own lessons learned process on that, but we are engaged in those exercises and we will be engaged in the lessons identified processes as well.

Q58 Lord Methuen: What account has been taken of the probability that some drivers in the logistics chain will become ill or for pandemic-related reasons may not turn up for work? What sort of contingency planning have you done for this?

Professor Davies: Well, this is clearly a very important matter, and it is one which we have taken really seriously. We have a number of workstreams in place.

Dr Kirby: I think the key thing to note is we are making proportionate preparations for the disruption that pandemic influenza will have in terms of staff absenteeism on the logistics, drivers and the whole of the supply chain. Firstly, we have been engaging with all Government departments that have a stake in this, in order to drive forward business continuity planning in the relevant sectors. That includes providing specific guidance, providing checklists and also one-to-one support if requested in order to help them drive up their planning on the whole of the supply chain, not just on the drivers element. Many of the people that we have engaged with are actively taking this forward. For example, the retailers have looked at their supply chains; all of them that I have spoken to have plans to prioritise their supply chains for essential services, food, milk, et cetera, rather than clothing or luxury goods, which is definitely a step in the right direction. In addition, we have also looked at the legislative framework within which our logistics operations and supply chains operate. They are also on an end-to-end basis. So, for example, HGV drivers will be able to work longer hours to deliver goods to supermarkets if we utilise the flexibilities that we have in place under drivers' hours regulations. At the other end of the chain, supermarket staff will be able

to work longer hours to receive goods by utilising the flexibility under the Working Time Directive. So we have taken an end-to-end process, looking at the business continuity framework and the legislation framework, in order to give ourselves the confidence that this will not fall down in the pandemic.

Q59 Lord May of Oxford: This is a question that Lord Broers, who could not be here today, was keen that we ask, and it is based on his understanding that Australia and New Zealand and, for all we know, other countries are planning to (or at least thinking about discussing whether to) close their borders in the event of a pandemic, perhaps in the case of Australia and New Zealand motivated by the fact that they did avoid the worst effects of the 1918 pandemic by virtue of remoteness, admittedly in a different world. I appreciate that it is a different world, and I also realise that some of the reasons for not considering it are that it is not merely inconvenient but maybe infeasible, but none the less, it is in my view (and Alec's) certainly something that ought to be considered, and I just wonder to what extent we have.

Professor Davies: We definitely agree it needs to be considered. It is probably again better for Becky to give you the details, because a lot of thought has gone into this already.

Dr Kirby: To address this policy, we looked at it back in 2005, again more recently in 2007, and it is constantly under review to sort of take advantage of any sort of scientific breakthroughs that we get. The fundamental thing is a balancing act between knowing what the positive result of border closures or international travel restrictions would be, in terms of delaying the pandemic, but weighing those up against the specific impacts that the UK are likely to face, which may be different from Australia and New Zealand, as a result of these closures, and that is the balancing act that we have tried to do. Our SPI modelling paper, which is in the public domain, shows that neither border closures nor more limited specific restrictions on international travel would delay the pandemic for a significant amount of time,

and the key thing is not an amount of time which will allow for a pandemic-specific vaccine to be manufactured.

Q60 Lord May of Oxford: With respect, this is my subject, it is a subject that Roy Anderson and I are largely responsible for creating, and one of those studies at least shows that a combination of targeted local prophylaxis is far more effective than closing borders, but the original and still one of the best studies by the Imperial College group shows that if in addition to that you close borders, then in some of the simulations it is not so much just delaying it, you halve the total number of cases below -- it is much more effective to be targeted local prophylaxis, but none the less, added to that -- I do not think it can be dismissed on the basis of modelling saying it does not work. There are larger questions furthermore in that you have to think, if you postpone it, then you have more time to be developing a vaccine, and it gets much more complicated than that. I would have been myself much more convinced by the argument that it is a mixture of infeasible and dreadfully inconvenient, but I would like to hear it said. But you cannot invoke the models as the reason, in my opinion.

Professor Davies: We totally would share that. It is balancing risk, as everything is in pandemic management. Having looked at the practicalities of closing the borders, and you would need to get at least a 90 per cent secure closure in order to have really any significant impact at all, that would divert so many people to closing the borders away from the things that they might profitably otherwise be doing, that we think feasibility arguments are very powerful, in terms of doing it. Equally, to get a 99.9 per cent closure, which would really give us a significant delay, as we understand it, we just do not think that would be do-able, given the number of ports we have, and the situations that we have in the UK, but Becky can talk about the implications.

Q61 Lord May of Oxford: The Australia/New Zealand experience in 1918 did not get 99.9 per cent closure. That is an interesting thing worth looking at. Admittedly, there was much less travel, so that you are trying to diminish something that was smaller. But I do not want to pursue this any further, I just think it is the sort of thing that I think has been brushed aside because it is too anti-prevention.

Dr Kirby: We have mapped out the impacts, we have not just looked at modelling and how long it will delay. We do weigh that up against the impacts it will have, not only on the economy but on businesses; our ability to import essential medical supplies, for example, which save lives regardless of the pandemic, which the UK is reliant upon. So it is a case of managing all of those issues. My understanding on the Australian situation specifically is that for a future pandemic, they are proposing to restrict travel from what they are calling high risk countries rather than implementing a full border closure, which modelling a map of the UK suggests that because people reroute via other countries and come into the UK indirectly from south-east Asia or other places which we might consider high risk, then it really would not have significant impact in delaying the pandemic, hence why our policy is so different to Australia.

Q62 Lord Haskel: Just very quickly, have you taken public perception into account? Surely the public would expect us to close the borders?

Dr Kirby: I think border closures is one of the first decisions which will need to be taken once WHO raise their alert level to alert level 4 and I think it would be naive to expect us not to come under some pressure from the public to close borders. However, the general public are quite savvy nowadays and also the media. I do not think it would take them long to realise what the impacts of border restrictions would be, or to look at the scientific papers that we have published and independent scientists have published which suggest that border closure policy would not necessarily work. Similarly, if we were to adopt a position like Australia,

I do not think it would take long for the public or the media to realise that people were coming to the country from infected areas, routed via other large hubs, Paris for example.

Q63 Chairman: Presumably there would be a difference between a short-term closure to buy some time to develop, if one possibly can, a new vaccine, and clearly the maleffects of longer term closures, where you have -- well, we are not a self-feeding country, just for a start.

Professor Davies: The time involved in developing a pandemic specific vaccine and having enough of it to distribute to us and other countries would be a number of months, and even if the technology moves on, our understanding is it still takes some considerable time. So yes, it is an attractive concept, but we cannot see that it would work because of the risks to our own supplies at the same time.

Chairman: You can see we have elements of scepticism about that, but we will move on with Lord Haskel to another question.

Q64 Lord Haskel: We move on to the preparedness of the NHS and we wondered what is going to happen to the 3.3 million doses of the H5N1 vaccines when they pass their shelf-life, when they are beyond their sell-by date. What is the cost of the recurrent provision of the vaccines and the antivirals, and will they be used for key frontline workers?

Professor Davies: We currently have a stockpile, as you say, of 3.3 million doses which we purchased in 2006 from two different suppliers, Baxter Healthcare and Chiron Novartis, and these vaccines are not currently licensed. At the time of their purchase, there were no licensed vaccines. When we bought them, we thought it was definitely the best way; it was again balancing the risks, we would rather have a vaccine than no vaccine, so that is where we are. At the moment, we are testing them regularly and they are standing up well, so we have

not seen any decrease in potency as yet, but we are continuing to keep that very much under review.

Mr Taylor: Essentially we work with the National Institute for Biological Standards and Control, who carry out the tests for us, as well as with the actual companies. We bought them over a staged basis during 2006, and actually that also helps us; as the tests happen, if they do start to get early indications that the stability is becoming less beneficial, then actually we will get early warning to that. Really at that stage we probably have two main options. One is to use it as originally intended and make it available to frontline healthcare workers. As Lindsey has referred to, the fact that it is a use of an unlicensed vaccine does increase potential risks, particularly given that there had been no increase in the pandemic alert at that stage, but what we are doing on that is that we are actually now seeking advice today, at a meeting of the Joint Committee on Vaccination and Immunisation, around their views on the safety issues of if we did choose to go down that line at some point in the future, what their view would be. The other part would have to be in terms of our ongoing review of pre-pandemic vaccine anyway, and therefore to be looking at the replacement strategy for healthcare workers and potentially others as well, as part of that strategy. So therefore, it is a two-pronged approach that we are now taking.

Q65 Lord Haskel: But do you have a replacement strategy? How long do you expect these current doses to last: years, months?

Mr Taylor: This is the thing, we genuinely do not know, because buying a vaccine and keeping it for that long is actually quite a novel thing to be doing, because normally people buy vaccines and then use them within the year of expected use. So what we are doing is keeping these monitoring tests going because of the fact that actually that enables us to be able to see how long we could be able to keep them for. As I say, because it was staged, we will get an early view of when it starts to become a potential issue. What we are having to

look at very closely though is also then the manufacturing timescales. With the current manufacturers of our pre-pandemic vaccine, there is now one licensed product, but there are a number of other products on the market as well, in order to see the windows of opportunity that provides, so if we were then looking to a situation of replacement, when we would have to be making those commitments in order for it to happen. As I say, it is balancing that monitoring against actually having the plan to be ready if things start to suggest that we need to look for a replacement.

Chairman: Thank you for the clarity, we genuinely do not know, that is refreshing. We move now to Lady Whitaker.

Q66 Baroness Whitaker: Turning to new work, can you tell us how you ensure that recent advances in pandemic and pre-pandemic vaccine developments and new information on the resistance to antivirals become incorporated into policy?

Professor Davies: We have a Scientific Pandemic Influenza Advisory Committee, which is a large committee, and which advises not just the Department of Health but all departments across government on matters related to pandemic influenza, and we look to them for considered advice on every scientific aspect that we can, including antivirals and vaccines and so on. On the vaccine side, we do also look to the JCVI, the Joint Committee on Vaccination and Immunisation, that we were referring to earlier, for their very specific advice. They really are the experts in the field and we take their advice, as we are today, very frequently. We also do have a range of experts who we talk with, as I was saying earlier, individually, to make sure that we really are keeping abreast of what is happening in the field and at the cutting edge as far as we are able to. In terms of the system that we have in place to translate the advice of those committees into policy, and to seek their advice, Bruce, do you want to talk about that?

Mr Taylor: Yes. Just to give you a couple of examples of it working in practice, you will probably be aware that we are now increasing our stockpile of antivirals to cover 50 per cent of the population. Following on from the discussions with SPI around issues on resistance to antivirals, what we have now agreed that the part of the procurement that is taking place is to not only increase our supply of Tamiflu, which was the original stockpile that we had, but also to include within that 50 per cent a strategic stockpile of Relenza, so that we are now buying 10.5 million courses of Relenza within that total. What that essentially means is that we will still aim to start the pandemic using Tamiflu, because that is the easiest one for people to take, the one that is recognised, but what it also then means is if other issues arose because of resistance during the pandemic or other concerns were being raised, it does mean that we have this back-up situation of having some Relenza to be able to use on a targeted basis if that situation arose. What it also means is if there was in fact a higher attack rate in the pandemic, we would be expecting to use both Tamiflu initially and then Relenza subsequently as part of our overall responsive treatment.

Q67 Baroness Whitaker: So that is information from your own operations?

Mr Taylor: Yes.

Q68 Baroness Whitaker: Which obviously can be very rapidly put into policy, but your Scientific Influenza Committee, is that people from all over the world, is it British academics, who is on it?

Professor Davies: A bit of both actually. It is largely British academics, but we do also have a number of people from Europe and further afield, WHO --

Q69 Baroness Whitaker: Does it meet regularly on a standing basis, or is it ad hoc?

Professor Davies: No, it meets twice a year normally, and it has a number of sub-groups that meet more often. We set up ad hoc working groups to look at particular issues where we need to. It was I think set up in its current form probably about 18 months ago now, so it is just getting into its proper functioning, but it is settling down very well.

Q70 Baroness Whitaker: So if some really important new research emerges between meetings, how do you make sure that that is translated into policy?

Professor Davies: I think our first step with that would be to talk with one or two of the relevant experts on that committee, we would then discuss with them whether it was important or worth really exploring, in which case we would probably set up a sub-group of the committee to meet really quite quickly and give it as much consideration as we could. We have scientists working on the programme as well employed by the Department of Health who would be able to help with a lot of background work for that too, and they in turn link with their equivalents in other government departments, so we would bring civil service expertise along to support what the academics brought. We would then take the advice of that sub-committee and bring it to the main committee if there were a meeting at the right sort of time, but again we would not delay. We could either set up something if we really needed to with the big committee more quickly, but more likely we would move this through, speak to the chairman and talk about how we would take that. Then when we got the considered advice, we would move that into papers sort of internally within the Department of Health to explore with colleagues and with ministers, so that is how it would gradually work forward, and if necessary, across government. Does that answer the question?

Q71 Baroness Neuberger: I think you have largely answered the question about whether you have come to a decision on options for the use of pre-pandemic vaccines, but I think it would be helpful for the Committee to know a little bit more about what you are thinking

about a replacement strategy and certainly about the manufacturing timescales. I do not know what you can say about that, but it would be very useful to hear it.

Mr Taylor: Certainly, as I say, I think the science has become clearer around pre-pandemic vaccine, and certainly, compared to where we were in 2006, we have more options in terms of what is being produced, what has now been licensed. What we have also then done is wanted to undertake an independent research into the current market, to get a better feel, because a lot of the manufacturers work around their windows for seasonal flu production, to therefore understand on that piece, but we also have sought advice from the JCVI, the immunisation and vaccination committee, just around if we were to expand our view beyond frontline healthcare workers into other targeted groups, where they actually feel that would be best focused, whether it is around children of school age or the elderly. That is really as far as we have got at this stage, because there have not been any further commitments beyond that. It is now actually reviewing the information that has been obtained by those two actions, in order now to inform us being able to advise on a way forward.

Q72 Baroness Neuberger: Is that today's meeting of the joint committee that is looking at that?

Mr Taylor: Essentially today's meeting is more around the use of the current stockpile. At the last meeting, we talked to them about the fact of the idea on targeting and it is out of their review on that that we are now hoping to try and inform policy linked to the manufacturing piece as well.

Q73 Baroness Neuberger: What is roughly the timescale on that?

Mr Taylor: Essentially we were planning to go to Ministers within the next few months with that as a view. Clearly there are other factors to measure against this because as we are building on other stockpiles as well, like the antibiotics, it has to be set against that

background of the sorts of timescales, but clearly one question would be the replacement piece may well actually need to be driven as a priority as compared to the other parts.

Q74 Lord Crickhowell: You have begun to mention the things that it has to be set against, manufacturing timescales. How is it affected by sudden large scale demand from other countries elsewhere in the world? Surely there is a limit on manufacturing, and your own estimates may suddenly be knocked completely sideways if there is a stampede from countries who have been rather slow on the starting line.

Mr Taylor: Although at the moment, the majority of countries who have gone down the line of any pre-pandemic vaccine have been on very limited procurement, there are only a couple of countries that have bought significantly more. We do through our international contacts try and keep as much information as we can around the ideas of where countries are moving. Again, I cannot deny, part of it is I think a lot of countries are watching us and therefore seeing what we are doing, where the thinking is moving, and have the same issues, whether it is around the cost or the timescales of the pre-pandemic vaccine. It is a risk, I would accept, but as I say, we tried our best by actually monitoring and mapping what is going on around the world.

Chairman: We wanted to pick up the issue of testing the system, and Lord Jenkin perhaps will take this on.

Q75 Lord Jenkin of Roding: The first thing I just would like to say on this, those who were at our previous evidence session, you remember I asked a number of questions about tests and trials, and I think the Minister's statement this afternoon referred to end-to-end testing. The first thing I would like to say is since that last session, we were sent some additional papers by the department, including a paper that was called C, and in fact it was labelled B, I think, wrongly, plans for distribution of antivirals and testing of plans, and I would like to say that

was a hugely important part of your evidence, and I felt, having read that, that at least a good many of my questions were being answered. However, I do not think we have had yet what you called an end-to-end test, and the question is, if you do that, is this going to be a real test, a realtime test, with real people performing their designated roles in as realistic a situation as can be devised, or is it something less than that?

Professor Davies: We are addressing that in two parts. We would very much like to do something top to bottom, end-to-end, with all the bits in place. The practicalities of that are something we want to explore, and I will invite Janet to talk about that in a moment, but Bruce, do you want to just start by explaining the end-to-end bit as far as the antiviral distribution system goes?

Mr Taylor: Yes, because essentially what we have from the papers you have seen now are three main elements to this, in terms of the point of view of the Flu Line, working through to the stock management arrangements and therefore having control on that, through to the storage and distribution arrangements. So what we are keen to be making sure is as we are developing those systems, from the Flu Line, which comes in and will be available to us around the May point, through to things like the stock management system, and storage and distribution schedule for the summer, once we have those elements together, a critical part will be the integration testing of those pieces. So making sure that the information systems themselves, as data is fed in at one part, actually can then be recognised and reflected in the way that the systems then act to control and give us surveillance around the fact of how the take-up is then being dealt with, to the management of the stock, through to actually the performance of our contractors in delivering out to the collection points, and making sure that stock is in the right place at the right time, and using different systems, whether it is around threshold or whether it is around actually the levels of stock that we are putting out. So there is a proper control around that piece of work, so there is that understanding that as the re-

ordering then takes place, there are proper controls that mean that we can have confidence in the information we are getting. So that is the element around the end-to-end system testing that we are doing, but I accept that is just part of the overall story.

Professor Davies: We do try to take a whole systems approach in everything that we are doing here, and put all the pieces together as reasonably as we can, but the logistics of that are sometimes a challenge, and Janet is currently exploring how we can practically do what you are looking for, which is test something which starts with somebody feeling ill and phoning the Flu Line and gets everything back round to them.

Ms Meacham: I guess the challenge of that is how many people do you need to then test it with, over what geographic area, and how many collection points do you use? I think we need to go and have some careful thought about this, although we can test it end-to-end with just a few people, that you would want to test it in as realistic a situation as you possibly could, and if that means over such a wide geographic area that it becomes unfeasible, then we have to go and think again. So it is a real challenge, we have not come to the end of it. We have done it in some other exercises, used real people in testing out systems, not necessarily for flu, but in doing it for the Flu Line, I think the challenge is the numbers of people and the geographic area.

Q76 Lord Jenkin of Roding: We are going to have a question on Flu Line later, but I am just going to repeat what I said at the previous evidence session. I have been going round asking quite a lot of people at the hospital over the river, in my general practice, nurses that I meet, and the family and everything. I have yet to meet a single person in the health service who has any idea what they are going to be asked to do if there is a pandemic flu. They have no idea as to what their role will be. My GP simply said, "They are going to dump it all on us and we shall be completely overwhelmed", and she is a highly intelligent lady. I think you

ought to take note of this. People do not know what it is they are going to be expected to do, and I do not see how you can make a system work until they do.

Professor Davies: Yes, we too are conscious of that, and we walk around and we hear the people too, so I share that concern. Now that we have our plans in place, and we are confident in them, and we understand better than we have before how the various bits are going to work. One of the next steps that we are currently planning is a proper exercise, a process of communication with NHS staff to make sure that they genuinely do understand everything that needs to be in place and how to do it. Now we will be looking at the self-assessments that are coming through to explore this with them, because it was an element that NHS organisations are being asked to demonstrate, that they have robust implementable plans in place, and implementable does mean that the staff know what they need to do. That said, there is a real question mark about which staff exactly need to know what and when, given turnover and movements around, but at least understanding the basic concept is a very important thing. So we have developed a number of educational programmes already, but we are building on those over the next year, and we are alongside that planning a proper communications exercise.

Ms Meacham: We are doing a communications exercise, a piece of research that started yesterday, to test out the different roles and responsibilities of NHS staff, whether or not the communications package that we have developed for the public is enough for them, do they need something further and specific communication tools, and then it will be to go and share pandemic flu communications with them. So that is one thing that we are doing. But we have a phenomenal number of conferences that we attend to raise awareness, both with social care and with NHS staff. We are hoping that more NHS staff will participate in the off-the-shelf exercise regimes that we are now able to give them, now they have come to the end of planning, then maybe the planners will move into players, and there will be a wider

engagement with how they are testing their flu plans, with more people, and some of them are already tested over quite a large area. Then I think you must not forget what they already do in terms of baseline training. Every year, we emphasise with staff routine hand hygiene, which is one of the bases of what they need to do in pandemic flu. So I think there is a lot that we are doing that is not necessarily pandemic flu badged, but still helps people to understand what they would need to do in a pandemic.

Q77 Lord Jenkin of Roding: What is the question I should be asking them?

Ms Meacham: I guess I would want to ask, if I go into an organisation, do you understand that your organisation has a plan for pandemic flu?

Q78 Lord Jenkin of Roding: I suspect the answer from the people that I was talking to would be that they would not have a clue.

Ms Meacham: That is something we need to continue to work on, because one of the other things that we recognise is the more that people who work in an organisation have a better understanding of what the plans are, the more they will realise what the organisation is doing to support them, and so internally support the organisation.

Professor Davies: I think our experience would be it is very variable across the country at the moment. You could equally speak, I think, to some GPs who would be very well aware of it and very conscious of it, but it is patchy, and it is the consistency that we want to improve. The BMA and the Royal College of General Practitioners together published guidance specifically aimed at general practitioners and their practice managers at the end of last year, and that is beginning to have a real impact around the country now. We want to see that and other things being used more effectively, but as Janet says, the very small exercises, the very practical gains that people can play, some PCTs already use these very effectively. Camden for example has a great very practical game where you deal a few cards out and you play and

gradually people die and you suddenly realise you cannot rely on these people any more. It brings it home to people that they need to plan, and where that is used, it is used very effectively, and it does put people in mind of the need to do plans. Equally, in some regions, for example the East of England is buying a business continuity management tool for each of its general practices, and putting that in place, so that all GPs are becoming extremely conscious of the wider aspects of business continuity as well as for pandemic flu. So there are different approaches, but we want to share the good practice, and we do have a way to go, we acknowledge that.

Q79 Chairman: I think we are running together two or three different things here. One is clearly how far down the system communication has gone, and that is a very important question. It will be critical on the day, so to speak, but also before the day. But there is still the question of what we have called, and you have also, end-to-end testing, and what is feasible, and what is not feasible, and you did try to draw a distinction. I can imagine, because of volume factors, it is very difficult to test that in an end-to-end context, but although it has to be tested, it is not the only thing that is tested in an end-to-end test. What is being tested are the links in the chain, so that things are not happening out of time, out of sync, and you can move from one set of decisions to another having at least some confidence that either the material is available or the people to distribute it or whatever, and it is this end-to-end bit I press back at you again. I think the only thing that would satisfy us was to see every step outlined, and yes, we have gone right down the ladder on that. Is that impossible?

Mr Taylor: I think the best way to make it real is actually by looking at the different parties involved, and how they interact with the systems. So therefore, from the public's point of view, essentially there are two main points of access. One is through Flu Line and one is through the Flu Friends going to collect at the collection point. Those are the elements of test that you pay for the public to be able to be involved and actually have them party to. Clearly

you have an awful lot of users as part of this, whether that is within the PCT, manning the actual collection points, or whether it is actually in the call centres, taking the phone calls, or within the actual central co-ordination, whether that is within the PCT itself or at a national level, and what you can do is you can run exercises for those different elements for those perspectives. What I think has to support it and back it up is the confidence that the fact is all of those elements are being supported by systems and, therefore, to know that they can operate the processes that they have, but also to understand the systems that are operating for them, and have the opportunity to put those in practice well in advance, and I think it is how you bring those elements together. I personally do not think you can get a full end-to-end part where you would have the public ringing in, getting someone to go and collect from a collection point, to actually then seeing it all work behind the scenes, but essentially if you can play all of those pieces in individual parts to exercises, linking the dependencies where they are there, actually you can get more confidence and assurance around the fact of the system actually delivering on the day.

Q80 Chairman: I understand what you say, I am not sure I am convinced yet completely, because I think if it is a shortage of people phoning in, you have nine volunteers here immediately. Whatever it is, it is to see whether the bits do fit one after another, and the only way to do that is to see the linkages in operation.

Mr Taylor: Yes, I would accept that, and certainly, on things with the Flu Line, actually we have plans in place for public testing, so actually we have already started again this week the initial pieces of taking people through the scripts to understand them, and obviously their reaction, what they would have to do next in order to do it. I suppose the only thing I would question is just about the fact of to then say to them, are you to then send somebody to a collection point, or actually is it better then to run that as an independent piece, knowing that there is a direct linkage between having gone through that first call? As long as you have

tested with the public their reaction to the idea of having gone through that first stage of confirming access to the antiviral that they are symptomatic, to then say the next stage is you would need somebody to go and collect, that would be very good, how do you react to that, rather than having to actually go through the process. We can certainly refine and certainly become more sophisticated, I think, as our systems and processes become more established and in place.

Chairman: As we discovered not a few weeks ago, if there is a very heavy snowstorm, things are suddenly disrupted and you actually need to know what could be done -- I think we have made our point, and it is on the record, and we may come back to this, but now I wonder if Lord May would take us on.

Lord May of Oxford: Let me just lead off by saying that compared to the hearing we had on flu, I guess it is two years ago now, this has been much more reassuring. That earlier meeting was really quite dreadful. The first meeting with officials, it was unclear that the officials understood the difference between use of antivirals and antibiotics, and they had not got round to briefing the Minister, because when the Minister appeared, the Minister said the policy for the use of Tamiflu shall be that you come into the surgery and are diagnosed with flu and then we will give it to you as a patient, which brings me to the point -- I mean, that was when we had 14.7 million doses of Tamiflu, which was the result of a three digit precision calculation, so lots has got better; however, in the interval, Lord Jenkin has asked a short Parliamentary question on the question of how we are going to handle the distribution, not just the distribution points, but how they are going to be used. Are they going to be used for people who now have the flu or are they going to be given to people, if you can get them early enough, in the flu cores, or are they going to be that plus giving them to the family, giving them to the kids in the school room, giving them to the thing that is technically known as targeted local prophylaxis, which is in my opinion, and that of most people, the only

rational use of antivirals, because by and large, by the time someone is clearly symptomatic, it is past the point where they are going to be a hell of a lot of use. That point was made more than two years ago, it got a waffly answer in the Lords over a year ago. When we had our little seminar, we asked Nigel Lightfoot, who gave a very good presentation, he was asked bluntly, do you think the optimum use of Tamiflu and Relenza is as a targeted local prophylaxis, and he beamed and unambiguously said absolutely. So my question is: when is this going to be your formal policy in the distribution of it? Could you reassure me on that, so that my cheerfulness on some things could be expanded?

Q81 Chairman: We like a cheerful Lord May. Do help us.

Professor Davies: Well, I think the first thing to say is that the scientific advice that we have, of which you are aware, I think, is that it is actually useful to give people antivirals, as long as you get them to people within ideally 12 hours but definitely 48 hours of their becoming symptomatic.

Q82 Lord May of Oxford: That is not prophylaxis.

Professor Davies: I am coming on to that, sorry, but it was just about that our scientific advice tells us that it is useful to give them once you are symptomatic, and I just wanted to be clear about that to start with. Again, our understanding on that, and the reason that we are working so hard to get the antivirals to people who are symptomatic, is because we want to above all reduce their chances of getting the complications of flu, and that is really the prize that we are after in getting the antiviral distribution system as effective and as robust as we can. That is what we are concentrating on at the moment. The matter of antivirals for prophylaxis and giving it to people, as you say, very, very early --

Q83 Lord May of Oxford: In close contact with the people diagnosed.

Professor Davies: I am very conscious of that, and conscious of the science, and it has been part of our considerations of our defence in depth strategy for a couple of years now. We are conscious of it, we talk about it. We certainly have seen the scientific arguments for that and we understand them very well. That said, we are very concerned to ensure that whatever plans we put in place are practical and are implementable, so what we are doing at the moment is having looked at the science, we are looking at the practicalities of implementing a policy like that, in terms of how the stockpile would be used, how you would define people in close contact, how you would reduce the chances for fraud, what sort of amount of stockpiling and the costs of that that you would need at the time. We are also conscious of the potential that if you do use it very widely like that, antivirals on a very widespread basis, then the potential for resistance becomes more significant, and again that is another of the risks that we are balancing.

Q84 Lord May of Oxford: Can I interrupt, before going on too long, to say that you are in flat disagreement with, for example, Nigel Lightfoot, and if you actually tell me that the best advice you have is what you were on the point of elaborating at length, and could be summarised as saying not having targeted local prophylaxis in the sense I defined, then I say to you flatly you are not getting the best scientific advice, and I am in a position to say that.

Professor Davies: Nigel Lightfoot is a member of our scientific advisory committee and we do our best to get the best scientific advice and we will continue to do so, to talk with him and others.

Q85 Lord May of Oxford: So you disagree with him or you agree with him?

Professor Davies: Our priority at the moment is to use them for treatment, and to get the treatment actually in place and robust, because taking the consensus of advice that we have, that is where we are at the moment. We are looking at the practicalities of using antivirals for

prophylaxis, but at the moment we have not explored those sufficiently to convince ourselves and others that we could implement it practically. Those are the bits we are exploring, and if we can find a way, then we will be taking the policy discussions further.

Q86 Lord May of Oxford: There is no point in pursuing this further. I think the best way forward here is I will find out a bit more about who the expert committee is and talk with some of the people who are really expert, and we will have another conversation, but what I have heard from you is that Nigel, for example, and I and Roy Anderson and a set of people that I would trust in this have not convinced you, and you have given me what I thought was a rather long-winded way of saying maybe/maybe not, and I find that unsatisfactory.

Mr Taylor: I think just the other thing to add to it is the fact that at the moment, we are not aware of any other country that equally is going down the line of household prophylaxis, and I think it is similarly the logistical and implementation issues of how you actually try and put that into practice which is causing their issues.

Lord May of Oxford: But on the other hand, we have now spent the better part of three years not even considering it and trying to move it forward.

Chairman: I think saying it is a logistic problem is a rather different response to saying it is not the right scientific answer. Well, you have heard it, again it is on the record and doubtless you will think about what has been said and perhaps we will take it forward in other ways.

Q87 Baroness Neuberger: In the event that there is a pandemic, what do you think will be the pressure on access to intensive care facilities, and given the very limited resources available that we all know about, what guidelines, including guidelines I think on ethical choices, will be given to frontline workers for conducting triage? A small question.

Professor Davies: It is a very big question. Again, we are trying to take a really sort of whole systems approach to this. There will be huge pressures on intensive care in a pandemic, there

is no doubt about that. We are entirely realistic, and we talk to colleagues in the field, not least the other Bruce Taylor, who I think was part of your discussion the other day, and he and many of his colleagues like us are concerned about the pressure that there will be, and the very real difficulties that will be faced, and the ethical challenges to be faced by people on the frontline when the pandemic arrives. So we are doing our best to provide them with the best support that we can in those circumstances, because with the best will in the world, it would never be possible to provide unlimited intensive care facilities, and that is not practical. So we have looked at providing ethical advice for this, we set up the ethical committee on influenza nearly three years ago now, in response to exactly this kind of concern. We wanted to make sure that there was a suitable basis, and that it was a consistent basis around the country. That has produced its advice, but it is still very broad brush, general principles, and we are now in the process of developing that further, articulating it in the forms of worked-through scenarios, which is what the committee will be working on over the next year or so, in order to really practically help people on the ground, so that is the important first bit about the ethics of it. Janet, I wonder whether you would like to talk a little bit about what we are doing in terms of tools, the surge management guidance and so on.

Ms Meacham: Yes, the next piece of guidance we are going to be issuing, Lindsey has referred to it as surge, we are actually calling it managing demand and capacity in healthcare organisations, because people seem to be a bit scared of the word “surge”.

Q88 Baroness Neuberger: I can imagine.

Ms Meacham: So we have renamed it. It is a piece of guidance that was originally developed by the Scottish pandemic influenza team, and it has been at consultation since August 2008, and I think it is the single piece of guidance that has had the most comments and the most interest from clinical staff. It says several different things. Firstly, it is reinforcing the fact that we are expecting organisations to look at how they can increase capacity, and that is both

in terms of facilities, their people, and to look at business continuity issues. So we recognise that that will go some way to assisting. But secondly, to set out that within the difficult situation that people may have in critical care, that they need to feel that they can work within an ethical framework that will allow them to take some difficult decisions. I think this guidance is talking about some of the tools of assessment that may be available to do that, and I think Bruce Taylor talked about one called a SOFA score, which means sequential organ failure assessment for ITU, and has been recognised in both Canada and the USA as probably the best mechanism for assessing somebody's entry into ITU. But then there is the equally difficult bit of how one can assess a patient; are they still maintaining support from ITU, or have they reached the stage that in actual fact, we can no longer give them anything that is beneficial for their care? The surge guide is suggesting that there should be very regular assessments and some practical advice to people to say that if scores -- and scores can only be an indicator, they are not precise, and because of that, then clinicians may want to take advice from more than one clinician, and to work together, so they feel assured that they are making the right decisions within an ethical framework in an ethical way, so that there is equality of access for patients. So the guidance actually sets out the indicators and the principles behind that as well. The reason why Lindsey said it takes a whole system approach is because in fact, for some patients, it may well be in the community, and it could be predicted that they may well need to go into secondary care, and into intensive care, so it is sensible to try and look at what assessment criteria there are within the community, so that people can work together, and by that I mean the GPs, the acute hospital trusts, the ambulance service as well, so that if there is an increase in demand on services, people can try and get consensus of the same tool that they are assessing people against, albeit as an escalating score. So we are just beginning to do some of that work, I do not think it is going to be easy, but there is an awful lot of interest and the colleges are signed up to working with us to begin to explore that.

Q89 Baroness Neuberger: You are going to try and model it?

Ms Meacham: I think the first thing we are going to try and do is pick apart things that are there, and see if we can start from scratch to say, is there going to be any consensus on what it might look like, and then I think at some stage we will have to think about how we may well test it out, and I have some views on how we may do that, and maybe use it as a training tool as well.

Q90 Lord Jenkin of Roding: The pressure is going to be intense if there is a pandemic on this. One of the messages which I have got from your papers is that there really does need to be emergency legislation to protect healthcare staff from the risk of being sued if in fact, under that pressure, they make a decision which in ordinary circumstances they perhaps ought not to have made. Is there any consideration being given to that? Because otherwise, you are going to have people not coming in. They will say, "It is not my job, I am not going to be able to do that. Therefore I am not going to go into the place at all".

Professor Davies: We are naturally aware of that concern, and as a doctor, it is something that I would personally be concerned about if I were in that position, very much so. That said, we would want to look very carefully before we talked about emergency legislation to just protect any health professional from making any decision that they might make, whatever the pressures upon them, and what we are looking at at the moment, the way we are approaching this, is we are giving health professionals as much support as we can in the decisions they may wish to make. We are also working with the GMC, who have produced some very helpful guidance recently, with the other professional organisations, and some of the defence organisations, to just talk with them about how best professionals can be reasonably made to feel protected, and able and willing, and supported in coming into work. Some of that is reflected in the HR guidance for the NHS that we published last year, but others of it are part of conversations we are having at the moment, and still taking forward. So we are very

conscious of this, we do want to give people reasonable levels of protection, but again it is a question of balancing risk, and there are risks to patients and risks to healthcare professionals, and we need to get that balance right in whatever advice that we give.

Q91 Chairman: Again, we understand that, but evidence was put to us really quite strongly about the concerns of some in the health professions about this matter, and the risk that it would have adverse effect on the behaviour and willingness to turn up and make the impossible decisions that they will have to make about who gets the treatment and who does not, and who is in the intensive care unit and who therefore will not be in the intensive care unit. So I suppose we see it not simply as a matter for further discussion, but a fairly urgent view on whether or not, and I think this is the question raised, emergency legislation at that time for a very short period, which would cut out the risk of it being misused later, could be put in place. Is there a plan at least to consider that, is the point we are pressing. You have heard our concerns.

Professor Davies: We have heard the concern.

Chairman: Perhaps we could move on. Lord Selborne?

Q92 Earl of Selborne: Yes, in the previous evidence session where you kindly gave us some help, we discussed how the interface between primary and secondary care would be managed and I wonder if we could return to that. How will the referral system be organised, and has this been tested in local primary care trusts, and if so, what happened?

Professor Davies: We were talking a little earlier, Janet was describing the work that we are just putting in train, in terms of trying to get some consistency of approach across the country for enabling people to make the choices that will need to be made about who goes into which levels of care, but Janet, I do not know if you want to expand on that?

Ms Meacham: Yes. I think the referral system will work as normal, except as it works at the moment, I think if you are a GP and you try and refer a patient into hospital and the hospital is very busy, that very busyness may well be just for a short period of time, and how hospitals normally get by is by being able to use their own clinical networks, transferring patients to other nearby hospitals, as you get a peak of work. Clearly in a pandemic, that cannot work, because everybody is going to be under the same level of pressure, and so we think that the best thing that we can do is to try to support people to look at an assessment tool that they can all use, that they can all sign up to, so that there is communication throughout that community and beyond that they are at a particular level of assessment, and so that they know at what level patients can get access to a higher level of care, and that is what we are saying is the way forward. So it builds on the work that we are doing in demand and capacity, into access between primary and community care. We have got a little bit further with paediatrics than we have with adults, and we are expecting a paediatric assessment tool to be available in summer this year, which is looking at assessing children beneath the age of 16, and whether or not they would be benefitting from going into secondary care.

Q93 Earl of Selborne: So from that, do I gather that you are not going to do tests within the primary care trusts as such?

Ms Meacham: Well, when you talk about testing it, I think the way that we would test it would be to try and ensure that all the people who might be using it, and it may be GPs, secondary care, it may be ambulance services, that when they assess people with that tool, that they come out with the same assessment, and it works for all of them, and they will feel comfortable about it. So that is the kind of testing that I would see happening.

Q94 Lord Crickhowell: Lady Finlay cannot be with us this afternoon. You have been given notice of a question which she wanted put, and that is: what measures have been put in place

for those with long-term maintenance conditions? She cites those on dialysis, drug addicts, those on domiciliary parenteral or gastrostomy feeding as examples. What is the answer to her question?

Professor Davies: There is no simple answer to this. The most straightforward way of answering it is to say we are encouraging through the guidance every local NHS organisation to look very carefully at these vulnerable people, and all those with long-term conditions come into that. The Cabinet Office has recently produced guidance on vulnerable people in emergencies generally, but we are currently working on something more specific for people with health issues. That said, each of the medical Royal Colleges has been asked to think very carefully about the guidance that it gives to clinicians and patients which would need to be given real priority in a community or elsewhere in a pandemic, in terms of maintaining their own support, and people with long-term conditions come very much into that, as being part of their considerations. The Royal College of Physicians, for example, has done a huge amount on this, and provided a wealth of guidance to specialists to assist local planning and the exploration of that. On the drug addiction side, we are working with the National Treatment Agency, we have funded them to explore relevant aspects of preparing for a pandemic, as far as drug addicts are concerned, and that work is starting already.

Mr Taylor: Yes.

Professor Davies: It is going ahead, so we are doing what we can to take a range of approaches, but there is not any single answer.

Q95 Lord Crickhowell: On dialysis, it just happened a very long time ago now, I think I was the first Minister to introduce private business dialysis units into National Health hospitals in Wales with very considerable success. As far as the patient is concerned, they are simply the national health, but they are actually run by private companies, so are you

consulting with private organisations in this area and in others which are working as part of the health service, or indeed outside the health service?

Professor Davies: We are working very closely with private healthcare organisations nationally and we are strongly encouraging the NHS locally to engage with its local and further afield partners in this. That is a message that we have all given – individually and in the framework. – very strongly, because we are conscious that resources need to be shared and they need to be acknowledged and we need to make the best use of whatever is out there for patients and for their families, so yes is the answer to that.

Q96 Lord Crickhowell: Taking my first question on the particular area a little wider then, so organisations like BUPA hospitals or others are being very much drawn in, are they, and fully involved in this process, and will play their part, right across the board?

Professor Davies: Absolutely, absolutely. We have spoken with them. I have regular meetings with private health and social care providers as a group, to make sure that they understand exactly what our planning is, and also in developing policy, we explore with them some of the ideas that we are coming up with, so that we can be sure that it makes sense all round. We speak to the national representatives, as well as encouraging people locally to make these moves from the NHS perspective; we listen to them, and where occasionally they have told us that they are not getting the engagement with their local private sector colleagues that they would ideally like then we have brought that to the attention nationally of the relevant organisation, because we are really determined that everybody works together on this, and we have been really very pleased with the response that the private healthcare organisations have given to us at every stage of the plan.

Q97 Lord Crickhowell: One final question. It occurs to me, following the earlier question on ethical issues, that there may be some quite difficult ethical issues here, consultants who

work in both private and public. I declare an interest, as one who has life membership of AXA/PPP, I can see pressures developing in between private patients and those without such care. Are these issues being considered and addressed, and if so how?

Professor Davies: They are being addressed. They are being addressed in the local discussions with an honest debate about what will and will not be sensible to keep going during a pandemic. There are discussions nationally in the committee that we have, which we do put these things on the table, because there are obvious issues about non-urgent procedures, for example, and whether those will continue to be done during a pandemic or not. The expectation is that a lot of people are ill with flu, then demand will go down very significantly, and equally, many of the staff who work within the private sector as you say also work in the public sector, and they will be needed to provide the essential healthcare that is necessary to keep the whole country and the whole emergency system moving. I think both parties are very conscious of that, and as I say, I can only say I have been very encouraged by the nature of the discussions and the debates that I have heard, and I think the same would go for the insurers as well, because obviously they have concerns; they have slightly different anxieties, but we have had discussions with a range of those at the same time.

Chairman: Time is moving on, but I wonder if we could manage at least one more question, and I will ask Lord Methuen to pick up the issue of the Flu Line.

Q98 Lord Methuen: You have indicated that the Flu Line will go live in May. Who will staff the 7,500 call centres, and how are you making sure that the systems behind the call centre will actually take the load? So you need to do a real test with 7,500 people, to make sure it does not collapse.

Professor Davies: The first thing to say about the Flu Line, it is all about delivering antivirals to the right people at the right time. It has three arms, one of which will be via web-based access, so computer-based access for people who can use that. Another will be automated

telephony, so as is used in many call centres these days, you get an automated voice, and they ask you questions, and you press buttons 1, 2 or 3. The third arm of the Flu Line will be the real people in call centres, and there will be transferability between those last two. We are, as you have heard already, doing a lot of work on the infrastructure supporting that and procurement of call centre staff.

Mr Taylor: Essentially we are looking at two main sources. Firstly the public sector, because the public sector has a large number of call centres, whether that is in Transport, Inland Revenue and potentially Work and Pensions, and therefore discussions have started with departments about the potential of being able to use some of the capacity within the public sector. But in order to get the full number of seats that we are seeking, that will need to be supplemented by the private sector as well, so again initial discussions have now started around looking at the potential of using some areas of the private sector who may well find that at the time of a pandemic, their own business needs are less and therefore actually would be able to see this as an opportunity for something. On the other question you asked about loading, built into the contract with British Telecom is the requirement that they must run regular dress rehearsals that would then link into our call centre links. So actually, the fact is that in total the expectation is that at any one time we would be expecting at least 20,000 people to be able to access one of those three channels to Flu Line, and that is really what we need to be testing in order to actually make sure that we have confidence that it could work through those three channels with the sorts of volumes we would expect at the peak, also recognising that if you can manage that, then in a lot of the instances during a pandemic, you will not be operating anywhere near that level, but actually you will have the confidence of being able to upgrade.

Q99 Lord Jenkin of Roding: It is the next question on the list, it follows very closely from Lord Methuen's question. How long do you imagine it will take if you have a patient who

rings up, or a patient's friend who rings up and says, "I think I have got flu", or, "She has got flu", how long is the process of questioning, triage, decision, before they can get a number and go off to the collection point?

Mr Taylor: We have done a lot of work around that, both from the point of view of the initial clinical algorithm that we worked through with the clinicians, the questions in the order that they need to be asked, and now with British Telecom in developing the scripts to be used. I have to put two caveats to it in terms of the fact that clearly it will depend on the individual patient's circumstances, because there are some questions they will need to be asked if they answer yes to some questions which lead them in a way, but at the moment the view is that the process for getting to that point of being confirmed for antivirals is around eight minutes. What we are doing now though is actually putting that into public testing, because what we want to do is take people through that process in order to actually see how they react to that, the questions that are needed to be asked, because what you are doing is you are doing some introductory questions, then the assessment, then telling them about what we need to do in order to get access to the antiviral, so there are a number of elements we need to be testing with the public --

Q100 Lord Jenkin of Roding: One makes the comparison with NHS Direct which my wife has had occasion to use, and, of course, it is far longer for that, but obviously different, I understand that, but I am genuinely astonished that you think in many cases it could be done in as little as eight minutes.

Mr Taylor: As I say, certainly we will test with the public to see their reaction to the nature of the questions, but having taken it through on that basis, that has been the understanding.

Q101 Lord Jenkin of Roding: There will be a lot of them without English as their first language, which will be an added difficulty.

Mr Taylor: Yes, and certainly with that, what we are doing is looking at the web in order to actually provide some additional languages that will be available through the web access, so what we have done is work with NHS Direct to identify, in addition to Welsh, the other languages that are accessed most through their own services currently, things like Turkish, Portuguese and Polish, and have those available on the web as well. But I think the other thing to flag is we do recognise there will be some people who will not be able to use the Flu Line, simply because there are certain issues, like other languages, which have not been able to be catered for, and therefore need to be using local healthcare services.

Q102 Lord May of Oxford: You will be able to do it through the web alternatively?

Mr Taylor: Yes.

Chairman: Perhaps as we conjure with the prospects and opportunities of the eight minute diagnosis, gosh, that is a thought, I think we should draw to a close now and say thank you very much in for participating in our robust discussion. It is robust because we think what you are doing is very, very important, and we have a sense of some of the importance of that. So again, many thanks, and we look forward to seeing the Minister as she recovers. Thank you very much. I just remind you, if there are points that you can expand on in writing in relation to the discussions we have been having, that would be very helpful.