HOUSE OF COMMONS

Health and Social Care Committee

Oral evidence: Cancer services, HC 551

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Watch the meeting

Members present: Jeremy Hunt (Chair); Dr Luke Evans; Anum Qaisar-Javed.

Questions 138 - 196

Witnesses

I: Dr Philippa Hetherington, cancer patient.

II: Professor David Cunningham, Chair, Association of Cancer Physicians; Professor Mike Griffin, President, Royal College of Surgeons of Edinburgh; and Professor Pat Price, Consultant Clinical Oncologist and Chair, Action Radiotherapy.

III: Professor Nick James, Prostate and Bladder Cancer Team Leader, Institute of Cancer Research; Baroness Delyth Morgan, Chief Executive Officer, Breast Cancer Now; and David Watson, Executive Director, Economic, Health and Commercial Policy, Association of the British Pharmaceutical Industry.

Examination of witness

Witness: Dr Philippa Hetherington.

Chair: Good morning. Welcome to the third session of the Health and Social Care Committee's inquiry into cancer services. Today we are focusing on the question of whether NHS patients are able to access the latest drugs and treatments, and what role science and innovation can play in helping us to bridge the gap in survival rates between the UK and countries such as Australia and Denmark.

To discuss the role of science and innovation, we will be joined later by Baroness Morgan from Breast Cancer Now, David Watson of the Association of the British Pharmaceutical Industry and Professor Nick James of the Institute of Cancer Research.

First, we want to look at the more tangible question of whether NHS patients are able to access currently available treatments. We have Professor Mike Griffin from the Royal College of Surgeons of Edinburgh, Professor Pat Price from Imperial College London and Professor David Cunningham from the Royal Marsden.

Before we hear from them, we will set the scene by hearing from Philippa Hetherington, who is a cancer patient. She will be asked some questions about her treatment by my colleague Anum.

Q138 **Anum Qaisar-Javed:** Hello, Dr Hetherington. Thank you so much for joining us this morning. Can you tell us a bit about your experiences, please? We can then go on to talk about how those impacted on your access to treatment for cancer through the NHS.

Dr Hetherington: No problem. I have stage 4 metastatic breast cancer. I was first diagnosed with primary breast cancer in March 2019. I was treated at the Churchill Hospital in Oxford. I went through the standard of care treatment for that. About a year after I finished that treatment, I was diagnosed with metastatic spread. The cancer had moved to my lungs and the lymph nodes in my chest.

Initially, we thought that the cancer was the same as my original cancer, which was what is called hormone-positive breast cancer, the most common type. Although people definitely die of hormone-positive breast cancer, it is the more treatable type, but we found out from a biopsy that the cancer had mutated to what is called triple-negative breast cancer, which is the hardest to treat and has the worst prognosis once it has gone to stage 4.

Triple-negative breast cancer is usually treated only by chemotherapy. That is the only treatment. Different kinds of chemotherapies are used, and none of them has a particularly high success rate. You just cycle through the different ones, hoping to get a bit of time out of each of them before they stop working.

Obviously, it was pretty devastating. I found out that my cancer had mutated and would need quite different kinds of treatment than I expected in December 2020 to January 2021, right as the second wave of Covid was peaking. I had some treatment obstacles as a result of that. My oncologist was redeployed to the Covid frontline. I could not get the kind of biopsy that I needed to get more information about my cancer at the time when I needed it. Essentially, at that point my cancer was in my lungs and, of course, all of the lung specialists were taken up with the Covid peak. I definitely had some Covid-related obstacles.

I got on chemotherapy in mid-January. I had been diagnosed in mid-November, so there was quite a delay between when I was rediagnosed and when I went on treatment. Things seemed to be going okay, but my first chemotherapy failed and then I had extensive spread to my brain. A large number of tumours cropped up in my brain. I have had what is called whole-brain radiation for that. I have also had some targeted radiation for it.

I had to pay for the targeted radiation privately out of pocket. I do not fully understand the science of it or the regulations and how they work, but, as I understand it, when you have brain metastases there are certain NHS rules about how many the NHS will treat with what is called targeted radiation, and it is quite a small number. If you go private, they will treat a lot more. I do not think that it is because they take more risks if you go private. My radiation oncologist might correct me, but my understanding is that it is to do with the equipment and the software they have access to if you go private. I do not have private health insurance, so I paid for that out of pocket.

I also paid out of pocket for another drug called Avastin that is approved on the NHS but not funded. Trials show small but none the less improved outcomes for patients with metastatic triple-negative breast cancer if that drug is added to their standard of care chemotherapy. When you have stage 4 cancer, even a small improvement is an improvement in outcomes. I was on that drug with my chemotherapy, and it seemed to be working really well. Unfortunately, I ended up with a blood clot, and you cannot be on that drug with blood clots.

It has been a rollercoaster. At the moment, I am recovering from the targeted radiation I paid for out of pocket, which we hope has gone well. I am back on another chemotherapy—a different one—with my NHS team. I am now in London, at St Bartholomew's Hospital, because it has a specialist team that has a huge amount of knowledge about triple-negative. When I was rediagnosed, I did my research, found out where the best team for my cancer was and had myself moved there.

My team and I very much hope that, if and when my current chemotherapy stops working—it is only a matter of time—my next treatment will be a drug called Trodelvy, which is a very innovative new drug that delivers chemotherapy in a different way and has had a lot of

success with triple-negative breast cancer. I could need it in a matter of weeks. We could find out in a matter of weeks that my current chemotherapy is not working, and I could need to pivot to Trodelvy straightaway. At present, because it is not fully funded on the NHS, that is a difficult thing to do.

Q139 **Anum Qaisar-Javed:** Thank you so much for sharing your story with us. You spoke about Covid-related obstacles and the fact that your oncologist was deployed to Covid wards. What kind of experience have you had through the pandemic with this in terms of access to treatment? It sounds as if the pandemic—the lockdowns and the rearrangement of the NHS—has had a significant impact on your care.

Dr Hetherington: Yes, I definitely think that it has. I was unlucky enough to be rediagnosed just as the second wave was taking off, so even things that had been planned—when my oncologist said, "We will do this kind of biopsy. We will do this kind of scan. We will do this kind of test"—were basically put on hold as things got more and more intense in the hospitals.

I was very surprised when my oncologist was redeployed. I had understood that cancer services would be somewhat protected. I still saw someone. When she was redeployed, I was on chemotherapy. You have to see someone each chemotherapy cycle, just to make sure that you are coping. I did not see someone in person; I had telephone appointments. A kind of fill-in doctor still called me and said, "Are you coping? Are you able to get out of bed?" They sign you off to have your next cycle.

That person did not know me at all and did not really know about my situation; they were just asking, "How are your side effects going?" For a number of weeks earlier this year, I did not have an oncologist to talk to me about what was happening and, crucially, to be making active plans for my treatment. I asked her, "Were you helping cancer patients with Covid?" She said, "No, I was emptying bedpans." That is my understanding of what happened then.

That was very stressful. There is even the fact that I was told that I had stage 4 cancer over the phone. Obviously, that speaks a bit more to the mental health impact of going through cancer treatment during Covid, not having any in-person appointments and not being able to take people with me to any appointments or treatments. That meant that I was by myself at various points in time—for example, when I was told that the cancer had spread to my brain—which was very difficult.

The huge stress at the beginning was that in order to be eligible for immunotherapy on the NHS for my kind of breast cancer you have to have it first line, at your first treatment, and you have to be checked for a particular biomarker. For that, you have to have a certain kind of biopsy, but they could not give me that biopsy. They said, "The lung surgeons who would need to do that biopsy are taken up with Covid. There is no way that we will be able to fit you in for one for a month, for

weeks or until this horrible situation improves a bit." That meant that I missed a chance to get immunotherapy, which is considered the best first-line treatment for my cancer if you have this biomarker. We could not even find out if I had it because there was no one around who could do the biopsy. I was calling private hospitals, contacting different teams and desperately trying to get the biopsy, so it was an incredibly stressful time. I just could not get it and I was eventually told, "We need to put you on the chemotherapy." That meant that I missed that chance.

Q140 **Anum Qaisar-Javed:** That sounds like a really difficult situation. As you say, there is the mental health aspect of being there by yourself.

You mentioned a drug called Trodelvy. What do you think it would mean to you and women like you who are undergoing this to have access to that medication?

Dr Hetherington: It would be absolutely huge. As I mentioned, triple-negative breast cancer is the kind of breast cancer that has the worst prognosis—by quite a long way. It is considerably worse. The official prognosis is 12 to 18 months after diagnosis with stage 4, whereas women who can go on hormone drugs for hormone-positive breast cancer can live for many years on those drugs. It is quite a difference in outcomes.

Trodelvy is the first drug that is considered a targeted therapy for triple-negative breast cancer. The clinical trials show that it is seven times more effective than some of the chemotherapies they put you on for triple-negative breast cancer. It is a lot more effective. Crucially, it is also effective for patients who are heavily pre-treated. Often, when you have had a number of treatments, each one has less and less likelihood of working, whereas Trodelvy can work very well on people who have had a number of chemotherapies already.

As I said, the prognosis for triple-negative breast cancer is short, so even a matter of weeks of delay in getting a drug can be huge. For example, I was not initially scheduled to speak today. I was asked to come in at the last minute, because the woman who was meant to speak today died last week. She was waiting for Trodelvy. Her oncologist had applied for it for her, but because currently, although it is approved, it is not yet funded on the NHS, the only way to access it without paying out of pocket is to apply to the drug company for compassionate access. They do not guarantee that, so it is also very stressful worrying about whether or not that will be approved. She was waiting for approval when she died.

For me, hopefully, that will be my next treatment. As I said, if it is my next treatment, that will be because I have had progression of the cancer on my current treatment. At that point in time, you do not want to be waiting around for weeks and weeks for the paperwork to be done. You want to be on your next treatment quickly, so that things can be brought under control. Although the drug has now been approved, the quickest way to access it is by paying out of pocket. I know that I am trying to

save money at the moment so that I can pay out of pocket, if I need to. That is something that is at least viable for me, but it is not viable for a lot of other people. It is not super viable for me, but it is something I can at least think about doing. It is not something many people can think about doing.

Although the application for Trodelvy's approval was made through Project Orbis which, we were all told, would speed things up a lot, it still took nine months to be approved. It is still going to take, potentially, another year for it to be funded. For patients whose prognosis is 12 months, that seems an inordinately long time. As I said, patients are definitely dying while they are waiting.

Q141 **Anum Qaisar-Javed:** Thank you for that. You have raised a significant amount of money for this treatment.

Lastly, what do you think needs to change? What changes would you like to see?

Dr Hetherington: I do not know the inner workings of how the MHRA goes through its licensing applications, but when the UK joined Project Orbis it was definitely advertised as something that would really speed things up and, potentially, put UK drug approvals on a schedule that matched or, at least, was close to FDA approvals in the US. These drugs are approved much faster in the US. I do not know the ins and outs of exactly how the FDA approval process works versus how the MHRA approval process works, but we certainly know that the US has better breast cancer outcomes. It has better breast cancer outcomes for metastatic triple-negative breast cancer patients as well. I cannot help but think that that is due to faster drug approvals. Perhaps the promise of Project Orbis can be realised in some way so that the MHRA licensing process is sped up, especially if a drug has already been approved by the FDA or another Project Orbis member. I guess that takes resources, so that there are more people engaged in the approval process and it can happen faster.

The other problem, of course, is the lag between approval and funding. It is very unfortunate that it will potentially take a whole year or more between when the drug is approved and when the NHS makes a funding decision. I am not sure whether that takes more resources or something like that, but if that process could be speeded up for patients it would be a huge thing. In the case of Trodelvy, especially, it is difficult to know that there is a drug out there and that patients in the US are getting it and having great success on it—they have had it for 18 months, so think about the number of lives that could be saved in that 18-month period—but we are not able to access it. When I talk to friends and family in the UK about this, a lot of people assume that they can get the most innovative cancer drugs on the NHS. It is just not the case currently.

Anum Qaisar-Javed: Thank you so much, Dr Hetherington.

Chair: Thank you very much. I know that I speak for everyone on the Committee when I wish you every success with your ongoing treatment. We really appreciate your talking about extremely personal matters. It is incredibly important for us to put in place the right context for all our discussions with the experts we are now going to hear from. Thank you for joining us, and the very best going forward.

Examination of witnesses

Witnesses: Professor Cunningham, Professor Griffin and Professor Price.

Q142 **Chair:** I now welcome Professor Mike Griffin, who is a consultant cancer surgeon and president of the Royal College of Surgeons of Edinburgh; Professor Pat Price, who is a consultant clinical oncologist at Imperial College; and Professor David Cunningham, who is a consultant medical oncologist at the Royal Marsden. You are all very welcome.

Can I start by asking you each briefly to reflect on the testimony that we have just heard from Philippa Hetherington? Is that a common story or an unusual story? How does it reflect on the general standard of cancer care available in the NHS? Let me start with you, Professor Griffin.

Professor Griffin: Her testimony is deeply moving. It was focused largely on oncology and our oncological treatment, which I am sure both David and Pat will refer to. As a cancer surgeon, I have seen huge delays, certainly in the first wave, when a lot of major cancer surgery was paused. They happened for two reasons. First, there was a redeployment of beds to look after Covid. Secondly, it was not actually safe for major cancer surgery to go ahead in that time. There were reports, not just from China, but from Italy as well, of very poor outcomes. That was proved in London, where the first wave hit first. There were very adverse outcomes from major surgical resections at that time.

Q143 **Chair:** Was that because of infection prevention and control issues?

Professor Griffin: Absolutely. If patients got Covid during the perioperative period, there was up to 25% mortality in the first wave. As a result, major surgical resections were paused. In fact, during that time many patients were treated non-operatively. At the time, we would have described that as suboptimal care.

As you know, and as you will hear from oncological colleagues, a lot of cancer work is very much a team effort between surgeons and oncologists, but the basis for all of this work is predominantly surgical. In fact, surgery provides most of the curative treatments for our patients. Of course, as you will hear from Professor Cunningham and Professor Price, most of the advances are happening in oncological circles, but surgery is the bedrock of most of the cancer curative work that goes on, so that was a huge problem in the first wave.

Q144 **Chair:** Professor Price, what are your reflections on what we have just heard?

Professor Price: It was terribly moving, wasn't it? From running the #CatchUpWithCancer campaign, we hear this all the time. It reflects exactly what has gone on out there and, unfortunately, what is still going on.

What is quite depressing is that all we hear is, "Everything is all right." It is absolutely not all right. This is going on up and down the country now. We had a 25-year-old who tweeted recently, "Can I please have an appointment?" She has been diagnosed with metastatic breast cancer and there has been nothing for eight weeks. That is just not acceptable.

The main problem, obviously, is that cancer was not ring-fenced and prioritised. It should have been.

Q145 **Chair:** During the first wave of Covid?

Professor Price: During the first wave. Over the summer some of our oncologists were still told to make sure that they could redeploy 10% of their staff over the coming winter. It is still going on.

As the lady said, it is not for great works with Covid. We had very specialist staff in radiotherapy redeployed as mortuary assistants, de-gowning people. I know that the work needed to be done; it was just the concept that cancer was okay to leave, yet the urgency should have been there, as with accident and emergency and obstetrics. Cancer cannot wait.

As the Committee will know from all of the stuff that we have put out, a four-week delay in cancer diagnosis and treatment can mean a 10% reduction in survival. Cancer should never have been stopped. We should have found ways. We heard from Wuhan on 8 April about how they got their radiotherapy back up and running. In America, we had testimony from a big hospital that had 1,000 patients in ITU—in the car parks and everywhere—that they got their radiotherapy back up and running in three weeks, because they knew they could not stop.

Q146 **Chair:** We had Amanda Pritchard, the chief executive of NHS England, here last week. The NHS says that now cancer treatment starts are back to pre-pandemic levels. Is that not the case?

Professor Price: The House of Commons has just published the data. The standard was 93% with treatment within the 62-day target. It is about 75% now. Remember, that does not tell us everything. That is new patients. This is not metastatic disease. They are not on that. They are not measured like that.

With respect, if you are on the ground seeing what is going on, it is absolutely not all right. We have done a recent survey, which we will publish later today or tomorrow. In certain places, radiotherapy is absolutely on its knees. Nobody believes that we can even get back up to 100%. There is a study from the Institute for Public Policy Research that shows that going up by 105% will only get us back to normal in 10 years'

time. Also, back to normal is not okay. We went into this pandemic the lowest in the league of all high-income countries. So our ambition is to get back to being the worst? And that is not even achievable. We have to do something. We must have a radical new plan, as otherwise this will go on and on.

Q147 **Chair:** We will come back to what that new plan might be. That is the purpose of our inquiry, actually. Professor Cunningham, what are your reflections on what we have just heard?

Professor Cunningham: I echo what my colleagues said. It is a very moving story—a story where I can see how technology advancements could help—for example, blood first. We are moving now towards a situation where, rather than doing further biopsies, we can get all the information from blood tests—next-generation sequencing and circulating tumour DNA. We are piloting a study at the Royal Marsden precisely to do that sort of thing. We have included in that the hard-to-diagnose malignancies such as pancreatic cancer, oesophageal cancer and gastric cancer, where you need some sort of intervention—endoscopy—and we have been able to show that you can identify genes in the blood that we believe will permit us to diagnose the condition without necessarily taking a biopsy. Especially during Covid times, that would be particularly valuable.

Access to cancer drugs has been an ongoing issue. It is easy to criticise and say, "Well, we can always do better." Yes, we could do better. You have heard about Project Orbis, which is a very interesting post-Brexit initiative. On average, the FDA approves drugs about six months more quickly than the EMA, which is the European body that approves all new drugs, including new cancer drugs. The FDA has an accelerated approval process for novel cancer drugs. It can fast-track to get those drugs into general clinical use in advance of Europe, for example, where the licensing takes much longer. For example, it has licensed two very valuable drugs in lung cancer through that process this year already.

The technology assessment that is done by NICE is the thing that delays the introduction of drugs into clinical practice. Those technology reviews are very detailed. They cannot be done on the back of an envelope, and they take time. The cancer drugs fund allows you to fast-track drugs that are not quite reviewed into patients. The story resonates with me.

The other interesting thing is—

Q148 **Chair:** Can I come back to you in a moment? I want to ask all of you a follow-up question from exactly that point. We heard from Philippa's story that there had been big interruptions to her care because of the pandemic. We all understand that the pandemic has had a big impact on the care that people have received all over the world. If you take the pandemic out of the picture, how good is the cancer care that we offer in the NHS at the moment, compared with other countries? Professor Price talked about the fact that back to where we were before still is not good

enough.

Let me start with you, Professor Griffin. Could you start with some reflections? Are there substantial differences between the care received in England and that received in Scotland? Could you talk about how the UK as a whole compares with other countries? I will then come to Professor Price and Professor Cunningham.

Professor Griffin: The answer is that there is no difference between England and Scotland, largely, in cancer outcomes. I do not think that is relevant. The United Kingdom is the United Kingdom.

Comparing internationally is very difficult. I want to make that very clear. I do not think that looking at figures from abroad, whether it be Europe or further afield, is very helpful, because we cannot compare apples with oranges. We have an NHS where all patients go into our cancer audits. The data that you get from other countries are very much from private practice, not from socialised medical services.

Q149 **Chair:** In an earlier evidence session, Professor Mike Richards told us that there is a scheme that tries to compare outcomes on a like-for-like basis with countries such as Denmark and Australia. He believes that we can make that comparison and that we do not do as well as either Denmark or Australia. Is that fair?

Professor Griffin: The Scandinavian countries have socialised medical services, and therefore they are much more comparable, but Australia is different because 50% of its health service is through the private sector. It is a different demography. I do not think that Australia is a good comparator. Certainly, the Scandinavian countries are far more useful in that.

To back up my oncology colleagues, I am an oesophageal gastric cancer surgeon. We wait four weeks for an out-patient appointment with the oncologist—for curative treatment and for palliative treatment—and then four weeks before they start that therapy. That is up in Newcastle. It is the same all over the United Kingdom. It really is a problem at the moment, but as you heard from Professor Price it was a problem before we started.

In 2019, from data from the Office for National Statistics and CRUK, the previous 15 years had seen an improvement in five-year survival and overall survival from all cancers of over 10%. I can tell you that we are not going to see that in the next 10 years because of what has happened. Professor Price is absolutely right to have an aspiration to go back to where we were in 2019. I would love to go back to where we were in 2019, but it still was not good enough.

Q150 **Chair:** Thank you. Let me bring in Professor Price. The NHS long-term plan has an ambition to diagnose three quarters of all cancers at stages 1 and 2 by 2029. The previous experts who have given evidence to us say that is a very big ambition and, indeed, if we made that ambition we

would have some of the best cancer survival rates in the world, but it is a big step up from where we are now at 53% or 54% diagnosed at the early stages.

Yesterday, there was a big announcement about 100 new diagnostic centres. With the plans that we have in place, are you confident that we can turn things round in our cancer survival rates?

Professor Price: There are two things. Number one, there is doubt whether we can reach that target for diagnosis. Fundamentally, we do not just diagnose the patients; we then have to treat them. Unless we get the treatment side, we are not going to make any improvements in survival.

The Committee will be shocked to hear that, before we went into the pandemic, 24% of curable stage 1 lung cancer received no treatment in the UK. They should have had radiotherapy, and they did not. That is the sort of thing. If you do not treat those patients, you are not going to cure them. That is because we do not have the treatment capacity that we need.

It is great and fantastic that we have all this diagnosis. We absolutely need that, but unless you match it with treatment you are not going to have any effect at all. There is such a variety around the place. For instance, let me take—

Q151 **Chair:** Can I follow up that point, because it is very important? We are obviously expanding our diagnostic capacity at the moment, from what we heard yesterday, but do you see any evidence that we are expanding our treatment capacity to match the new diagnoses we find?

Professor Price: Absolutely not. In fact, it is contracting. Our recent survey showed that 80% to 90% can only go about 80% to 90%. That is because of social distancing and all of those things. We were running hot anyway. We cannot do this. It is so short-sighted not to give the treatment, in effect. You can imagine that it will snowball because there will be delays; you get more late stage and treatment costs more. It will just get out of control. We have to put the treatment inside.

To take one example, already radiotherapy is needed in 50% to 60% of cancer patients, by international standards. From the CRUK websites, we treat 27%. That is the sort of thing we are doing at the moment, and yet that is cheap treatment. It is £4,000 to £7,000 for a curative treatment. Unless we actually increase our treatment capacity, you are not going to improve survival rates. That is pretty basic.

Q152 **Chair:** That is very clear. Let me bring in Professor Cunningham. The original question was, how do you think we compare in the UK, taking the pandemic out of the picture, to other countries around the world with which you are familiar? In particular, I want to ask you to touch on one thing we have not touched on so far, which is the pressures on the cancer workforce and whether you think we have in place plans to expand the

number of surgeons, oncologists, nurses and so on to deal with the improvement in treatment that we all aspire to.

Professor Cunningham: To give you an example in response to that question, we have the same number of medical oncologists in the UK, roughly, as they have in the Netherlands. The Netherlands has a population of 17 million. That just gives you an idea. It is probably an equivalent health service.

We have plans to expand both medical oncology and clinical oncology. There have in fact been new training posts created this past year, but it is probably not sufficient to get to that level. We need to treble the number of oncologists that we have in the country. If you count clinical and medical oncology, there are about 1,500 whole-time equivalents, which is quite a small number. They are the people who are supervising and delivering the chemotherapy and the radiotherapy.

Manpower is a massive issue in medicine. You rob Peter to pay Paul. If you have people in oncology, they are not in respiratory or cardiology. We have to look at the global picture and expand the medical and nursing workforce so that we can fulfil the needs of all the specialty areas in medicine to deliver the best quality care.

Q153 **Chair:** You talked about Holland. I appreciate what Professor Griffin talked about in terms of the difficulty of international comparisons, but are you saying that cancer care is better in Holland?

Professor Cunningham: It depends. If you look at the comparative statistics, they are difficult for the reasons that Professor Griffin outlined, but they do better in a number of cancers than we do. We do quite well in some cancers like haematological malignancy. We do very well. We do less well in diseases such as colorectal cancer and gastroesophageal cancer. That may be linked to delays in diagnosis and the delivery of robust multidisciplinary care, although multidisciplinary working in our country is very strong. We just do not have enough bodies on the ground.

Chair: Thank you.

Q154 **Dr Evans:** As the Chair has emphasised, we are trying to look at cancer services as a whole. I want you to disregard the pandemic, although I know that is not particularly useful when we are trying to deal with this. For the sake of the thought experiment I would like to conduct, I think it would be useful. Professor Cunningham, do you think that the NHS system that we have is fundamentally flawed, or does it need tinkering with when it comes to dealing with cancer services?

Professor Cunningham: I think it needs two things. It needs more investment. It needs continued and expanded investment in research. Ultimately, research delivers the best care. The NIHR is a magnificent organisation and it funds high-quality research in the UK that is, generally speaking, at the transitional phase of research for a lot of the

funding. Research delivers. Research is one of the keys to us improving our outcomes.

Q155 **Dr Evans:** The underlying system and the building blocks are correct, but we are just not utilising them properly. Is that a fair assessment?

Professor Cunningham: I think the system is good. It is good that everybody potentially has access to the same system. I have no fundamental problem with that. The system needs more investment.

Q156 **Dr Evans:** We do not need a radical rethink or top-down reorganisation of the NHS. We do not have a good history potentially, but what I am getting at is, if I was to say, "Design a cancer system in the UK," whether this is the kind of system you would pick.

Professor Cunningham: Yes. With the cancer alliances and the integrated care systems, where you are bringing together primary care with tertiary care and social care, there is also an advantage to streamlining the system.

Q157 **Dr Evans:** Can you pick up some of the barriers that you see that should be removed, if we have the correct system but there are problems? You have already hinted that research would be useful, aligning the pathway. What other things can we, as policymakers, remove from that journey to make it smoother?

Professor Cunningham: It is really just access to the service, the quality of the services and having sufficient capacity. Capacity is really the key thing. It is what you are hearing about from my colleagues. I think everybody knows how to deliver a good cancer service. We have the basic building blocks in place, but we have insufficient capacity and insufficient investment. We do not need to reinvent the whole process. We just need to support it, fund it and recognise that there are many good things in what we are doing, but we could make it better.

Q158 **Dr Evans:** That is really helpful; thank you. Professor Griffin, to pick that up from the surgical point of view, access is really important. Getting to you guys is really important. When there is so much backlog, how do you assess which cases are the right ones to go ahead with when there is so much pressure. We have already heard that there are capacity issues.

Professor Griffin: Could I comment on what Professor Cunningham said?

Dr Evans: Of course you can.

Professor Griffin: I agree with everything he said, but in terms of the infrastructure I would argue that we need to think differently going forward.

Professor Cunningham works in the Royal Marsden, which is a non-acute hospital. Indeed, it is the model we need to be looking at going forward. The Covid outbreak has been the perfect example for that, for the

reasons I made clear at the start. Surgery paused because most cancer surgery was going on in acute hot and heavy hospitals, which had an open door to Covid and, of course, there were nosocomial infections and hospital acquired infections as a result. Patients did not particularly want to come into hospital because they thought they might well get Covid. They were also being public-spirited and avoiding coming in, to help the NHS, but actually that was a problem.

Of course, in that first wave people were dying as a result of getting Covid over the operative period. We have to ring-fence cancer care. That is my view. It is certainly the view of most surgeons now. Most surgeons felt differently before the Covid pandemic. We are just another year away from another viral pandemic.

Q159 **Chair:** They did not want ring-fenced hospitals or cold sites. They used to be on big busy—

Professor Griffin: They did, because they had practices that had benign components to their work, and also emergency commitments, trauma and so on. Cancer surgeons contributed to running those busy, general surgical trauma units,. The reality is that we cannot have what happened in the first wave ever happening again in the NHS, when cancer surgery was paused. Cancer treatment was paused. It cannot happen again.

We need more institutions set out and ring-fenced like the Royal Marsden, which is where Professor Cunningham works, where cancer care can continue, as it did in the States and in much of mainland Europe, whereas we paused. That is why our outcomes have been worse compared with our colleagues abroad. We do not have that set-up, and that is what I think we need to do.

You mentioned the diagnostic hubs. I think diagnostic hubs are fantastic. I worked with Mike Richards on the whole concept. It is great that it is being rolled out. It will really make a difference, but it can only make a difference if we have the workforce to run it. At the moment, we do not have the workforce to run all those diagnostic hubs. I am talking about elective treatment centres like the Royal Marsden. We do not have the workforce to run those stand-alone units at the moment.

We haemorrhaged nursing staff in particular during the pandemic. Northern Ireland has no elective surgery going on at all, as you know. The same is happening in places around the whole of the United Kingdom, because we do not have the nursing staff. I am less worried about the surgeons and the oncologists at the moment. I am worried about them, but I am more worried about how we deliver treatment and the diagnostic facility from the point of view of healthcare workers.

There is a global shortage of healthcare workers, and we have it in spades here in the United Kingdom. We cannot just say, "Let's go abroad and bring in thousands of people from south-east Asia." First of all, it is not ethical during a pandemic. Secondly, it is not a long-term solution.

We have to make working in the NHS a joy and a privilege. People need, as I did, as David Cunningham did and as Pat Price did, I am sure, to feel joy in coming to work. The NHS needs to generate that community spirit, with people wanting to come to work for the common good and to get the joy that I get from looking after patients.

At the moment, that community spirit is not there. It has been eroded by targets. Areas for rest for all staff have been shelved and used for clinical space and things like that. The community spirit of having somewhere where you can have a cup of coffee, some hot food and talk to people has been eroded and it has gone. We need to get back the joy of people wanting to work in our NHS.

Q160 **Dr Evans:** You are absolutely right. That message is heard loud and clear. We will be putting that to the Health Secretary. My fondest memories are of meetings we used to have in the mess with colleagues, to share the soft stuff that is not written down about patients.

Professor Griffin: Exactly. It actually helps wellbeing because you can share the issues that you are dealing with. The problem is shared and halved; it really is.

Q161 **Dr Evans:** The workforce point is heard loud and clear, and we have got that. I am keen on the system base. You are a surgeon, and we are expecting a backlog of more advanced cancers. We have a two-week cancer referral pathway. It is often used by clinicians on the basis that someone might have cancer. Once every month, I would see someone and I would say, "This person definitely has cancer," yet they would go on the two-week wait pathway.

Given that access is key and that we are expecting more advances, should we be looking at another pathway for immediate cancers? There is an obvious breast lump, I am convinced it is cancer and, as a GP, I could refer it directly, straight in, on the day or within 48 hours to someone like you. You get the point I am getting at. My worry is that we are using it as defensive medicine to pick up many cases, but for the times when we see more advanced cases, with access being so important, is this a model that we should put within the two-week wait?

Professor Griffin: I see your argument about access, but the difference between doing that immediately and a two-week wait is a matter of possibly a week. I just said to you that we have to wait four weeks for an out-patient appointment with an oncologist after diagnosing an oesophageal gastric cancer for them to be seen, and then another four weeks before they start their neoadjuvant therapy. That is more of an issue, as you heard from Professor Price earlier, than one week at the very start. I absolutely accept that a week's delay probably will not make an awful lot of difference to cancer outcome, but I can tell you that it makes a big difference to a patient's mental health and wellbeing. I absolutely accept that. Eight weeks' delay is significant in something like

oesophageal gastric cancer, colorectal cancer or the other major organ cancers.

Q162 **Dr Evans:** Let me pick up that point. How are you, as the college and individual hospitals, streamlining your patients to decide that? We know that demand is up and supply is down, as you have outlined. What is happening on the ground? Is there national guidance on how you should stratify who goes under the knife? How are you making that judgment call when you have thousands of patients, all with cancers or needing an operative intervention? What is the site doing?

Professor Griffin: Things have improved now. Cancer surgery is back up and running. In some parts there has been a delay, though not for long, because of the latest wave. Generally speaking, cancer surgery is back up to near the levels at the start of the pandemic.

What happened in the first wave was a real problem. Prioritisation had to come in then. We, as colleges, brought together a prioritisation group for which patients needed to be operated on and in which order. The benign elective surgeries like hip replacements, knee replacements and cataracts were relegated. It was cancer surgery that went to the top of the pile. Within that cancer surgery, the patients that stood to gain the most would be discussed at trust level in England and at health board level in Scotland to prioritise which cancers needed to be prioritised on the day, on the availability of intensive care beds and beds in the hospital. That is actually what happened on the ground during the first wave.

That no longer has been the case, although, with the present wave and the increased footfall through A&E, the problem with nursing care, beds being closed and not available, the social care issues of not getting patients out and the number of beds in hospitals, I am worried that cancer surgery will once again take a hit in the coming weeks over winter.

Q163 **Dr Evans:** I have a final question. On that basis, how much do you think it is the responsibility of the Government to sort it out? One of the best things we heard in the Covid inquiry was the fact that, on the spot, the NHS had the ability, for whatever reason, to make innovative decisions. The team sat together and said, "We are going to do the ward round differently. We are going to do the operative list differently." We have also heard evidence that that is starting to wane again, and that people are resorting back to normal.

Where is the boundary? How do we protect that innovative spirit and keep it running through the NHS when we are no longer in the emergency of a pandemic? We hear time and time again that the NHS is in crisis. Arguably, we should keep that innovation going. What is your thought? Is there a way to secure that?

Professor Griffin: Telemedicine really came to the fore during the pandemic. NHS England has a big project going forward, looking at the issues that particularly made a difference. You could call them shortcuts,

but they were not deleterious to the patient. That has been very much concentrated on and Steve Powis is leading on it. It is not going to be forgotten.

I think it is harsh to say that it is waning. The telemedicine idea has been very much embraced, and I think it will continue. It will not go back to the bad old days, if you like. I am confident that that will not happen. I am much more concerned about the workforce, and you have reassured me that you are on it. That is our problem in the NHS. It is not just doctors, anaesthetists and oncologists. It is about the whole healthcare workforce.

Chair: On that very topic, I hand over to my colleague, Anum.

Q164 **Anum Qaisar-Javed:** Thank you, Chair. Professor Price, you spoke about the importance of having treatment available, and not just the diagnosis. Some people would argue that staff shortages are something that the NHS is struggling with in all specialities. What impact do you think the staff shortages are having on improving cancer outcomes and treatments?

Professor Price: We cannot get to where we need to be without an improvement in staff numbers, full stop. There are ways that we can improve that, but we are not going to get there until it is back to how we organise it. The problem is that nobody is really in charge. Nobody has the responsibility for improving survival.

If we did it like the vaccines with a Minister, getting the bureaucracy out of the way, getting on with it and doing it now, whatever it takes, we could do it. With cancer, 18 months on, we are still in this mess. It is nobody's job. That is the problem. We have to have the end point that is cancer survival, not saving money or working within a budget. Until we have that radical rethink, we are just going round in circles.

With the radiotherapy, we have published a whole raft of measures that you can do to mitigate. Obviously, we need more workforce. That is everything. There are certain things you can do now, though. You will be shocked to hear that half of trusts still have radiotherapy treatment machines that are out of date. The new machines can work three times as fast. With the same staff you can treat three times the number of patients. It is not rocket science. It is straightforward stuff, yet we do not get them replaced.

With IT, it can get you 20 minutes in the day to get the computer to load up, and then there is no printer. Some staff cannot even get on the wi-fi to join a meeting. We heard one story where they waited three years to get a bit of software that would save them one post in quality assurance, and that software cost the same as one cycle of chemotherapy for one patient. This is total madness. There are solutions out there, especially with IT and technology, particularly with radiotherapy. Remember that radiotherapy only has 5% of the cancer budget and it is needed in 40%

of cures and for 50% to 60% of people with cancer. It has been the Cinderella subject. It has been under-invested and removed from the equation for so long.

As an example—it is about distressed staff—we have done a recent survey; the number has moved from 60% to 80% of staff now on the radiotherapy frontline who either themselves want to leave or know somebody who wants to leave. It is partly because they see this as all so unnecessary. They have seen cancers that they have never seen before because they are so advanced, and patients with advanced disease. The two things they hear are, "Everything is fine; it is not a problem. Just work harder." The second thing they hear is that radiotherapy is not there to be funded. I do not want to sound disrespectful, but we have had Ministers and the Secretary of State mix up the words "radiotherapy" and "radiology".

I know that the Committee will know this, but for the record radiology is diagnosing it and radiotherapy is treating it. If frontline staff feel that the people making the decisions do not even know what they do, it is very depressing.

Q165 **Anum Qaisar-Javed:** They do not have confidence in them. How do we tackle the retention of staff? How do we ensure that people are not leaving the NHS?

Professor Price: Get a plan. It is straightforward. Number one, accept that there is a problem. Just say to people, "Yes, we accept there is a problem; we know there is a problem. We are going to put in a plan and we are going to do something about it. Now, let's hear your ideas."

Going back to your question, it is the bureaucracy that stands in the way. I was talking to Nick just before. If he is with a patient and he can give an ablative dose of radiotherapy, he knows that the tumour will not come back in that place. He is not allowed to. That is total madness, and it has gone on all the time with radiotherapy. I think with radiotherapy we had about two weeks of the "Let's do it" phase back in early Covid. Then it was straight back to, "You are not allowed, and you are to stop."

As we heard, targeted radiotherapy can cure. There is a 20-minute out-patient treatment—one treatment—that is non-invasive and will cure lung cancer. You can go back to work in the afternoon. When that was introduced, centres were stopped from doing it. This is the madness that is going on, unless you have somebody in charge.

Q166 **Dr Evans:** Why? You said that for two weeks you were able to do it, and then suddenly you were not. Who told you that you could not, and why did it go back?

Professor Price: Because of the perverse tariffs. We have been banging on about tariffs. Tariffs for radiotherapy mean that you get paid for every single treatment. You get more if you do lots of treatments. Classically with Covid, you can shrink it down with modern technology and IT. It is

whizzy, and there are smaller treatments, but you do not get paid as much. We were going to change tariffs, but we abandoned that because it was Covid; we cannot think about that until another time. We have a block tariff now, but that means that you cannot have a new machine until you do 9,000 treatments. It keeps breaking down and you cannot do the treatments, so you cannot have a new machine because your machine keeps breaking down.

Q167 **Dr Evans:** It is the trust management telling you this.

Professor Price: These are rules that are centrally commissioned. These are rules from the top. The radiotherapy guidelines that are still in place, which we were worried about, said avoid delay for radiotherapy. Remember, it was only in Nottingham a month ago that they reverted to those guidelines for chemotherapy, so that it was only radical people that got chemotherapy. This is rules and rules and rules.

I think "morally repugnant" was how one frontline staff member termed the tariff in radiotherapy. It stops innovation for patients. I am getting cross about this, but that is something you can do. Just stop this nonsense and then patients will survive longer.

Chair: Professor Price, maybe you could write to us detailing in a bit more time than you have this morning what the issues are in radiotherapy in particular. That would be very helpful for our inquiry.

Q168 **Anum Qaisar-Javed:** Professor Griffin, you spoke about global shortages and how it was morally incorrect to take staff from other countries and bring them over here. How confident are you in the NHS's ability to address the cancer treatment backlog with current levels of staffing? You said it is not just doctors but nurses and across the board.

Professor Griffin: The answer is that I am not confident over this winter. It is not going to happen, not with the pressures. It is not just Covid. Everybody seems to be blaming Covid for everything. We had a problem before Covid. It is a very easy target. Covid is contributing, quite rightly. I accept that, but we also have chronic nursing shortages, as I have outlined, in the surgical disciplines. If you do not have surgical nurses in theatres, the surgeon is impotent. They can do nothing. Surgeons are useless without an anaesthetist and without nursing staff. If you cannot get the beds because you cannot have the nurses on the wards to open those beds, you cannot get those treatments done.

Equally, with social care—I am sure I am grandmother sucking eggs here—if you do not have the carers, you cannot get patients out into social care, thus freeing up the beds. That is why we have ambulance waits. We have to sort all those things out.

My solution to it in the short term, because it is very difficult to solve, is to retain our staff now. We cannot allow any more haemorrhage. We have to support them in the workplace. We must make the workplace

better. We can do that very quickly in the short term. We can make the working environment better so that people do not leave.

We have to encourage those who have retired and left. You heard that there are so many who are thinking of leaving at the moment. We have to encourage those who have left back into an environment they want to work in. There are many 60-somethings and 50-somethings who do not want to do one in fours on call, and come in at night, but they can staff the diagnostic hubs and the elective treatment centres because they are not working 24 hours. They are not doing shifts. Get them back to work.

We surveyed, from the college, our members and fellows. Our fellows voted, and 60% of those who retired in the last three years said they would come back, provided that they were not being asked to do night-time work and to be on call. They would come back. That is surgeons, but the problem is not just surgeons. It is the nursing staff. If we do the same with our nursing staff, I am sure that the same will prevail.

People love working in the NHS, provided that the working environment is communal, and it is a community. That would be my acute management of the problems we face at the moment. In the longer term, it is exactly what we have heard. We need more doctors and nurses, and we need to train more cancer nurses, more surgical nurses and more doctors and oncologists.

Q169 **Anum Qaisar-Javed:** Professor Cunningham, how do we train more people? How do we encourage them to come into the NHS and to work in cancer services? We are painting quite a depressing picture.

Professor Cunningham: I do not think there is an issue in encouraging people to do medicine or nursing. There is an issue with retaining them that you have heard about. Medical places at universities are oversubscribed times 10. We need to expand the number of people in training.

You have heard about retention. In cancer medicine, we are seeing a big issue with burn-out among consultants. Interestingly, it is not the older consultants. It is the young consultants who are 40 to 50. They cannot cope with it. It is the pressures. It is everything you are hearing about. We need to invest more in people. We need to invest more in training more people, as you have rightly identified.

The people are there. The fewer people we have, the greater the pressure on those who are left and the greater the threat of burn-out. It is clear; again, it is not rocket science.

Q170 **Chair:** You have all given very passionate and powerful evidence this morning. Next week we have the Health Secretary, Sajed Javid, coming before our Committee. As a final thought, in just one sentence what does he need to do to address the issues that you have been talking about this morning?

Professor Griffin: Specifically cancer?

Chair: Yes.

Professor Griffin: It is still workforce. I am sorry, but in the short-term we are not going to make any inroads into the problems that we have with cancer if we do not retain our workforce. Do something to retain what we have, and to bring back what we have lost. That is the only way we can do it at the moment.

Q171 **Chair:** Thank you. Professor Price?

Professor Price: I would say to him, don't listen to the people who are telling you that it is okay. It is absolutely not okay, and by thinking it is okay, people are going to die. There are a lot of solutions they could do to mitigate this. You could be putting radiotherapy machines into your diagnostic hubs. Industry has IT solutions. I could, on my mobile phone, be planning people on the other side of the country. We are doing none of that, and we need to do it. He has to act. By not acting, more people are going to die.

Q172 **Chair:** Thank you. Professor Cunningham?

Professor Cunningham: I think he should invest, apart from in the workforce, in technology and research. That is a real way out of this situation that is probably deliverable in a much shorter timeframe than training up the next group of doctors to deliver care.

Chair: Thank you all very much indeed. It has been very helpful testimony. We are very grateful to you all for your time. Thank you, also, for all the work you are doing on the frontline at the moment in a very pressured period. We are going to move on to our final panel this morning, but thank you very much indeed to our second panel.

Examination of witnesses

Witnesses: Professor James, Baroness Morgan and David Watson.

Q173 **Chair:** I welcome our final panel this morning. We are going to discuss particularly research and innovation and the role that can play in helping us to transform our cancer survival rates.

For the benefit of our final panel this morning, we have been talking a lot in previous evidence sessions about how we could follow best practice in other countries when it comes to cancer treatment. A lot of it is around speedy diagnosis, but you heard this morning about speedier access to treatments, investment in new machines and so on.

We are very happy to hear about that, but we particularly want to focus in this final session on what we can do on the science and innovation side, taking a bit of inspiration from what happened in the pandemic where we started without a vaccine and without treatments and ended up making very rapid progress very quickly, a lot of it actually in this

country. We want to see what we could learn from that experience when it comes to cancer treatment.

Thank you all very much for joining us. I welcome Baroness Delyth Morgan, who is the chief executive of Breast Cancer Now; David Watson, the executive director of economic health and commercial policy at the Association of British Pharmaceutical Industries; and Professor Nick James from the Institute of Cancer Research.

I would like to start with Baroness Morgan. As you know, we heard very powerful testimony right at the start of this session from Philippa Hetherington about how the pandemic had interrupted her treatment and she is now in a terminal stage of her treatment. Leaving the pandemic aside, we heard that there were failings in the care that she received. Would you reflect on the things that she was telling us before we move on to bigger issues?

Baroness Morgan: I would like to pay tribute to Emma Metcalfe, who was going to give evidence. Sadly, she died last week. She was planning to be here. It was wonderful that Philippa was able to step in. Emma had and Philippa has incurable breast cancer, as you said, Chairman. I think that is really what I would like to reflect on now.

For many, breast cancer outcomes might seem to be really positive. We do very well on survival compared with other cancers, not necessarily in comparison with other developed countries, but those figures mask the fact that there are about 35,000 people living in this country with incurable breast cancer. You might think it is a product of success that they are still living, but what is so important to patients with incurable breast cancer is access to clinical trials and the hope that research and innovation can bring when there are exciting new treatments that can potentially slow down the progression of the disease and the inevitable day when the disease overwhelms one's system.

While there is the possibility of that, it brings hope. We also need to make sure, as a country, that our regulatory processes, which are so important for patient safety, and our processes for the NHS to ensure that we can get value for money and there is fair access across the system, are as aligned and as tight as they possibly can be, so that patients like Emma and Philippa can access exciting and innovative treatments as quickly as possible.

Q174 **Chair:** We often hear about how brilliant our science base is here and how excellent the research is at our universities, but where are we actually? You are obviously an expert on breast cancer. Are we in the top five globally in places doing research into treatments and cures for breast cancer?

Baroness Morgan: Absolutely. I absolutely nail my colours to the mast for the research and innovation that goes on in this country. We have some of the most brilliant clinical scientists and the most amazing

institutions where we see groundbreaking biology converted into targets for new drugs and into life-saving treatments. That is happening.

Obviously, we have seen research interrupted because of the pandemic. That is a big worry for how we keep the momentum going forward, but we really punch above our weight in this country. We need to make sure that we can join that up so that people can access these innovative treatments as quickly as possible, and we do not lose momentum once we get to the clinic. That is a big challenge. Where it works, my goodness, it works brilliantly.

There are delays, and sadly we have seen that with a great example of a new treatment called Trodelvy, with Project Orbis, an initiative of the FDA. All sorts of things aligned in the best possible way, but still we have a break between the successful licensing of a really exciting new treatment for unmet need in triple negative breast cancer. There is a gap, and we have to wait until spring or summer before NICE can properly finish their job and decide whether or not it will be available on the NHS. We know we have a great licensed treatment. We are just waiting.

Q175 **Chair:** To be a bit more specific, if we are in the top five globally for cancer research, who are the other four?

Baroness Morgan: I think you would have to think about, obviously, the States. You would think about Germany. Then I would be a bit unsure, but we are definitely up there. Actually, I would say that we are pretty close to the top. My colleague here will be able to say. We really are, and it is something to be proud of.

Q176 **Chair:** I will come to Professor James in a moment. David Watson, you represent pharmaceutical companies. First of all, do you agree with Baroness Morgan about the quality of our science base? Do you think that the pandemic gives us an opportunity to think differently about the role that science and new treatments can play in improving our cancer survival rates?

David Watson: Yes, I do. First of all, I recognise that the life science sector in the UK has been a very effective sector for a number of years. The basic research here and the innovation has been among the best in the world.

Specifically on research and development, this country suffered over the pandemic. Unfortunately, we have not yet recovered to the place where we were before the pandemic, whereas other countries have got there faster, certainly in clinical trial recruitment for example. The UK is still down.

On the point about Orbis, to talk about new medicines development, I think Orbis and the new regulatory pathway has been a great thing for the UK to be front and centre of, along with other countries. As other speakers have said, the challenge with looking at access to medicines is that it is not just a regulatory question. In the UK obviously, we have

NICE. I agree with the point that somehow we have to bring all the processes together to make them work and to ensure better patient access than we have done.

Q177 **Chair:** Let me bring in Professor James. What is your perspective? Has the pandemic changed the way we think about the role of science? When we are worried, as we are in this Committee, that our cancer survival rates still appear to lag other countries that we regularly compare ourselves to, like France, Germany, Denmark or Australia, should we be looking for radical leaps forward as well as incremental improvements?

Professor James: I think the scientific response to Covid exemplifies what we can do for everything. We invested money early in vaccine development, somewhat speculatively. It was not clear that AZ at Oxford had picked the right target for their vaccine, for example, but the investment was put in speculatively. The delivery mechanisms downstream were put in ahead of the results of the trial.

The MHRA looked at the toxicity of the vaccines as the trials were going on. Obviously, you get the toxicity straightaway before you get the efficacy data. We could do the same sorts of things with cancer drugs. We could remove a lot of the barriers to taking drugs out of the lab and into the clinic. My institution has developed more new drugs for cancer than any other institution in the world. We cover the whole spectrum from basic science drug discovery through to large-scale clinical trials, which is my particular specialisation.

The second thing is that the trials regulations were not suspended for the Covid vaccine trials, nor for the RECOVERY trial that is actually based on a trial that I run for prostate cancer called STAMPEDE, which is testing multiple things all at the same time. They were fast-tracked, and barriers to progress were removed. Costs were defrayed and access to trial set-up and all the rest of it was done very quickly. Again, we can do the same things for cancer trials.

One of the things my institute has researched is the time from patent to patient. A patent lasts for 20 years. A few years ago, the time from patent to patient typically in the UK was 12.8 years. It is now 14 years. It is going up. That is one of the things that drives up the cost of the drugs. The drug companies are only making money once they have got the drugs in the patient.

Q178 **Chair:** Are you saying that it takes 14 years from a drug being ready for it to be patented?

Professor James: No. You make the patent when you synthesise the new chemical entity that might be the drug. The majority of drugs do not make it from patent into the clinic, clearly; 95% of drugs do not make it from phase 1 to phase 3, for example. Rather like with the vaccine, you have to spread-bet across a lot of compounds to get the winners. It is not clear what the winners will be. That is what the clinical trials are for. The

processes, once things are hitting the clinic, are so slow. It takes a long time to set the trials up. It takes a long time to get the approvals. It takes a long time to open centres like the Marsden. I previously worked in Birmingham at a big DGH, the Queen Elizabeth. The bureaucracy underpinning all of this is ferociously and, I would say, unnecessarily complicated.

The Covid trials, the RECOVERY trial and the vaccine trials, have shown that you can massively accelerate those bureaucratic stages. That is to everybody's benefit.

Q179 **Chair:** Are we going to do that now?

Professor James: There is no reason why we should not, but the evidence would be that we are not. If we look at bladder cancer, which is one of my areas of interest, trial recruitment dropped off a cliff with Covid because we were told to stop doing trials nationally and focus on Covid trials, not unreasonably. Once that bar was removed, some areas such as south-west London where the Marsden is, where I work, pretty rapidly ramped up trial recruitment again. Birmingham is where it was before. It still recruits almost nobody to cancer trials. They are bogged down in the Covid response.

The amount of money you would need to put in to oil the wheels is tiny. You need to put in a few more trial co-ordinators, a few more data managers and a few more administrators to process the ethics applications. You can rapidly accelerate trial access and trial recruitment with quite small amounts of money.

Q180 **Chair:** Could you possibly write to the Committee and spell out what we need to make standard, following the example of the RECOVERY trial and the Covid trials, in all our trials going forward? That would be very helpful for our final report.

Professor James: Yes.

Q181 **Dr Evans:** I have two areas to talk about: regulation and the clinical aspect. David, I will turn to you given your position and your previous history.

I do not want to prejudice my question. What is your SWOT analysis of the current MHRA and their position? What are their threats and opportunities at this point in time? There is a big debate going on. I would be interested to know what your thoughts are.

David Watson: One of the debates on regulation is whether fast is better. Moving from the position of the UK being part of the European agency where we all did things together, once you take the UK out of that you have a decision to make. Do we just try to copy what other countries do, or do we try to take a leadership position?

I think the MHRA is steering the correct path through that by maintaining its expertise and its position as a well-respected global regulator. There is

a balance, though. If we just expect to license new medicines as fast as possible, we will inevitably end up in a situation where we do not have the data available to decide whether something works. There is a bit of a trade-off on speed.

Q182 **Dr Evans:** Feel free to pass on this question, but it would be interesting if you or your association had an opinion. With the MHRA staying where it is and the EMA taking over, there is talk of a lot of staff moving back across and that there will be a dearth of skills in the UK. Do you think that is a real eventuality, and the problem therefore is that we may not have the skill base to deal with the applications when they come through? Is that a picture that you see happening?

David Watson: Yes. Other speakers have talked about workforce. You could obviously apply workforce planning to the MHRA and to NICE as well. It is really important that fundamentally we have the right scientists, and so on, working in our regulator. In fact, the MHRA is very much looking at that at the moment.

The signs are, though, that it is entirely feasible for the MHRA to remain a gold standard regulator in the world. That is good for industry and for patients too.

Q183 **Dr Evans:** That is useful for the Government to hear. We heard it the last time. Research is one of the key ways to get it out, and obviously taking some of those building blocks out. For a small amount of money it is the kind of investment that you could make. I argue, as a clinician, about not waiting 10 minutes for your computer to boot up; it should work like your mobile phone. Those tangible things can make a real difference.

I want to move on to your experience. Your organisation comments about the fact that there is almost a hesitancy for frontline clinicians to use new medications. Can you comment a little bit on that?

David Watson: We tend to think about medicines as licensing a medicine and then after that it is immediately in clinical practice. Of course, that is not the case. NICE, as you know, carries out health technology assessments in England, and the Scottish Medicines Consortium in Scotland has a very equivalent role, and they do it very well. We have, however, a challenge, particularly with the example the patient gave of delays in getting brand-new technology to patients. In part, although we are doing the regulation bit well and probably as fast as possible, that is because the decision on whether the medicine is value for money for the NHS is taking too long to get to, and then the commissioning decision is also taking too long to get to. That is an unacceptable package or process in the UK, and I think we need to bring those things together.

Q184 **Dr Evans:** You go through all that, and there are a good number of drugs that are all licensed and ready to go, but clinicians are wary of using them because they don’t have experience of them and are worried they will get sued if they use them wrongly. How do we smooth over that

part? It has all gone through to the CCG, be it a new migraine treatment or a new treatment for heart failure. There are some fantastic drugs that have come through, but there is hesitancy across the country about using them. How do we do that? Is that the industry's job? Is it the doctor's job? Is it the Government's job to try to join it all up? Where do you see that pressure falling?

David Watson: I would differentiate two aspects. One is the availability of medicines in the UK, and the other is the uptake and their actually being used to help patients.

On the availability side, one of the features that the system increasingly has in the UK is that, although NICE may recommend a medicine that is cost-effective for the NHS to use, it will increasingly say, "It is a yes, but" and that "yes, but" is that only certain patients will be allowed that medicine because it will be cost-effective there, and it may not be cost-effective elsewhere. That happens in about half of recommendations or optimised recommendations. We think that needs to be addressed because it will be a barrier to medicines being available to the population that the medicine was licensed for.

On the second point about whether the medicine is then used in practice, as I think other speakers have said, a whole lot of processes affect that, things like pathways, centres of excellence and guidelines. The constant theme in all of those is whether there is a leadership focus on improving the availability of medicines, in the same way as you could pick up a newspaper and look at a league table for vaccine uptake. Do we have the mentality that we need to have the very best care available to patients? Often, I do not think we have as much in this area.

Q185 **Dr Evans:** Do you see that levelled at CCGs, ICS, or at national level? The good news about having 40 or 42 new ICSs is that we have chairs who could potentially come round a table and say that, or is it above that, at a NICE level? Is it sitting them all down together and saying, "Make a decision and we will use this medication"?

David Watson: The first thing we can get right is to reduce the number of optimised recommendations. That would mean that the NHS was able to use medicines at a cost-effective price that had been licensed by the MHRA. That is step one.

After that, the industry tends to the view that uptake is best when it is co-ordinated across the system. When pathways are left to be second-guessed or reinterpreted at local level, you start to see variations in care. There is a balance between centralising activity in the NHS and allowing ICSs, and so on, to plan around their local needs.

Dr Evans: Thank you very much.

Q186 **Anum Qaisar-Javed:** David Watson, Cancer Research UK found that one of the main barriers for the workforce to get involved in research is lack of protected time. Could you talk to me a little bit about that, please?

David Watson: Not all of the research in the UK is sponsored by the pharmaceutical industry, but a chunk of it is. The industry is always keen to help the NHS do clinical research. As other speakers have said, it is probably a key part of care ultimately for cancer patients. This is pretty old data, but about one in six cancer patients is somehow involved in a clinical trial as part of their treatment.

At the moment, the lack of recovery in the UK has possibly been down to NHS resilience to the pandemic and the ability to get people back into the cancer care setting, as other speakers have said. There is particularly a problem going forward about recruitment. I think there is a multitude of reasons behind recruitment. We have a study that we can provide to the Committee as evidence. We talk to the various things that we think affect recruitment of patients to clinical trials. Certainly, the workforce planning and genomics aspect is all very much part of that as well.

Q187 **Anum Qaisar-Javed:** What were the kinds of things that you found in your study, if you can remember off the top of your head?

David Watson: I would say that, compared with other countries, the industry somewhat has the benefit of being global and therefore being able to see how other countries operate in the space. Spain, for example, probably has more of a culture of clinical trials being a core function of what the health service does, across even regional hospitals. We do not necessarily have that culture of clinical trials being really important to the NHS in all settings. It is great in some very expert centres, but it is not necessarily seen that way across the board. It is seen potentially as a burden and something that people do not really want to get involved in. That is one aspect.

The other aspect is an IT process element, which can be tricky to navigate. The approval for running clinical trials in the UK can also be pretty complex for companies to work through.

Q188 **Anum Qaisar-Javed:** Baroness Morgan, would you say that your experiences in breast cancer are similar? In the information you find, what are the workforce barriers to clinical research?

Baroness Morgan: Listening to the discussions makes me want to be reflective and say that it is actually about how well the whole system works together to promote research and innovation for patients. Ultimately, it is for patients, and having access to new treatments—offering hope to patients like Emma and Philippa—is the end goal, as well as take-up of all the other new or better treatments, possibly cheaper treatments. That is the goal of the system. We know that patients who receive their care in a hospital that is research active and has clinicians, nursing staff and admin staff who are all involved in research do better. That is well established.

These are the challenges that we see in research currently. Nearly 50% of medical research in this country is funded by charities. That is true in

cancer. Through the pandemic, most cancer charities experienced a really significant drop in income. We are the people who fund the clinical fellows and the people who may take time out of their medical training to do a PhD. We are a really vital part of that ecosystem. That is a real worry. We have not made up that funding. I know it is a problem across the board in other medical charities as well. The Government have provided some support. It is not very much. It is about £20 million, which is a small amount in the big hole that has been left. In the way the NICE process is being reviewed at the moment, there are a few missed opportunities to align the NICE technology appraisal with the regulatory process, so that you can take out the gaps. Obviously, that is the other end of the ecosystem.

Workforce is absolutely key. Research nurses are absolutely vital. They are often pulled away to work on other things, particularly during the pandemic to support patients. The whole system is creaking, but we have a huge opportunity to get it right. We have a commitment from the Government to speed up all these processes and to make access to new treatments much quicker, and to help people like Emma and Philippa get extra time with their families through speeding up the regulation and so on.

It is very easy to say no to a new treatment. It is much easier and much quicker just to say, "No, we can't do it." I accept that NICE has to do the work and it has to be fair. That is how we are going to get innovation across the country. If you are in the centres of excellence or you are being seen at the Marsden or the Christie, that is great, but it has to be fair and equitable. That is why cancer alliances are really important. They are a team, a collective, where you can get a bit of critical mass for debate and discussion about how we are going to really improve our outcomes in breast cancer locally. How are we going to get together? Some will have tumour boards and so on. It is getting the system to work and to prioritise research as part of the beating heart that motivates people to go the extra mile for their patients.

Q189 **Anum Qaisar-Javed:** Moving the pandemic to the side, is there a culture in the NHS for research? I am thinking back to what Cancer Research found. One of the biggest issues they spoke about was that there is no protected time for research.

Baroness Morgan: Absolutely. It is really tough. You have to be very driven if you are in an ordinary district general hospital to carve out time to do research. In the centres of excellence, where you have a relationship with an academic institution, and you are very research active, there is more opportunity and more of a culture. There is absolutely no reason why, in every coffee room—there are not many canteens—they cannot be talking about research. It is what excites people in medicine and research nurses. Clinical nurse specialists are all there because they want to improve outcomes.

It would be as much about researching and evaluating the delivery of care and what works in a particular clinic style, what information works best, or how we help people to understand risk or make choices about different types of reconstructive surgery and so on. That kind of research and implementation of research is valuable as well. It is not only the research that goes on in the laboratories like those at the Institute of Cancer Research, where they are looking for new biological pathways or new drug targets. It is also about how we make the best of what we have around us to serve our patients better. A lot of it is time.

Q190 **Anum Qaisar-Javed:** Professor James, in your centre what staffing challenges have you faced?

Professor James: I might broaden that out to the centre I was in before, in Birmingham, which is a hugely busy DGH. I worked there for quite a number of years. I was the cancer R&D director for many years as well.

In terms of barriers to research, we surveyed our oncology workforce as to what they thought about trials. In general, they wanted to put people in trials, but what they did not want to do was fill in case record forms and serious adverse event forms. That can be done by other people; they do not need to do it.

What we found was that, once you put in not that much resource to take those barriers away, trial recruitment quadrupled across not just the QE but the network. What we also found, though, was that, when you asked patients if they wanted to go into trials, overwhelmingly patients want to go into trials. But if you are pitching up in Walsall, which is part of the network in Birmingham, almost nobody went into trials because there were no trials on offer in the first place.

There are a number of issues around that. One is about equity of access. If you come from a poor, deprived background, particularly from a BAME background, you are much less likely to go into trials than if you are white and middle-class. That causes all sorts of problems with the evidence base as well, because you do not know whether drugs or radiotherapy treatments will behave the same in different groups. One of the aims of our biomedical research centre renewal is proactively to target deprived areas. We are partnering with Clatterbridge, for example, which has some of the most deprived boroughs in the country, to ensure that we can get people from deprived backgrounds into trials as well as university professors living in Edgbaston or Chelsea. That is key.

The workforce issues are the same for everybody. There are not enough of the people you would like to have enough of, so you have to look at it creatively. For example, instead of employing research nurses, who are an incredibly scarce resource, you employ recent graduates in biosciences. They can do a lot of the stuff nurses do. They cannot take blood, do injections or put up drips, but they can do a lot of the rest of it.

By fiddling around with the skill mix and being more innovative, you can drive costs down because it is much cheaper to employ somebody who has just graduated than somebody who is a specialist nurse, and you can deploy the nurses to do stuff that is towards the upper end of their skill range instead of doing stuff that is actually not necessarily a nursing or medical task. That is one of the things we did in Birmingham. It is one of the things that the Marsden, which is where I did my clinical work, does extremely well. As a result, we recruit well to clinical trials and we have a culture of doing it. You expect that you are going to do it if you work there, and the organisation as a whole does it very well.

Perhaps I could mention one other thing about doing trials in general. If you look at trials of radiotherapy fractionation, and instead of four weeks of treatment you give treatment in a week, we can cure prostate cancer—my specialisation—in a week. To do that, you have to do a large-scale trial. Just in the fact of doing the trial, you have saved a shed-load of radiotherapy fractions because half the patients are now getting fewer of them. It also means that when you get the results of the trial and the 20 versus five show that five is just as good, the centres that take part are all completely tooled up to do that treatment. It is very easy to implement.

By doing the trial, you quality-assure everybody's treatment while you are doing it. You up the standard nationally in all the participating centres. You save resources if you do trials well. It then gets very easy to roll out, so everybody wins by putting more patients in trials. Patients want to go into them. Clinicians want to put patients in trials, but they do not want to do the bureaucracy. If you get a result, if lots of people have participated, it is then easy to implement.

Q191 **Dr Evans:** Professor, we have talked a lot about the system base and less about the patient. Particularly with your specialism in prostate cancer, the current drive is to diagnose many more people much earlier. At the outset, that seems a good side. The downside is that, with the likes of prostate, picking it up very early can mean you give someone a diagnosis of cancer and they have to live with it for 15 or 20 years. Do we have the balance right?

Professor James: I think so. I think early diagnosis is generally a good thing because you frame-shift things towards earlier treatment. One of the things that we have learnt with prostate cancer is that, actually, you do not need to treat everybody. We can monitor people and not treat them, or indeed overtreat them.

The other disease I treat is bladder cancer. Prostate cancer outcomes have improved substantially over my professional career because we have invested money in research, and across the board in pharmaceutical, radiotherapy and so on. With bladder cancer, the outcomes have not changed at all. You are as likely to die now as you were 30 years ago if you are diagnosed with bladder cancer. A lot of patients with bladder cancer pitch up in A&E. They pitch up in completely

the wrong place. Overall, 18% of cancer patients arrive in A&E, so the drive for early diagnosis is absolutely correct. I know that the Committee has heard about that previously. The problem of managing earlier cancer is, honestly, a nice problem to have. You have better options, and often less expensive options. It is a good place to be, not a bad place to be.

Q192 **Dr Evans:** Can I extrapolate from that a little bit further? We have heard as well that we are moving much more to personalised treatment, genetic treatment and even genetic screening. I am thinking about future-proofing systems. Do you think that the NHS is going to be in a position where people might be able to have their genome sequenced and be told they have a predisposition to bladder or prostate cancer at the age of 40, and then have to manage that through? Is it too naive for the NHS to be having these conversations? What work is going on in this sphere to make sure? This is coming in the next 10 or 20 years. It is up to us as policymakers to make sure, when we are doing these policies, that they are future-proofed to make sure that we are detecting early. What is detection and what does that look like to the patient?

Professor James: One of the things I am actively involved in is research around what is called polygenic risk profiling for prostate cancer. We can identify a man who is in the top 10% of risk. What you can do then is target screening resources disproportionately on the people at highest risk, and disproportionately less on the people at lower risk because those are the ones who are most likely to get it, and they typically get worse cancer when they get it. You get more bangs for buck. It allows you to focus your resources where they are needed.

As I think was said earlier, you need to focus not just on diagnosing people but on making sure they get the right treatments once they are diagnosed. If you alter the diagnostic paradigm, for example in the way we are doing with the polygenic risk score, it is quite clear from the clinics I run with these patients that they have disease that behaves, on the face of it, in quite odd fashions, because we are picking them up at probably a much earlier stage than we would have done otherwise.

The treatment paradigm needs to change as well. You need research at every stage of the thing. It is not just about diagnosis. It is about managing how cancers behave once you are diagnosed.

Q193 **Dr Evans:** My final question is this. Do you think the UK is up there as a world leader on this? Is one of the ways of getting ahead by stratifying much better so that we can deal with the backlog we have heard about and the problems we face with cancer, because we are targeting much better, it is cost-effective, patient effective and has better outcomes for the staff because they do not have such a big workload?

Professor James: We absolutely are world leaders. One of the huge advantages we have is that we have, broadly, a single payer system and a single provider system. We have fabulous data potentially available to us. One of the things that is very frustrating to me is that data is the

world's most valuable commodity. The biggest companies in the world are data companies. We have the most fantastic data resource. For me to access patients' data is an absolute minefield and expensive. We get charged a lot of money by NHS Digital to access data, for example, on late hip fractures caused as a result of the hormone therapies we give men for prostate cancer.

As a result of the trials we are doing, men live much longer so now they get fragility fractures that they would not have got because they would have been dead five years earlier. Getting that data out of NHS Digital is currently a battle we are having, and we have had to go through ethics committees and patient panels on whether it is reasonable that we have the data because we did not ask for it at the beginning. That is because we were not expecting the patients to be alive that long.

Dr Evans: Could you write to us on that?

Q194 **Chair:** We are giving you lots of homework. I want to give you all a chance to have a last word. I thought I might ask you the same question I asked the earlier panel. We have the Health Secretary coming here next week. In one sentence, if we are really to grasp this opportunity from science and innovation, what does he need to do differently from what we are doing at the moment?

David Watson: The most important thing we can do is this. NICE is currently looking at the way it appraises medicines, cancer medicines being a huge part of its workload. It is currently looking at a methods review, which is a big technical exercise. I think that methods review could be taken forward in the next couple of years, with a sort of ambitious outlook, at no additional cost. As you know, the medicines bill in the UK is capped. I think that would be a great opportunity to improve the long-term availability of medicines in the UK.

Q195 **Chair:** Thank you. Baroness Morgan?

Baroness Morgan: It is such a tough question. The really important question is about how the Secretary of State can view the system as a whole, joined-up system that is completely geared towards improving better outcomes for patients and see the golden thread of research and innovation running all the way through at every stage, so that you get it all joined up together, to take the amazing research and reputation that we have following all the way through to making us the best in the world for outcomes as well.

Q196 **Chair:** Thank you. Professor James?

Professor James: I think the lesson from Covid was that investing in research technologies and in broad-based clinical trials, recruiting large numbers of patients across the whole NHS, drove change very rapidly. We do trials on that scale in cancer, but we could do far more. It is a very powerful engine for change and is well worth the investment in the processes.

Chair: Thank you. We have had a very interesting session. It is nice to finish with a bit of optimism on the potential of science and technology. We will definitely reflect that in our report. We are really grateful to you for sparing the time this morning, and for your excellent evidence. Thank you very much.