HOUSE OF COMMONS

Health and Social Care Committee

Oral evidence: Cancer services, HC 551

Tuesday 13 July 2021

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Watch the meeting

Members present: Jeremy Hunt (Chair); Paul Bristow; Rosie Cooper; Dr James Davies; Dr Luke Evans; Sarah Owen; Anum Qaisar-Javed; Laura Trott.

Questions 1 - 67

Witnesses

I: Dame Cally Palmer, National Cancer Director, NHS England; and Professor Peter Johnson, National Clinical Director for Cancer, NHS England.

II: John Butler, Consultant Gynaecologist and Clinical Lead, International Cancer Benchmarking Partnership; Professor Sir Mike Richards, former National Cancer Director; and Professor Jon Emery, Professor of Primary Care Cancer Research, University of Melbourne.

Examination of witnesses

Witnesses: Dame Cally Palmer and Professor Johnson.

Q1 **Chair:** Good morning and welcome to the first evidence session of the House of Commons Health and Social Care Select Committee inquiry into NHS cancer services.

We are all very aware of the impact of the pandemic on the provision of cancer screening diagnosis and treatment, with nearly 40,000 fewer people starting cancer treatment in England last year. We know that there were also many challenges in cancer care before the pandemic. According to the Nuffield Trust, for example, if you look at five-year breast, cervical and colon cancer survival rates, we are behind Australia, Denmark, Japan, France and Germany.

We are going to look at all of these issues in the round and ask a simple question. What would it take to overcome the pandemic backlog and give England the best cancer survival rates in Europe? Do we have the plans in place to do that?

Later this morning, we are going to look at how other countries are successful in getting better outcomes than us. We will hear from John Butler of Cancer Research UK; Professor Jon Emery, professor of primary care cancer research at the University of Melbourne; and Professor Sir Mike Richards, who was Tony Blair's cancer tsar among many other roles, including being a very distinguished chief inspector of hospitals—in fact the first chief inspector of hospitals.

First, we are going to hear from the NHS as to how they think it is going. On our first panel, I am delighted to welcome Dame Cally Palmer, NHS England's national cancer director, and Professor Peter Johnson, who is the national clinical director for cancer. A very warm welcome to both of you.

Dame Cally, could you give us your most up-to-date estimate of how the pandemic has impacted cancer services over the last year, and what the scale of the backlog is?

Dame Cally Palmer: Good morning, everyone. I will start with the scale of the pandemic and then address the question about the backlog.

Clearly, having a suspected or an actual diagnosis of cancer and treatment is an incredibly anxious time for people. We should not underestimate, of course, the additional anxiety that the pandemic has caused globally as well as nationally on cancer diagnosis and treatment.

I will address the issue of the backlog in a moment, but the headline figure is that overall we have been able to maintain cancer treatment at 91% of pre-pandemic levels. I will address the deficit issue in a minute, but on the more assured and confident level, cancer treatment has been maintained throughout the pandemic. If we take the start in March 2020 through to May this year, it is at 91%.

That masks some variation in different tumour types. We saw a particular drop, for example, in referrals for lung cancer because of the crossover with Covid-19. Broadly, we saw referrals recover very quickly after a drop in April and May, and that has been sustained. Since March, referrals and treatment levels have been above pre-pandemic levels. That is the sort of upside.

In terms of the backlog, there are two areas that I need to address. The first is the long waiters, where we have seen an increase in the number of people. These are people who are referred for a diagnosis, and possibly for treatment if the diagnosis is confirmed. People waiting over 62 days is the long waiter period that we identify. That level is currently at 16,000. The intention is to return it to pre-pandemic levels by March 2022. It has been coming down—it was considerably higher than that during the peak of the pandemic, but it has been steadily reducing. Clearly, we need to do more to make sure that it is properly addressed. The other important thing to say about the backlog of long waiters is that 12% of those people will have cancer. We know where we need to direct our efforts, which is the faster diagnosis, or exclusion, of cancer, but of those 16,000, 12% will have a diagnosis of cancer.

Some people group together the figures for the long waiters with the people who have not come forward, but what is of particular concern to Peter and me is encouraging people to have the confidence to come forward for diagnosis and treatment. We know, if we look at the number of first cancer treatments in 2019 compared with the number of first cancer treatments in 2020, that we have a gap of 36,000. The 40,000 figure you mentioned, Chair, is the whole country. I am talking about England, with the 36,000. That is obviously an issue of concern. It is to do with people not wanting to come and bother the NHS, or being concerned about coming forward. It is very important that we have the diagnostic and treatment capacity to address that.

As many members of the Committee may know, we have been running the Help Us, Help You campaigns, with the support of cancer charities, to encourage people to come forward. We are really trying to maintain that and target particular tumour types, like lung, where we feel there is a bigger volume of people who have not come forward. I'll pause there.

Q2 **Chair:** Thank you very much. On the 36,000 figure for England, or 40,000 for the UK, we understand that it was caused by events beyond your control, but what is your projection for the number of additional deaths we will get as a result of significantly fewer people getting their cancer treatment started?

Dame Cally Palmer: That is a very important question, but we are not able to answer it at the moment. The ONS data does not show a pattern of increased mortality or excess cancer deaths at this point, so we obviously need to monitor the position on that. We have not been seeing lots of additional late-stage cancers. What we are concerned about is that

we are seeing fewer early-stage cancers simply because we have that gap of missing first treatments, if I can use that expression.

I do not think at this point it is possible to make any considered or intelligent assessment of excess deaths. We have no evidence of that at this point. For cancer registrations in 2020, we will be able to see the mortality rates in 2022. It is just a bit early, which I think was the answer I gave you at the last Health Select Committee. It needs very careful monitoring, but the big job is to encourage people to come forward, and for us to ensure adequate diagnostic and treatment capacity.

Q3 **Chair:** You said that the number of people waiting more than 62 days will return to pre-pandemic levels by next March. Are you intending that the entire cancer backlog will return to pre-pandemic levels by next March as well?

Dame Cally Palmer: If by that you mean the missing first treatments, that is the ambition. Obviously, that is not totally within the national cancer team's control. What is within our control is making sure, with cancer providers and cancer alliances, that we have sufficient diagnostic and treatment capacity, and that we encourage and target messaging to ensure that people come forward.

Q4 **Chair:** To use layman's language, are you intending to clear the backlog by March 2022, March next year, and are you confident that you will be able to do that?

Dame Cally Palmer: By March next year, the planning guidance requires us, and we intend, to clear the over-62 day backlog back to pre-pandemic levels. It is a recovery to the pre-pandemic position on those 16,000.

Q5 **Chair:** Thank you. We will come back to you, if we may, but I want to ask Professor Johnson about our pre-pandemic survival rates. It has often been a real source of frustration inside the NHS that we do not appear to have survival rates as good as countries like France and Germany. What is your assessment as to why that is?

Professor Johnson: I think there are many reasons why, historically, our survival rates have been behind some of our comparator countries. It is not uniform across the piece. There are some cancers—for example, children's cancers and acute leukaemias—where we are up with the best in the world, but on many of the cancers that are perhaps more related to lifestyle and depend very much on the speed at which people come forward for help, such as lung cancer and so on, we have lagged behind.

Historically, the main reason has been that we have seen people at a later stage, with more advanced cancer by the time they present. That is partly unwillingness to seek help, partly the difficulties of getting into the system, and probably partly diagnostic capacity, which we know has been challenged for many years.

The figures that we have show that survival has progressively improved. One-year survival, which is largely a measure of the stage at which people's cancer comes to light, improved between 2003 and 2018 by more than 10%. It was up to just under 74% in 2018. Five-year survival, which is more a global measure of how well not only presentation but cancer services work, had gone up by 9% between 2003 and 2014 to just under 55%.

We are making progress, as are our comparator countries, but the emphasis has to remain on trying to help people to recognise their symptoms at an early stage and get into the system, and to make sure that we have the diagnostic capacity to carry out the scans and endoscopies to make the diagnosis as rapidly as possible. It is a bit like the cycling analogy of multiple different small incremental improvements that we need to make to the pathway as a whole in order to absolutely optimise what we can offer people.

Q6 **Chair:** Can I ask you about the scale of our ambition? Obviously, countries like France and Germany are also improving their cancer survival rates; they are not standing still. Does our long-term plan for cancer actually see us catching up with French and German cancer survival rates?

Professor Johnson: The target we have set ourselves is to diagnose three quarters of cancers at an early stage and at a stage when potentially curative treatment might be possible—so-called stages one and two—by 2028. That is a very stretching objective. Our current figure is just under 55% of people at early stage. If we can achieve that, and we have multiple lines of attack on that figure to try to make sure that we can, we will be up there with the best of our European comparators.

Q7 **Chair:** Thank you. That is obviously a very important ambition. We have had a setback with the pandemic and fewer people coming forward for scans. Do you think we are going to be able to make up the delays caused by the last year? Broadly speaking, because 2028 is a long way away, are we on track to deliver that three-quarters ambition?

Professor Johnson: Clearly, there was no anticipation of the huge disruption that coronavirus would cause to health services as a whole when we set that ambition. None the less, we have worked very hard and fast, even as we dealt with the peak of the virus and all the difficulties that that imposed on delivering cancer services. At the same time, we have been planning for how we can come out of that in better shape and how we can accelerate, in the course of our recovery, some of the things that we were trying to do.

Take, for example, our rapid diagnostic centres, which is the idea that we can try to speed up the pathway to diagnosis for people and make it easier for them to come into the system. We now have those set up around the country in all the different cancer alliances. I think we already have 55 in operation, and another 30 or so are due to come on stream in

the next few months. It is focusing on how we can streamline that. Even in the depths of the first wave of the pandemic, we said that we absolutely had to make sure not only that we continued to put those pathways in place, but that we had to try to accelerate their development as we come out, because we could anticipate that there would be a fall-off in referrals and that we would need to increase our capacity as we saw people come back into the system, as indeed has been the case. I think in March we saw the highest number of two-week wait referrals that the system has ever seen.

Q8 **Chair:** To be clear, you are confident, as things stand, that we will hit that 2028 target.

Professor Johnson: I think we are very resolute in our ambition to get there, and—

Q9 **Chair:** I know that you are resolute in the ambition. I am sorry to push you, but I just want to know what degree of confidence you have. We are not expecting you to have certainty, because it is a long way off, but are you broadly confident? Do you think it is a 50/50 thing? Where are you on the scale? You are a cancer doctor, so you are very good at giving people percentage chances. Can you give us our percentage chance of hitting the 2028 target?

Professor Johnson: I am an oncologist. I do cautious optimism, and I am cautiously optimistic. There are not only the things that we have in place, such as rapid diagnostic centres and our lung health checks screening programme for lung cancer, but some of the innovations and some of the new things that we have in the pipeline. Admittedly, we do not yet know whether they will deliver for us, but there are things like the blood test to pick up cancers at a very early stage by looking at minute amounts of circulating DNA. If they do what we hope they will do, they will give us a very rapid leg-up and are something that I think will accelerate progress very markedly in the next few years. Yes, I am cautiously optimistic.

Q10 **Chair:** Thank you. Cally, how much difference is there between the well-performing cancer networks and the less well-performing networks in the country? Is there an issue around variation?

Dame Cally Palmer: Do you mean during the pandemic or generally?

Chair: No, I mean in overall cancer performance.

Dame Cally Palmer: What we have been seeing is an evening-out and sharing of best practice. When we originally set up the cancer alliances, we saw quite a lot of variation in models of care and delivery of care. There is still variation. It relates to deprivation levels and the geography covered, but generally what is beginning to happen is a sharing of best practice to try to improve whole pathway navigation of patient care and to do things like mutual aid and surgical hubs.

One of the upsides in all the huge difficulties of the pandemic for people professionally and personally has been the rapid sharing of best practice across all cancer alliances. For example, cancer surgical hubs started in London and Manchester and were then rapidly developed across the country. For some alliances, it was about mutual aid; for others, it was a big independent sector and NHS surgical hub. People adapted the models to suit their local circumstance. Yes, there is variation but—

Q11 **Chair:** Could you possibly write to us and tell us what that 55% figure would be if everywhere in the country was following the standards of the very best? That is probably the easiest way to understand if it is a significant issue.

Dame Cally Palmer: I am happy to do that, yes.

Q12 **Chair:** Professor Johnson, in the pandemic we have seen the transformative role that science can play. We can look at the RECOVERY trial and the vaccines programme. A lot of our cancer plan at the moment seems to be based on following best practice in countries that have higher survival rates than us. Do you think there is a role for bringing science in, allowing us potentially to leapfrog some other countries by the rapid adoption of new medicines, new treatments, new surgery and so on?

Professor Johnson: We are fortunate to have a fantastic science base in this country, and fantastic machinery for developing high-quality clinical evidence to back up the things that we think might work. I have already alluded to our work with GRAIL in particular, looking at circulating tumour DNA as a possible early cancer marker. We are just in the process of launching a very large study to screen people who do not have symptoms to see whether we can pick up a whole variety of 50 different cancers at the earliest possible stage. That kind of endeavour is fundamentally rooted in our ability to do clinical research in the sort of way that we have seen during the pandemic, with huge collective endeavour.

Another piece of work I am engaged in at the moment is measuring the response to vaccination among people with cancer, particularly people with haematological cancers—blood cancers—who have been having chemotherapy. We were worried that they might have blunted responses to the vaccination. Again, we have developed in a very short space of time, first, a survey to measure antibody levels in people who have already been vaccinated and, secondly, a study that we will be starting soon to look at booster vaccinations.

I think we can bring the ingenuity and creativity of our scientists together with the pharmaceutical and biotech industries. We are working at the moment with the Office for Life Sciences on, first, how we can accelerate early cancer diagnosis by looking at some of these technologies at an early stage; and, secondly, on looking at the techniques that we will need to look after people if we pick up cancers at an early stage. We will need much more surgery, much more sophisticated radiotherapy and different

interventional radiology techniques to tackle the cancers if we pick up the numbers that we anticipate picking up at an early stage. It is a multi-pronged attack on that.

Q13 **Chair:** Could I possibly ask you to write to us and explain where you think the biggest areas of opportunity are in our science base and our pharmaceutical base for transforming survival rates? It would be very helpful for our inquiry to understand where you think the biggest opportunities are. Would that be possible?

Professor Johnson: Certainly. I would be happy to do that.

Q14 **Chair:** I have two final questions for you, Cally, if I may. This is the $6 million question, but I am going to ask it anyway. Do you have the cancer workforce you need to deliver all the objectives that we have been talking about?

Dame Cally Palmer: Quality and delivery are all about the workforce. We have had a £46 million investment in the cancer and diagnostic workforce this year. We have seven priority professions that we want to invest in, both in training and in numbers, such as clinical nurse specialists, diagnosticians and so on. We have had some investment this year, but it is for one year. Clearly, as we change models and work hard to improve survival, we need the certainty of a multi-year settlement for the workforce so that we can make sure that we are planning and delivering successfully against long-term plan objectives.

This year, we are very pleased with the investment, but obviously there is a question mark about future years, and therefore certainty of planning. We are confident that we will meet the additional numbers. We set out that we would increase numbers by 1,500 in the cancer workforce in the long-term plan. We are on track for that, but the short answer is that we need continuity of investment in the cancer workforce.

The other thing I am very conscious of, and where we are working with the cancer alliances, is how we use the workforce much more productively. It is a really precious resource. For example, if we can employ more pathway navigators so that nursing staff can be freed up to do the things that only they can do, that is also a responsibility and part of our programme of trying to innovate and manage optimal pathways and fast and swift diagnosis successfully. There is a job for us on productivity and then, obviously, there is a job for all of you on what the multi-year settlement will look like longer term for the cancer workforce. In summary, I would say, this year, so far so good, but more to do.

Q15 **Chair:** I am sure we will come back to that one, but I have one final question for you, Cally, which is about capital funding. One of the things that Peter was talking about is the need for the new machinery such as MRI scanners, CT scanners and so on that is so important for early diagnoses. There also is the investment necessary for hubs. As you look at things now, do you have the capital funding you need to get to that

three-quarters target by 2028?

Dame Cally Palmer: I will respond to that in two ways. The first thing is that we have sought to have innovative pathways that do not depend on capital, because of the availability of capital. Peter referred to the rapid diagnostic centre pathways that we have been developing. We are doing those to wrap tests around the patients and to manage that without capital investment.

The first thing is what we can do without capital. The second thing is that we have had significant capital investment. Cancer is a capital-intensive business. We have had significant capital investment in radiotherapy kit and in the forthcoming community diagnostic hubs, which will be enormously helpful. You can never have enough capital, but we have had quite significant radiotherapy and diagnostic capital. It is just a question of where it goes. Peter and I are trying to make sure that we are not wholly dependent on capital to introduce some of those innovative, swift, new diagnostic models.

Q16 **Chair:** My local hospital, the Royal Surrey County Hospital, wants to build a cancer institute. They already have £25 million capital, but they are not allowed to spend it because of capital spending restrictions by the NHS. Is that a common problem across your cancer networks?

Dame Cally Palmer: It is an issue. There is a capital limit. I have worked in the national health service for a long time. It is a cash-limited system, where we have to be innovative and do the best we can with what we have. The really important thing is that a lot of the work we are doing does not depend on capital. Yes, there is a capital requirement, and we have had some significant capital investment, but we are trying to deliver realistically. Investment in diagnostic kit and the community diagnostic hubs is incredibly important, and ongoing investment in radiotherapy is clearly also very important.

Chair: It sounds to me that you are very diplomatically saying that, yes, this is an issue. I will leave it there for now.

Q17 **Dr Evans:** I am keen to unpick a little bit about the backlog, particularly around diagnostics and workforce. Both of you have talked about the future. I am more concerned about the here and now.

With the diagnostics, when you are in hospital everything runs more or less through the radiology department. They are the gatekeepers to getting everything sorted, whether it is primary or secondary care. Do you have enough resources to be able to deal with that, in terms of radiographers, MRI machines and ultrasounds, in the first place? What plans are in place to expand that?

Dame Cally Palmer: Thank you very much for the question. I will start and, if I miss anything crucial, Peter, please feel free to come in.

The first thing is that we have been doing some very careful planning with each of the cancer alliances around the country. We have looked at

what their workload activity is likely to be in diagnosis and treatment, including the missing first treatments, and planning with them how to manage that. We are doing very careful work with the cancer alliances and what needs to happen. We are investing in additional CT capacity, for example—kit and we are talking about diagnostic and surgical hubs so that we can use available IS and NHS capacity well as we do the recovery.

Q18 **Dr Evans:** Mobile MRI and CTs are much more commonplace in car parks. Where are they coming from? Is it from the private sector or are they being bought in by the NHS?

Dame Cally Palmer: The NHS is buying additional CT capacity. Some of that mobile CT capacity is for our lung health checks in supermarket car parks. Some is in-house CT capacity as well. There is investment in imaging because it is a major rate-limiting factor, as you alluded to, for patients coming through. There is investment.

We are also trying to be really careful about innovating in the management of pathways. An example is endoscopy, which is a big rate-limiting problem, as you know. What we have been doing is a new initiative in capsule colon endoscopy, so that we do an additional step in the process to avoid people going to full colonoscopy if they do not require it. We have rolled out new technology like that really quickly to reduce the impact on "oscopies" and the workforce. There is a range of measures between investment and trying to be more efficient with the ways the pathway is managed.

Q19 **Dr Evans:** That leads me to the next question. From my understanding, surgeons are chomping at the bit and ready to get going. The problem is the rate-limiting factor of anaesthetists. They have been lambasted by the fact that they have been taken on to the ITUs, and it is the same with nurses. How are you balancing that in cancer services for those who need operative procedures? The anaesthetists would seem to be the rate-limiting factor, given the fact that they have been under the cosh the whole time during the pandemic.

Dame Cally Palmer: Certainly, in the emergency response to the pandemic there needed to be a massive increase in critical care management of Covid-19. We have not seen the same impact in the later waves. Obviously, it is highly transmissible, but there is less impact on critical care than we have had. The outsourcing of staff and the use of anaesthetists for Covid-19 was a particular issue last year in the emergency response.

What we are trying to ensure that we do really successfully with the recovery programme is work effectively with clinical prioritisation and surgical and diagnostic hubs so that we can pool resources and undertake mutual aid where required between organisations. The good news is that we have had a lot of experience of that over the last 16 months. How do you deploy your workforce effectively? How do you bring teams of

surgeons from 10 hospitals together to flex demand and supply, and manage across the whole of a particular geography?

We are building on the experience of the last 16 months. With anaesthetists currently, unless Peter has an alternative view, we have not seen a particular rate-limiting problem with cancer surgery. Cancer surgery dipped. Overall, treatment is at 91% of pre-pandemic levels. We saw a dip in surgery last April and May, but that is now back up. The evidence does not suggest that there is a big problem with surgery and anaesthetic availability for cancer patients. Peter, is there anything I have missed and that I should add?

Professor Johnson: Clearly, during the first wave of infection, at this time last year, services came under huge pressure and there was a lot of redeployment and pressure on critical care. The way that the system flexed and adapted meant that during the second wave, even though we saw large numbers of cases in hospitals, and huge pressure on intensive care beds, we managed to maintain cancer surgery at much higher levels as a result of the adaptations and the matching of capacity and demand.

While there is absolutely no doubt that colleagues up and down the country have been under huge pressure, particularly colleagues in anaesthetics because of the critical care needs, we are able to carry out large volumes of cancer treatment now. Certainly, our levels of cancer surgery are running more or less at normal levels at the moment.

Q20 **Dr Evans:** That is really encouraging to hear. My follow-up question is to you, Professor. Pre-Covid, we used the two-week wait to pick up cancers. Often, a lot of GPs use them as a proviso to rule out cancer. If someone comes in with dyspepsia, you want to make sure that there is not something nasty going on, so they end up on the two-week wait.

It always struck me that there are some cases, maybe once a month or every two months, where someone has definitive cancer right in front of you. You want to get them seen the next day. Is there scope, given the fact that we might well expect later presentation, to have another pathway for those who we more or less know have cancer or perceived cancer—there are always going to be weird or wonderful sides—to help differentiate that? You would literally have a rapid access or next-day service for those who have a very obvious breast lump or a fungating testicular tumour in the groin, or something like that. Is that something that is being worked on? It would help pick up some of the people who may not end up on the two-week pathway. I can imagine seeing a place where you would just have one or two cases that really need to be picked up immediately.

Professor Johnson: I think we see the people who have obvious cancer in general terms as urgent referrals and urgent presentations. I treat malignant lymphoma. If I get a phone call from a general practitioner who is worried about somebody, we see them within a week because we

know that some of these cancers move very fast and need rapid intervention.

What we are trying to do, of course, is to make sure that we pick them up at a much earlier stage, before they reach that point. We have seen a progressive diminution in the numbers of people who present as emergencies, whether that is through casualty, A&E or as an urgent out-patient referral. I think we are down to around 18%, having started out at about 25% a few years ago. That is a reflection of the massive amount of hard work in primary care, referring people on the two-week wait pathways.

You put your finger on the problem, which is that we have gone from just under 1 million two-week wait referrals in 2010 to about 2.5 million just before the pandemic. We have massively increased the numbers of people being referred into the system. Happily, the great majority of them—more than 90%—do not have cancer, but it puts huge pressure on our diagnostic services because all these people need tests to make sure that they do not have cancer before we can return them to primary care. That is where we have created the pressures in the system.

We have seen 2.7 million two-week wait referrals since March last year, even during the course of the pandemic. We need to find ways to flex the system to make sure that people can get in, when, as you say, there is an obvious problem, as rapidly as possible—happily, I think that happens most of the time—and to make sure that we have the capacity. As we move towards the 28-day faster diagnosis standard, which is something we are introducing over the course of this year, we will need to have those models in place to make sure that we really can pick up the things that are obvious. A breast lump is a very good case in point. If one is in primary care and somebody has an obvious breast lump, you do not need a lot of complexity. They just need to go and see a combined breast clinic as rapidly as possible to get a diagnosis.

Q21 **Dr Evans:** On that basis, with the backlog coming, and the presentation and the natural tendency to refer more on the two-week wait to be safe, do you think you have the capacity as the service leads to deal with the onslaught that is coming?

Professor Johnson: We are putting adaptions in place, and we made a lot during the pandemic, when things were very difficult, to try to flex the pathways and put in some different solutions. For example, we are using much more tele-dermatology to do remote consultations for things on people's skin, where you get a medical photographer to send a high-quality image to a dermatologist so that we can try to match the capacity we have to the demand. There is no doubt that the demand was high before we started the pandemic, and it is going to remain high. We are going to have to keep adapting our systems and, as Cally said, innovating to make sure that we can help people get into the pathways and move down them as quickly as possible.

Dr Evans: Thank you.

Q22 **Sarah Owen:** I want to come back to some of the questions that the Chair raised earlier about staffing. This is quite a blunt question. Does the NHS have enough staff to tackle the cancer backlog? That is for Dame Cally, please.

Dame Cally Palmer: Thank you very much. The evidence shows that we are recovering referrals and treatment levels above the pre-pandemic level. We will be able to recover by March 2022.

I have to say that of course staff are tired. They have maintained services heroically and have had to flex to do things very differently, but at the moment both referrals and treatment levels are strong. What we need to ensure is that we support the workforce going forward. As I said, we had investment in the workforce this year. I think the issue is how that is managed in future years to ensure that we can support some of these new models of care and improve survival.

My summary is that you can never have enough, but staff have worked incredibly hard to keep referrals and treatments at the levels they have throughout the emergency response. Since March, we have seen the highest level of referrals ever and treatment levels above pre-pandemic levels. They are doing a fantastic job, but it is stressful. As I said before, it is about what happens in the future beyond this year's settlement.

Q23 **Sarah Owen:** You said that you were aiming to clear the backlog by March 2022. What is the estimate of the damage to survival rates in the time that we are catching up on the backlog?

Dame Cally Palmer: As I said previously, we are monitoring very carefully, but we cannot see from the current ONS data any consistent pattern of increased deaths from cancer because of the pandemic. We will have to monitor that data because it is early days.

We have not seen an increase in late-stage presentation, which very often predicts whether you can cure or not, but we have seen a reduction in early-stage presentation. That is to do with the missing patients who have not come through for diagnosis and treatment. At the moment, it is very difficult to give you a more accurate assessment than that, but it is something we are carefully monitoring. We have to make sure that we encourage people to come forward. As Peter was saying earlier, speed of presentation is incredibly important to enable cure and best outcome for people.

Q24 **Sarah Owen:** Thank you, Dame Cally. I have one more question on this point, and then I have a couple for Professor Johnson. You mentioned that it has been a very stressful time and that staff have done a brilliant job. No one doubts that at all. One of the other inquiries we have carried out as a Committee is on workforce burnout in the health services. Is there anything that could be done to facilitate keeping existing staff healthy and happy while the backlog is tackled?

Dame Cally Palmer: That is a really important question. The NHS generally is developing and implementing a range of measures on health and wellbeing for staff because there is obviously an NHS-wide recognition that this has been an extraordinary period. People need support. Peter and I both work in hospital environments. What people have been able to do is phenomenal, but it has been a very difficult time for people personally and professionally.

The NHS is developing a range of measures. Peter has actually set up and is chairing a new group on psychological impacts. It is primarily targeted on patients rather than staff, but we are looking at how we can support people, both workforce and patients, in this period of recovery. There are some activities going on to try to support members of staff.

Q25 **Sarah Owen:** Peter, will the £325 million provided by the Government for diagnostics provide the level of diagnostic capacity needed to reduce the waiting times for diagnostic tests?

Professor Johnson: It is a really good start as we look at the recovery and bringing people back into the system, and as we pick up the cancers that we have not seen in the last year, most of which, as Cally pointed out, are probably at an early stage because they are people without symptoms who would have been picked up through things like screening programmes or blood tests. As we bring those people back into the system and we bring online our rapid diagnostic pathways, and the programme of community diagnostic hubs that Mike Richards, whom you are going to hear from later, highlighted in his report as a way of increasing capacity, the first tranche will help us. It is an excellent start.

I think we need to see how that continues and try to make sure that we build on those beginnings to continue to increase capacity. As we have seen, the numbers of people with cancer continue to rise, and the numbers of people being referred for investigation of possible cancer continues to rise even faster. We have to make sure that we are keeping pace. Cancer is going up as we have an ageing population, and the declining competing risks are a bit over 2% a year. The number of referrals has to go up much faster than that because we have not yet found the magic way to find cancer at an earlier stage. That is a feature of a lot of the research we are doing. We absolutely need to continue building that capacity.

Q26 **Sarah Owen:** Thank you, Peter. As you said, the number of cancer diagnoses is going up. At the same time, in the very short term, looking at summer, hospitalisations of Covid-19 are also growing quite rapidly at the moment. What is your plan for maintaining services over the summer?

Professor Johnson: As we said earlier, we managed much better during the second wave than the first, as we understood how better to flex the system, how to match capacity to demand, and how to make sure we could have protected Covid-negative or Covid-reduced pathways and

places so that we could look after people even while the health service was under pressure. Obviously, the relative disconnect between severe infections and incidence of the virus that we have through the vaccination programme will be a big help, but none the less it is very important that we plan ahead. Our cancer alliances and the people running the system are doing exactly that, anticipating where the increase in demand will be and making sure that we can maintain those protected cancer pathways.

Q27 **Sarah Owen:** A lot of people who are receiving treatment for cancer will be out and about in the community. There is such a cliff edge in terms of removal of masks and the guidance on removing masks in public spaces. What impact will that have on cancer patients' everyday life?

Professor Johnson: The people I look after, who are having chemotherapy for things like lymphoma, know that they are very susceptible to infection. Indeed, that was something we all had to deal with before coronavirus was ever a thing. People who are having cancer treatment and people with vulnerable immune systems are used to taking additional precautions and making sure that they avoid risks of infection as far as possible. Coronavirus is yet another type of risk that people with cancer and people having chemotherapy and similar treatments are very aware of. I myself will continue to wear a mask, obviously in hospital and in crowded places, to do our bit and try to keep people as safe as possible.

Sarah Owen: Thank you.

Q28 **Dr Davies:** Professor Johnson, turning back to the importance of early diagnosis of cancer, which is arguably the most important area we need to tackle as a country, you gave us the statistic that 18% of cases were diagnosed on an urgent basis from an emergency presentation. Can you give us an idea of other routes to diagnosis and the percentages involved, whether urgent or routine referrals, screening or other sources, and the direction in which that has been going? How much success have we had in recent years in changing those figures?

Professor Johnson: I can write to you with the exact figures. In essence, as we have prioritised the urgent cancer referral pathway and lowered the thresholds for primary care workers to refer people in, our two-week wait pathway—the urgent referral pathway—accounts for around 40% of cancer that we see. That has progressively increased over the last few years as we have seen more and more people through that route. The corollary of that, as I said, is that we have seen a reduction in the proportion of people presenting as an emergency, either in casualty or in an urgent out-patient referral. That is down to about 18%.

Screening accounts for a very much lower proportion of total cancer pick-up rates. It is in the order of 5% to 10%. I can come back to you with the exact figure. The remainder of referrals come in through a variety of different routes. They are often picked up in other parts of the health service. It might be in hospital, for example, with people coming in with a

chest infection who are then found to have lung cancer, and things like that. That is the general make-up.

Overall, by virtue of hugely increasing the number of people we see on urgent referral pathways, we have managed to drive down the number of emergency presentations. That has to be good because we know that the likelihood of surviving cancer is much better if you are picked up through that two-week wait pathway than if you present as an emergency.

Q29 **Dr Davies:** To reiterate, it is too early to say what impact the pandemic has had on those proportions.

Professor Johnson: We saw a transient increase in the proportion that we saw as emergencies during the height of the pandemic, but that has now come back down again to about 18%. What dropped off were the urgent referrals, particularly during the first wave, but again those have come back up very rapidly. As I said, in March we saw just over 230,000 people on the two-week wait referral pathway, which is the highest number we have ever seen.

Q30 **Dr Davies:** Is there regional variation that hides particularly good performance or particularly bad performance at national level?

Professor Johnson: We see variations. To be honest, it varies from tumour type to tumour type and across areas. As the last year has gone by, and coronavirus has put pressure on different systems at different times, so we have seen fluctuations as things came under more pressure.

I think the public were incredibly sophisticated in the way they adapted to what was happening when things were really bad by protecting the NHS and not going to see their GP. As the pressure came off, we started to see them coming back, so it has fluctuated quite a lot.

Q31 **Dr Davies:** Dame Cally, what is being done to improve the referral process via GPs, particularly in light of the impact of the pandemic?

Dame Cally Palmer: We were doing work pre-pandemic, which we have accelerated during the pandemic, to completely review with our primary care colleagues the rapid diagnostic pathways. The origin of those was really the breast one-stop-shop clinics, where you wrap the tests around a patient rather than sending them off in a linear fashion for different tests at different times. We have accelerated the rapid diagnostic centre pathways both for cancers with specific signs and symptoms and, very importantly, for cancers with serious but non-specific signs and symptoms, which are the areas where, traditionally, patients are bounced around too much in the system.

We have accelerated the RDC pathways. We are working closely with primary care colleagues to look at how we manage case finding and fast onward transmission. Peter alluded to this earlier. We have just invested £20 million from the elective recovery fund on things like cancer hotlines, so that there is a rapid response if people are worried about a sign or

symptom. We are also accelerating the lung health checks; the low-dose CT in supermarket car parks is one of the models to pick up patients at an earlier stage. There is a lot of work going on with primary care to try to make sure that we handle the front end of the pathway effectively.

Q32 **Dr Davies:** Very good, but if up to a quarter of cancer cases arise from routine referrals, which I think is true, are you concerned about the fact that waits for routine out-patient appointments are much higher than they were? I worked as a GP in recent days, admittedly in Wales, and people were being told of a two-year wait for a routine out-patient gynae appointment. That is really bad news, isn't it?

Dame Cally Palmer: It is very important that the whole push is giving the public confidence to come forward if they have a worrying sign or symptom. What we are doing with each of the cancer providers, via the 22 cancer alliances nationally—sorry, this sounds a bit administrative, but it is important—is very careful activity and capacity planning. We have done a lot of work to look at what is required by surgery and by cancer type in each area, and to make sure that the right plans are in place and that there is navigation of those patients successfully through the diagnostic and treatment pathways so that they are not waiting. We are putting additional investment into things like whole pathway navigation. That is really important to pick up any deficits.

I have not flagged in any of those capacity plans and in the feedback particular issues with routine appointments among the cancer alliances in England. There will be individual issues because there always are, but that is not a major concern at the moment. What we obviously need to ensure is the trajectory of more increased referrals and the speed with which people are seen. From March to May, 95% were seen and had treatment within the 31-day window. We just need to make absolutely certain that that performance is maintained through the year.

Q33 **Dr Davies:** Finally from me, do you have concerns about the number of appointments with GPs that are still being carried out over the telephone or remotely, as opposed to face to face? How is that going to impact on referral rates?

Dame Cally Palmer: As you know, it is very important for effective cancer diagnosis to have face to face when that is required. We are currently running at around 55% virtual. I think that is the correct current position on virtual appointments as opposed to face to face. Peter and I are very keen to make sure that there is adequate face-to-face provision. I am sure you know this, but quite often something can be picked up face to face through very experienced GP and patient contact that you cannot get virtually. It is not quite the same.

We are obviously working with GP and primary care colleagues to make sure that there is sufficient face-to-face access for patients with signs and symptoms. As I said, a lot of work is going on with referral routes and the

rapid diagnostic centre pathways. Face to face is important for cancer patients.

Dr Davies: Thank you.

Q34 **Rosie Cooper:** Going on from what you have just said about its being important to speak to patients directly, unless we are all psychic it must be really hard for a GP to work out who they need to see, or where there may be an idea of cancer where it is not presented in a normal way. There are things at the edge.

I want to ask two things. The first is about giving people terminal diagnoses over the telephone without a warning to them and/or their family, so that they can be supported at the other end of the phone. I mentioned this to the previous Secretary of State. He indicated that people would rather know, but I have now had a number of incidents of constituents, and indeed a friend, where a terminal diagnosis was given over the phone, and they did not know it was coming. They did not have family support. It was devastating. The mental health of those people at the end of their lives was dreadful. How can we get better help? The consultant knows the diagnosis that he is going to give. Surely, the responsibility lies with the health service.

Professor Johnson: Perhaps I could answer that. Obviously, there has been huge pressure on the way that we communicate over the last year. The need to keep people safe and the need to try to minimise visits to the hospital and prevent the spread of infection has changed a lot of what we have done, which means that a lot more has been done by telephone and video-link.

You are absolutely right that people need to be helped to get information about their state of health, particularly when they are approaching the end of their life, in as sensitive and humane a way as possible. It is incredibly important that people communicate with patients in the most appropriate way.

I have often known the patients I look after for years and years because they have episodes of illness that come and go. Sometimes, they are very happy for me to ring them. In fact, they are happier for me to telephone them so that they can sit and process the information quietly at home before we then have to meet and make decisions about what to do next. It is a very individual process, and it relies on us knowing well the people we are looking after.

I have no doubt that during the pandemic the huge pressures on the system and the ways in which people had to work rapidly, and try to manage things as best they could, may have meant that, on occasions, things were not as they should have been. I think the underlying principle is that you have to know the person you are speaking to, and you have to know the way in which they want the information. Understanding what is important to people and what they want from an interaction is incredibly important.

Q35 **Rosie Cooper:** Thank you. Dame Cally, this happened in a mega, really good trust in the north-west, Clatterbridge, where people were given terminal diagnoses over the phone. What can you do to ensure that consultants are more thoughtful about what they do when delivering such a difficult decision—it is not a diagnosis—especially when, in one case in Clatterbridge, English was not the doctor's first language? It was really difficult.

Dame Cally Palmer: I will follow up immediately with my colleagues at Clatterbridge. I have a couple of things to say in addition to the comments that Peter made.

The first thing is that excellent cancer care is both about the best clinical outcome that can be achieved and the most personalised and individualised care for someone. It is the whole psychosocial and emotional support, and judgment about what you say and when. It is incredibly important to have both the personal and the individual, alongside technical excellence, in the delivery of care. Our holy grail is to make sure that they are equally addressed, and that variation is eradicated across the country.

As I said earlier, Peter is setting up and running with colleagues from the cancer community a new taskforce on psychosocial and emotional support for people, particularly as a result of the pandemic but more generally on things we can do to support people better. This is a subject for that group. It is very useful that you flagged it, so thank you.

Q36 **Rosie Cooper:** Thank you. When I spoke to you previously, we talked about radiologists and radiotherapy being unused, and that clinicians felt a little underused during the pandemic. I would like to reverse that. I have been talking to people who are particularly interested in IORT—intraoperative radiation therapy—in early breast cancer, in which radiation delivered once during the operation can save three weeks of daily radiation. It is better for the patient, and it also eases the service tremendously. I believe it was approved by NICE and yet it seems to have stalled. Can you explain why?

Professor Johnson: I think it is fair to say that it is controversial. While NICE cautiously gave it an approval, my colleagues who give radiotherapy treatment for breast cancer have mixed views about how useful it is. The principal concern about the technology is that the recurrence rate appears to be higher, and the difficulty of giving radiotherapy during an operation is that you do not know during the operation how extensive the cancer is because you only know that when you have the pathology result afterwards. It is fair to say that the reception has been mixed among the expert community who do radiation treatment for breast cancer. That is probably why it has not been as widely adopted as it might have been. There are very definitely pros and cons in that area.

Q37 **Rosie Cooper:** Thank you; that is very useful. Dame Cally, I have one

quick question about associated cancer services. If you have had breast cancer, the lymphoedema service seems to be nigh short of invisible. It is a very poor relation. People are not getting the help they need. How do you see those ancillary services? In the end, in order to make somebody's life comfortable, they are really important after their cancer treatment.

Dame Cally Palmer: It is very important that we have a holistic approach, including not only psychosocial support but things like lymphoedema in breast cancer, because it affects people's lives going forward. One of the big focuses of the national cancer programme pre, during and post-pandemic is on feedback from patients on issues to do with quality of life and quality of experience so that we can address deficits in the system.

I am aware that lymphoedema services are variable and often stretched, and that there is a waiting list for them. One of the things we are trying to address is understanding what the variation is and how we best address it. We are doing a lot of work with patient and public groups on quality of life and quality of experience post treatment. It is not just the immediate acute episode of treatment that we are addressing.

Q38 **Rosie Cooper:** In Merseyside, I am told that one local CCG put something akin to £12,000 into the pot for the service, and that people are not getting helped. When the consultant breast surgeon says that it is impossible—this is in Liverpool—and there is no service, and that the lymphoedema service is absolutely abysmal, why doesn't anybody do anything about it?

Dame Cally Palmer: Peter, I do not know if there is anything you want to add. I am aware that lymphoedema resources are very specialised. They are stretched and they matter enormously for patients post their breast cancer treatment. Part of our national programme is to address deficits in the system.

Chair: Rosie, I'm afraid we have to move on. This must be the last one.

Q39 **Rosie Cooper:** I am absolutely sure you have to move on.

Dame Cally, what gets measured gets dealt with. This is not measured and it is not dealt with. This is going to be my next little crusade. From what I have seen, for example, in the Merseyside area with friends, it is nothing short of a disgrace. Everybody cannot keep walking past and ignoring it. Saying it is important but doing nothing about it and having breast surgeons who know it is important saying it is dreadful, but no one listens, cannot be acceptable.

Chair: Perhaps Dame Cally could write to us with some details about what is happening in that area.

Dame Cally Palmer: I will indeed. That is an efficient way to give you more detail about what is happening and the plans. Thank you. Comments noted.

Rosie Cooper: Thank you.

Q40 **Paul Bristow:** My first question is to Dame Cally Palmer. The enormous backlog that we have to deal with for routine elective surgery is well publicised. That is for hips, knees, cataracts and that sort of thing. How are those huge backlogs in elective surgery affecting cancer surgery capacity?

Dame Cally Palmer: It is an important question. Cancer has been treated as a priority throughout the pandemic and is being treated as a priority in the recovery programme, because there is a survival window. There is specific money going into some of the initiatives we have mentioned for cancer—the pull-through for things like the hotlines, navigation and nurse-led clinics. Then we have access to the £1 billion elective recovery fund. I am working very closely with the director of elective and urgent care to make sure that we have an integrated plan.

As I am sure you know, the issue with cancer is that it uses the same theatres, critical care capacity and bed capacity as the electives—hips, knees and other things. We have to make sure that we are completely aligned with the capacity planning for cancer and elective recovery. We are working together on identifying NHS and independent sector capacity, making sure that we have a complete plan that is integrated.

The key point is that cancer has to be, and is, a priority for the use of diagnostic and treatment capacity because there is a survival window. It is very important that we get patients coming forward and that we can diagnose and treat them efficiently and quickly. Alignment is key.

Q41 **Paul Bristow:** Do you feel confident that we have a long-term arrangement with the independent sector that can ensure that we have the surgical capacity to deal with cancer surgeries?

Dame Cally Palmer: I will start with the emergency response and then come on to where we are now with the independent sector. During last year, we had a block arrangement, as you know, with the IS. That allowed the cancer surgical hubs to operate with Covid-secure facilities. Of course, independent sector capacity is not available everywhere in the country and it is not used everywhere in the country for NHS activity. We have to make sure that our models work for NHS facilities as well as NHS-IS linked facilities funded by the NHS. In the emergency response to the pandemic, we had a block contract with the independent sector. It allowed cancer surgical hubs to really motor and manage Covid-secure facilities for patients to keep cancer treatment at the levels that we mentioned.

Going forward, there is a more tailored arrangement. There is not a block any more, but there is a framework for the next four years for access to independent sector facilities. In the planning guidance, and in our work with cancer providers and cancer alliances, we are trying to ensure that diagnostic and surgical hubs, using IS where it is available, will continue to be used for recovery. We have gone from a block supporting the hubs

to a more tailored arrangement under the new framework for access to IS. It is important to have ongoing access to the IS under the four-year deal to really allow us to have the treatment capacity that we need.

Q42 **Paul Bristow:** That is reassuring. I have one further point, and please feel free to come in on this, Professor Johnson, if you want to. Cancer pathways are complex. How do you feel that they can improve as a result of the pandemic? Have we learnt lessons from the pandemic to improve those cancer pathways?

I have one cheeky last question, Chair. In previous years, the cancer drugs fund was always talked about as a political hot potato. Do you think we need a cancer technology fund, which would ensure that we had the same sort of technologies, scanners and all that sort of stuff available in the same way as we did with the cancer drugs fund?

Dame Cally Palmer: I will take the two parts of the question. Peter, please feel free to come in.

In terms of pathways, notwithstanding the personal and professional difficulties that the pandemic has caused, which have been enormous for staff and patients, as I said earlier, the upside has been that we have accelerated some pathways, and smoothed them and streamlined them because we have had to. The example I will give you is that in a matter of weeks we rolled out capsule colon endoscopy kits. Those are little cameras that people swallow to prevent the need for them to go through full colonoscopy if they do not have a high risk.

Equally, we have accelerated the lung health checks, so that you can do low-dose CT scans and then stream patients and stratify them more effectively. We have accelerated the rapid diagnostic pathways, where you wrap the tests around the patient. A lot of good has come out of a very difficult 16 months. We need to keep that accelerated practice going.

Chair: Thank you. Let me bring in Peter on that question because we have to move on.

Professor Johnson: With reference to bowel cancer in particular, Cally makes a very important point. One of the things we did was to speed up the rate at which we get GPs to use FIT—the very sensitive test to look for blood in faeces. We have been using it for screening people without symptoms, but in the course of the pandemic we brought it in much more rapidly using the information we had been gathering, so that by measuring the level of blood in the poo of people with symptoms we could decide who most urgently needed referring for a colonoscopy, who could have one of the capsule tests and who could be safely managed in other ways. By introducing that in response to the pressures of the pandemic, I think we managed to streamline that pathway.

The cancer drugs fund has been highly successful in coping with some of the demands and the need to innovate rapidly. During the pandemic, by

flexing the treatments that we made available to make them safer during the peak period of infection, around 10,000 people have had new treatments that might not otherwise have been available to them. There are around 40 different cancer drugs that we rapidly moved through.

Technological innovation is another potential case in point. In fact, we are putting out calls for innovation. We put out a £15 million call for faster diagnosis innovations just recently. In a sense, we are already there with that and with being able to do these things more rapidly. I hope that the work we are doing with the Office for Life Sciences will bring in and harness the talents and energy of industry in this area as well.

Q43 **Chair:** Thank you. We have to move to our next panel, but I need to ask you one final question. As you know, Professor Jane Dacre has an independent expert panel that works for the Select Committee. She will be Ofsted-rating progress against key Government and NHS objectives in cancer as part of this report. I want to ask both of you, if I may, when you look at NHS cancer provision overall, which bits are good and which bits require improvement. Let me start with you, Cally.

Dame Cally Palmer: I think we have absolutely fantastic cancer treatment in this country. What we have not focused on, and need to focus on, is speed of presentation—case finding, early detection and diagnosis. We know that for most cancers that makes a huge difference. That is why we need to get to it. Chair, when you were Secretary of State you asked for 80%, but we got a 75% early diagnosis figure. We felt that was a more realistic ambition that we could deliver. We have fantastic cancer research and some world-leading cancer practice, but—

Q44 **Chair:** Early diagnosis is the area.

Dame Cally Palmer: It is early diagnosis and speed of presentation that we really have to focus on. Of course, we must eradicate variations for different ethnic groups and geographies as well.

Q45 **Chair:** Peter, do you have anything to add?

Professor Johnson: Simply that the involvement of patients and some of our other stakeholders, particularly cancer charities, has been a huge strength during the pandemic, and, in the ability to bring together those different groups, remote working has been very helpful. At one point, we were having a call with cancer charities every week. It is the ability to bring together those groups and to focus on what matters to people and make sure that we are recording their experience. In the midst of this pandemic, we launched the largest quality of life survey anywhere in the world for people with cancer, to make sure that we understand not only what happens to people but what it feels like from their perspective. I think there are huge strengths.

We have a large amount more to do in that area, in particular responding to the things that we hear back. The area, as Cally says, that we really need to focus on is making sure that people come forward, and that we

have the diagnostic capacity to look after them. That is going to be absolutely mission critical to hit our long-term plan ambition.

Chair: Thank you. We are most grateful to you for coming this morning right at the start of the inquiry. I know that you are going to write back to us with lots of follow-up issues, but before you go I want to ask you to thank all your teams working on cancer services throughout the NHS. The last year has been incredibly challenging. We know that, and the whole country knows that. We are all incredibly grateful for the extraordinary dedication that they, and you, have shown.

Thank you very much indeed. We will probably invite you back at the end of our inquiry for some further follow-up questions. In the meantime, we are most grateful for your time this morning.

Examination of witnesses

Witnesses: John Butler, Professor Sir Mike Richards and Professor Emery.

Q46 **Chair:** We now move to our second panel. I welcome John Butler, who is the clinical lead for Cancer Research UK's International Cancer Benchmarking Partnership. From the University of Melbourne, we have Professor Jon Emery, professor of primary care cancer research. Professor Sir Mike Richards was, as we talked about before, cancer tsar under a previous Government, so he has enormous experience in exactly the areas we are talking about.

I will start with John Butler. Give us a summary, if you would, about how we compare in this country to other benchmarked countries like Germany, France, the United States and Australia.

John Butler: Thank you very much for the opportunity to present in the work you are doing. Without doubt, the story of cancer in the United Kingdom over the last 20 years has been one of progress and year-on-year improvements in survival. However, it was clear from the mid-1990s, which led to a lot of the transformations in cancer care in this country, that survival in the UK fell behind comparator nations.

A programme was set up in 2009 where we looked to find nations that had similar healthcare systems—universally available healthcare—and, crucially, full population registration of cancer. You alluded to Germany and France. Although we can make some comparisons with them, they only record about 20% to 40% of their cancer cases, so we cannot make as full a comparison as we can with countries such as Australia, Canada and Denmark.

What we have seen is that cancer survival has improved. In some cancers, such as breast cancer, survival rates in the United Kingdom are very similar to our peers, to the extent that in our most recent studies, when we looked at survival from 2010 to 2014, we no longer included breast cancer, as the survival differences, certainly at five years, were quite low.

What we have seen in other cancers, however, is that although there has been progress, we appear to be 10 to 15 years behind leading nations. For example, five-year colon cancer survival in the United Kingdom between 2010 and 2014 was 58.9%, which is roughly where it was in Australia 15 years ago. Although we have improved, everywhere else is improving as well.

That is a summary of where we are. Do you want me to go into some more detail as to reasons for that, or will we come on to that?

Q47 **Chair:** I appreciate this is something you could give a very long lecture on, but what do you think the headline reasons are for that 10 to 15-year gap?

John Butler: Certainly it is multifactorial. Early diagnosis plays a part, but a crucial thing in cancer, which is the purpose of early diagnosis, is picking up cancers earlier where we think more will be cured. The other issue with many cancers—I am a cancer surgeon dealing with ovarian cancer predominantly—is that we know it is not feasible to always pick them up at an early stage. Many will be picked up at an advanced stage.

What we found in our studies was that, even if patients were detected at the same stage, we saw inferior survival in the United Kingdom. In ovarian cancer, for example, we saw significant differences in survival for the advanced stage patients in the UK compared with better nations such as Australia, Denmark and Canada. We know that there is not only a problem with early diagnosis but that it is also to do with treatment.

Q48 **Chair:** Do you have good interaction with the Government? Are they engaging with you on the kinds of things that you are discovering?

John Butler: I am a researcher. I do not know whether Mike would be better placed to pick that up, as he has been chair of the programme for a number of years.

Q49 **Chair:** Okay, I will come to Mike. Mike, what do you think we need to be doing differently? That is a very interesting point that John Butler has just made; it is not just about early diagnosis, there is also a treatment issue. Let me ask you to wade straight in and talk about those two things.

Professor Sir Mike Richards: First of all, I agree with John that it is multifactorial; it is both early diagnosis and treatment. We could do a lot more in early diagnosis. When we set up the cancer benchmarking partnership back in 2009, it was very much a joint endeavour between Government, including the Department of Health—as it was then—and a lot of input from Cancer Research UK, and I would love to see that continue as a combined partnership. I think we are learning things.

One of the things we learnt in the first wave was that people in this country were much more concerned about worrying their doctor or wasting the doctor's time than they were in other countries. I remember that we presented that to the other countries, and they just raised their

eyebrows and said, "Isn't that what it's all about?" I think part of the pressure is in primary care. That is not saying anything adverse about primary care, except that they are under strain too. We also know that in primary care GPs in this country are less likely to investigate or refer patients than their counterparts elsewhere. Again, that is not blaming GPs. It is because our diagnostic services are hugely under strain. I can come on to that later.

I think it is a combination of factors, but the whole pathway is an important part of it. As John said, when we get the patient diagnosed we need to make sure that they are getting optimal treatment.

Q50 **Chair:** Mike, this is obviously something you thought about a lot when you were chief inspector of hospitals. Is there an issue about variation across the country in the treatment available?

Professor Sir Mike Richards: Yes. I saw that as chief inspector of hospitals. I also saw it when I was national cancer director. There is variation. We have worked hard to reduce it. We have done quite a lot of work, going back 15-plus years, on centralising surgical services for cancer. Have we gone far enough? That is another question.

It is worth emphasising that it is still true that surgery cures more cancer than either radiotherapy or chemotherapy, taken as a whole. It is easier for me to say that as a non-surgeon perhaps, but it is the case. We must make sure that patients get to surgery and get the best surgery possible where that is appropriate. There are variations in the proportion of lung patients who might be suitable for surgery who get to surgery across the country.

Q51 **Chair:** Mike, I want to ask for your experience. You put in place big plans to transform cancer care. As John Butler said, there has been a year-on-year improvement in cancer survival rates, but we are still behind some of our comparator countries in key areas. If you were having a word in the ear of the new chief executive of NHS England about what to do and what pitfalls to avoid if we really want to catch up with our comparator countries, what advice would you give?

Professor Sir Mike Richards: The advice I would give would focus largely on the early diagnosis side. John may want to say more about the treatment side. On the early diagnosis side, I would say that we need to do two things. We need to take further the work on pathways, and we very much need better diagnostics. Better diagnostics is both machinery—equipment and facilities—and the workforce.

It is also about doing things differently. It is not just about more of the same. The report I wrote last year for NHS England on diagnostics highlighted the need to increase capacity, but to change it so that we had separate streams, where that makes sense, for acute diagnostics—what is needed by the emergency department and in-patients—from elective diagnostics and what is needed for out-patients and GPs who want to

refer. That is actually what other countries do. We may hear more on that from Jon Emery. It is certainly what I have heard about other countries; there is much better diagnostic provision.

It is worth saying that, on CT scanners and MRI scanners, the OECD tracked that, and we are at the bottom of the league table of developed countries when it comes to the number of scanners we have. We need to double the amount of CT activity, and to do that we need more scanners. We can then work out how much more workforce we need. That was all in my report last year.

Q52 **Chair:** Before I bring in Professor Emery, I want to ask John Butler if he wants to come back on any of the things we have just been discussing with Mike.

John Butler: No. I agree with that. Hopefully, we will come on to the importance of the workforce. You cannot have a scanner unless you have someone to read the scans.

Q53 **Chair:** Thank you very much. Let me bring in Professor Emery. Thank you for joining us from Melbourne. From what you know about how the NHS works, what do you think you do differently in Australia that means you have better survival rates?

Professor Emery: I think there are three interrelated issues. The first, which is very much in keeping with what Mike was saying, is around access to both general practice broadly, and then the access that a GP has to critical investigations, particularly radiological tests and blood tests; and better access to out-patient specialist assessment. Related to that there are larger system-level issues. One is the way that a lot of medical care is funded through a fee-for-service model, which, for example in general practice, alters the way consultation patterns occur.

In a predominantly capitation model like you have in the UK, the emphasis is more on trying to reduce demand to see patients. In a fee-for-service model, you want patients to come and see you because that is how you generate income. I think that feeds into something that Mike was saying about patients in the UK not wanting to bother their GP. Australian receptionists actually welcome you making an appointment.

There are some interesting ways that we fund general practice, which contribute to access to general practice. They also contribute to the establishment in the community of large radiological services and pathology services that allow much better access to CT scans and blood tests that GPs can order directly. As a GP in Australia, you can order a wide range of blood tests that are funded through the Medicare system and have results back within a day. You can order a CT scan, again funded through Medicare, sometimes with additional out-of-pocket costs, but again you have the results within a few days. That is just an extraordinary difference from the way you access investigations in the UK.

The third piece, which is again an important contextual element, is our much more intimately combined public and private healthcare system. We have a range of tax sticks and carrots to increase the uptake of private healthcare insurance; 44% of Australian adults have some form of private health insurance for their in-patient care. If you have private health insurance, you are far more likely to be referred to see a private specialist for your initial assessment. Essentially, that is your fast-track pathway to see a specialist, even though actually the initial out-patient consultation with a private specialist is funded through Medicare, with sometimes some out-of-pocket costs. It alters the way that referrals occur. There is greater access for a large proportion of the population to private specialists. It also reduces the demand on public hospital services for out-patient assessment.

There is a range of structural ways that healthcare is funded that mean there is a greater GP workforce, greater access to general practice and greater access to investigations and specialist assessment, which means that there are fewer diagnostic delays. I think those are some of the major contributors, at least in the early detection piece, as to why Australia has better outcomes.

Q54 **Chair:** That you. That is extremely helpful. I am going to bring in my colleague James Davies, who is himself a GP to follow up some of those points. Before I do that, I want to ask John Butler and Mike Richards to reflect on something you said that I was not expecting to hear this morning about the difference between a capitation model and a fee-for-service model. The direction of travel in the NHS is very much to move away from fee for service—I am not talking specifically about cancer care, but across the board—on the basis that you are trying to move everyone to focus on prevention rather than cure; you are trying to avoid over-treatment; and trying to have a more holistic approach to people's care, which fee-for-service often does not do.

John Butler and Mike Richards, do you accept the point that Jon Emery is making? Are there risks to cancer care in particular of the capitation fee model that we are embracing, not just for general practice but in block contracts for hospitals?

Professor Sir Mike Richards: I think that what Jon Emery said is extremely important. We are now getting that understanding. It fits with the things that ICBP has found.

What we have to find is our own way of encouraging patients to come forward and encouraging GPs, by fee for service or whatever other means. We need to do that. I do not have the answer, because I think in this country we are absolutely wedded to the capitation system at the moment, but I do not think it does cancer outcomes any good.

Q55 **Chair:** That is very interesting. John Butler?

John Butler: To echo Mike, we obviously want to incentivise patients to access the healthcare system and we want doctors to give optimum

treatment. We know that with the current funding system we are a relatively underfunded healthcare system overall. The rates of treatment and patients not receiving treatment appear to be much higher. We need more towards investment. There are different models, and I can see some benefits of the capitation system but also benefits of fee for service. It will be an interesting debate to have.

Q56 **Chair:** If we did the other bit of what Jon Emery was talking about, which would be to massively speed up the ability to get diagnostic results back quickly for GPs, so that they knew they could get unlimited CT scans back in a few days and blood tests back within 24 hours and that kind of thing, do you think that could address the bulk of the problem we are talking about?

Professor Sir Mike Richards: It can certainly address part of the problem, which is the step from the GP onwards, but it will not address the point of getting patients to the GP. I am really glad to say that the report I wrote last year was accepted by NHS England, and we have some funding to get started on what we are doing in diagnostics, with the Treasury having given £325 million. Very soon, we will see the first lot of community diagnostic hubs coming on stream. There are 36 that have been approved. Later in the year, we hope to have another wave coming on stream. Will we need more funding for that in the future? Absolutely, yes, we will, but this is testing the new model and getting plans across the country for better diagnostics. That will give GPs better access. I am sure we will have criteria, and we need to work on that with GPs, but yes, better access to diagnostics and more one-stop shops will be part of what we can do.

By the way, that will benefit not just cancer patients but non-cancer patients. If you have breathlessness, you do not necessarily know if it is going to be a cancer or COPD or asthma. You need to be able to do the tests in one stop that will say what the cause of the patient's breathlessness is.

Q57 **Dr Davies:** John Butler, as a GP I am, as you can imagine, a big fan of our primary care system. Do you think, to an extent, that one of our problems is that GPs in this country are too effective as gatekeepers and are not letting people through, and that the systems in place in other countries make direct access to secondary care clinicians easier?

John Butler: Thank you very much for the question. We did a piece of work with the ICBP, offering clinicians from around the world the same clinical vignette. It was an example of a patient with, say, ovarian cancer. We found that in lower-performing countries such as England and Wales only about 35% of GPs referred. In better-performing nations, with an identical clinical history, it was 60% or 70%. Certainly, the threshold for referral appears to be higher in this country, based on our international studies.

I guess there are different ways of gatekeeping. Some are where the GP will want to conduct the diagnostic investigations, when there may be a delay. Others may be just monitoring patients and having too low a threshold for further investigation.

Q58 **Dr Davies:** Have you looked at direct access, even skipping the GP in some instances?

John Butler: Yes. As part of that we looked at direct access to imaging, such as CT and ultrasound. We found that was much greater in other countries. Hopefully, the diagnostic hubs that are being rolled out will increase that access. Certainly, there is a big variation in access to diagnostics.

Professor Emery: I hope you don't mind me interrupting, but I want to add to that point about the threshold issue. With GPs in Australia, where you have greater access to tests, inevitably the thresholds are lowered. I think the ICBP study that John Butler mentioned really highlighted that point. There is a supply and demand effect that goes on there.

Q59 **Dr Davies:** Professor Richards, many clinicians do not like ticking boxes. However, there is a case that a very simple referral system makes life much easier. If there are too many hoops to jump through, for instance, that is perhaps an impediment to referral.

Do you think there is currently too much variation across the country in referral criteria and referral pro formas? Should there be a level of excellence developed centrally to look at what makes it easy to refer, and who should be referred? I know there are obviously NICE guidelines as to who should be referred, but this is from the point of view of the hard-worked GP.

Professor Sir Mike Richards: Certainly, I would want to make it as easy for a GP as possible. I think we throw up barriers at each stage, but it is because of the lack of capacity in our system, so the first thing to do is to tackle the capacity barrier. As other people have said, it is both an equipment and a workforce one. If we put in more CT scanners, we will need more radiographers and more radiologists to report the scans. There is no doubt about that at all. I think we need to build the capacity. If we build the capacity, we will find ourselves making it easier for GPs to access that capacity.

Q60 **Dr Davies:** Are you aware of situations where the capacity is there but the referrals are not coming through? In some specialties—for instance, cardiology—a rapid chest pain clinic was set up in an area where I was working. They were actively encouraging GPs to refer even cases that perhaps you would not normally have done. They had a risk stratification system on the referral pro forma that suggested that almost anyone with a twinge in their chest needed to be referred. They seemed to be dealing with those patients very effectively. It can be done. Is it being done in some parts of the country?

Professor Sir Mike Richards: I think there is lack of capacity in diagnostic services throughout the country. I do not know of any part of the country where I would say that they have sufficient diagnostic capacity, either in the workforce or in equipment.

Cancer referrals have gone up year on year—the two-week wait referrals. I remember when the two-week wait referral was introduced at the beginning of this century. The number of people being referred was way below what we had predicted at that point. It is now just about where we expected it to be—the 2.5 million figure that was referred to earlier—nearly 20 years ago. I think that has moved on. GPs are responding to the fact that they know we need to diagnose patients earlier, so they are making much better use of that.

Q61 **Dr Davies:** Finally from me, we touched on virtual consultations in the previous panel. Do you feel they have had a negative effect at primary care level or at diagnostic level? Is there something to learn and embrace from them?

Professor Sir Mike Richards: I have talked to a lot of GPs and others about that, and my own view is that there are quite a lot of consultations that are better done virtually. I know from my own experience that I do not always necessarily need to see a GP. I want to talk to a GP, and that may be about a repeat prescription. Whatever it might be, let's get those done virtually. A telephone conversation is perfectly sufficient. With others, people need to be seen and we must make sure that is the case.

The GP may need advice. In many cases that advice could be given online to the GP, and the patient sent straight to diagnostics if that is the appropriate next step. I think we can change the old model, which was that the patient goes to the GP; the GP then refers them to a hospital; they see a consultant a few weeks later; they get a test done but the test is not definitive, so they go back to the consultant; and then they get a second test done. That builds in weeks of delay. We have evidence now that those weeks of delay can affect survival and therefore the outcomes.

We need pretty radical change in the pathways. We have seen a lot of that happen through the pandemic. We have to learn from that and make sure that the best of it is spread across the country.

Dr Davies: Thank you.

Q62 **Chair:** I want to wrap up by asking John Butler and Mike Richards a question. I will also bring in Jon Emery, although it is a very England-specific comment. You heard Peter Johnson and Cally Palmer at the start of the session. I think the phrase that Peter Johnson used was that he was "cautiously optimistic" that we would hit the 2028 target.

Jon Emery, you will know that the NHS lives and breathes by targets. What he said was that if we can get to three quarters of cancers being diagnosed at stages one and two by 2028, from about 55% now, that would be a very dramatic change. He was confident that if we got there

we would then be on a par with comparator countries like Australia.

Mike and, first, John Butler, do you agree with the underlying assumption there that if we hit that target and we got to three quarters of cancers being diagnosed, notwithstanding that France, Germany, Australia and Denmark are not going to sit still, we will probably be broadly at their levels by the end of that 10-year plan? Do you share the cautious optimism that despite all the challenges of the pandemic, such as workforce challenges and capital challenges, we should be able to get there?

John Butler: I think they have not declared a new target but an ambition. I think it is extremely unlikely that we will get there if we look at our current trajectory. If we look at the stage distribution across our comparator countries, they are not there, but they have better cancer survival. It is extremely unlikely that we will get there based on the current trajectory.

The more you look for cancer—for example, in Denmark they now routinely do PET scans for ovarian cancer—the more advanced stage disease you pick up. Although it may look worse in terms of having more advanced disease, actually you are doing better because you are better at identifying the disease. I think we are unlikely to get there, and I do not think it will be the only way to crack the nut.

Q63 **Chair:** If we did get there, that is a massive difference from where we are now—55% to 75%—but it is several years away. Would that break the back of the difference between us and comparator countries?

John Butler: I am sure it would, if we could get there.

Q64 **Chair:** Thank you. Mike, what is your view on that 2028 target?

Professor Sir Mike Richards: I stress again that it is ambition and not target. I strongly support the ambition—it is absolutely the right direction of travel—but on current trajectories, as John said, we are most unlikely to get there.

Cancer Research UK has done some very useful work in saying, "What improvements do we need to make in different areas?" If we eliminated variation across the country, we could perhaps go up from 55% to 59%. That would be 4%. If we really pushed screening by bringing in lung cancer screening and improving our bowel screening by reducing the age threshold and bringing a lower FIT threshold, that could be another 4%. We can do more on getting early presentation and changing pathways. That might be another 4%. Please do not take these as absolutely definitive figures, but I think they show what we need to do.

Then there is still a gap. That gap has to be filled with innovative approaches. Peter Johnson spoke about the GRAIL programme. I strongly support that. I am working as a clinical adviser with GRAIL and NHS England, so I need to declare that. We do not yet know whether that will

work, but it has the potential to do a lot to reduce the gap between where we are now and 75%. Added to that, we need to make sure that we give people the very best treatment.

Q65 **Chair:** Would you be willing to write to us, John Butler, with the details that Mike Richards says you have, which is what we would need to do to hit that 2028 ambition, what the different elements might be and what your research indicates in terms of our unlikeliness to hit it? It would be very helpful for our inquiry if we could look at some of the data that you have been looking at.

Professor Sir Mike Richards: Can I intervene? I think Cancer Research UK would be very happy to supply you with their estimates. I will certainly ask them.

Q66 **Chair:** That's great and, John, if you have some as well, that would be really helpful.

John Butler: I would be very happy to help.

Q67 **Chair:** Let me bring in Jon Emery. You have been listening to a very England-centric debate, but it is very important that we look at comparator countries. We want the NHS to be the safest and best in the world. That is a good aspiration for any healthcare system. What is your take on our approach, on our ambition, and what is your sense as to whether you think we have a chance of getting there?

Professor Emery: I agree with what both Mike and John said; it is very ambitious to get to that target in what is still a relatively short period of time.

I stress that the approaches Mike mentioned about improving access to diagnostic centres and increasing uptake in screening are all really critical things that are part of the approach. GRAIL is an exciting innovation in diagnostics. That said, it will require an even greater investment in imaging technology to work out the true positives from the false positives. Even if GRAIL actually delivers, there is still going to be a need for greater capacity in imaging to confirm the diagnosis.

I very much hope that those different components can get towards the UK reaching the targets, but I would say they are ambitious from the current starting point and, of course, with the ongoing consequences of Covid.

Chair: Thank you. We have come to a conclusion. This has been very helpful. It is the opening session in our inquiry. We will be going into a lot more detail in subsequent sessions on the issues of early diagnosis and all the things that Mike Richards was talking about—early presentation, screening, variation and so on. I think diagnostic capacity and speed of getting the results back to GPs is a very important issue that has surfaced this morning.

We have not talked at length this morning about public health, inequalities and the impact of an effective campaign, for example, on childhood obesity. I know that you would all think that was very important as well. We will be coming back to that, but we have touched on the role of science and innovation, and indeed issues around workforce and capital funding. We will definitely be coming back to those.

Mike Richards, John Butler and Jon Emery, thank you so much for joining us, and Jon Emery particularly for joining us early in the evening Oz time. We have really appreciated you being here with us this morning. That concludes this morning's session.