HOUSE OF LORDS

Science and Technology Committee

Corrected oral evidence: Clinical academics in the NHS

Tuesday 29 November 2022

11.10 am

Watch the meeting

Members present: Baroness Brown of Cambridge (The Chair); Lord Krebs; Baroness Manningham-Buller; Lord Mitchell; Baroness Sheehan; Baroness Walmsley; Baroness Warwick of Undercliffe; Lord Wei; Lord Winston.

Evidence Session No. 3 Heard in Public Questions 22 - 31

Witnesses

Professor Lucy Chappell, CEO, National Institute for Health and Care Research; Angela Topping, Executive Committee Member, NHS Research and Development Forum.

USE OF THE TRANSCRIPT

Examination of Witnesses

Professor Lucy Chappell and Angela Topping.

The Chair: It is my great pleasure to welcome our witnesses to the committee's third evidence session of its inquiry into clinical academics in the NHS. Our witnesses are Professor Lucy Chappell, CEO of the National Institute for Health and Care Research, and Angela Topping, an executive committee member of the NHS Research and Development Forum. The session is being broadcast on parliamentlive.tv and a full transcript will be made available to you shortly after the meeting for you to make any minor corrections. Should you think of anything you did not get a chance to say or any further data or information you would like to give us, we would be very pleased to receive that as formal evidence after this witness session.

Q22 **Lord Wei:** This inquiry is looking into clinical academics in the NHS and whether such roles are under threat but we are also interested in establishing their importance to the NHS. Can you outline to us why it is important to have an NHS engaged in research?

Professor Lucy Chappell: It is completely crucial and the past few years have shown that. In order for us to have a vibrant health and care system that addresses the wide range of patient and public needs, we need a system where research and innovation are completely woven through as part of everyday business for all our health and care professionals. Although I completely recognise that we should be looking at clinical academics, we should also make research and innovation relevant to every person working in the health and care service, as well as the patients and public who use the service. They should be as engaged with this concept.

If we thought our health and care system was perfect and we could stand still, our job would be done. None of us thinks that. Both the Covid pandemic and the situation we are in right now with the backlog show that R&I is completely crucial to the future of the system.

Angela Topping: Clinical research activity delivers clear benefits to patients, such as improved outcomes and lower mortality rates, as well as the NHS and the broader economy. There are three evidence-based reasons why we should undertake research in the NHS. The first is obviously for patient benefit. The patients are what we are here for and the more that we do research with our patients, not to them, the better we become as a society.

The next is in relation to the NHS staff benefits themselves. There is a strong body of evidence that engaging in research improves job satisfaction among health workers, boosts staff morale and can reduce burnout, all of which are issues in the NHS presently. The more we engage with research with all staff, the better the system will become.

Thirdly, there are the economic benefits that we generate from research. Evidence has been produced by NIHR in relation to the additional GVA

that comes into the country on the basis of the research we do in the NHS.

Lord Wei: I want to follow up and ask about this notion that research should be a default, holistic part of the NHS. Is that widespread? Are we getting to a place where trials and patients being asked to join trials is the default, or do you think it is going the other way?

Professor Lucy Chappell: In Covid, we saw some examples—the RECOVERY trial and the PANORAMIC trial—that really exemplified this. It was not completely new in Covid. In some sectors, such as paediatric oncology, it was expected that, if you were unlucky enough to have a child with cancer, you might well be approached. There was a culture, across the health and care professionals, the patients and their parents, that that would be the norm.

Covid came, and the RECOVERY trial was ground-breaking in a number of ways, including the fact that it normalised taking part in research across the NHS. We did that through a whole raft of innovations, for example at regulatory level and through the extensive work that the R&D offices in NHS trusts did. Every day, we saw doctors and nurses getting used to offering it and asking, "Are we providing the best treatment and how might we go further?"

I am keen for us not to slip back to our pre-pandemic ways but to retain those learnings. A number of us thought that that would be straightforward but the elective backlog has left both the system and the workforce feeling overwhelmed. When, as Angela says, we are short of one in 10 of the workforce, we need to find a way to say that research and innovation opportunities are not poaching staff. They are absolutely crucial to our recruitment and our retention offer.

One of the visions I have is that there are three options. You can either facilitate R&I, be active in it or lead it. The one option that is not on the table is to block it or be apathetic about it. Otherwise, you are saying things are good enough. We need to capitalise on that sense that we all have areas where we can contribute. As a funder, we need to ask, "What can we offer to everyone?"

Rather than thinking of it as something special that you do in a different place on a different day, we can make R&I far more accessible and see it as a whole range of options. There is discovery science, which does need to be done in a lab with experiments, but there is a huge amount where we can make it really relevant. As an obstetrician, one thing that I think about is how we move from the firefighting of pregnant women turning up in labour to the fire prevention. How do we get better outcomes through not just waiting for the emergency, which is where we are at the moment, but taking a step back and looking at the wider picture?

I am not as despondent as some might be. There are plenty of opportunities, plenty of green shoots and plenty of initiatives that should say, "Now is the time to capitalise on this and keep those learnings from Covid".

Angela Topping: Just to add a personal thing, as a patient and as a mum, I would like to be able to go to any hospital and get the same access to research and innovative treatment. That is why it matters to me that we embed this in every setting we have.

Professor Lucy Chappell: An example of how we might do this is to make it the default that, when you interact with the health and care system, you will be offered research. We have seen a real change in the number of levers in that way. Through CQC, it is now one of the well-led metrics. Through GMC, we are normalising research for doctors. The NHS Chief Nursing Officer and, linked to that, Health Education England have both produced research strategies for staff.

We are seeing a shift towards saying that this is now expected, which is linked to something commented on in the last evidence session: data. We trust all sorts of private enterprises with our data through our mobile phones, yet we need to think about how we gain the public trust on data so that we can accelerate our approach to research using data-enabled opportunities. We can then make it much more available to a greater number of researchers, and to the patients and public they serve.

Q23 **Lord Mitchell:** Thank you for being here today. I would like to ask a question and a supplementary. The supplementary is quite important given the facts that you gave, Professor Chappell; we will come on to that. Beyond clinical academics who are employed by universities and are spending their time 50/50 doing research and clinical practice, can you outline the importance of other clinicians engaging in research? How can we encourage this and what should funders do to support this research-engaged workforce?

As for the supplementary, we have heard that the ability to engage with research is particularly bad for those in primary care, GPs, nurses and allied professions, very few of whom are able to carve out time to engage with research. Is there more that the Government and funders of research can do to engage with these communities?

Professor Lucy Chappell: The first thing is to make all the barriers, and all the interchanges weaving in and out of NHS academic careers, much more porous. Let us look at the pathways. I gave a talk at the NIHR Academy last Tuesday discussing the road less travelled and the zigzags of our careers. We do not have straight-line careers in clinical academia. We do not go in at an embryo stage and come out at a fully formed stage. We have to look at all the routes—particularly, as you have heard, for those from different backgrounds—and create many opportunities for people to come in and out of research at every stage and across all the professions.

We need that shift. I am doing work through the NIHR Academy to ask, "How do we work with the NHS to enable nurses, midwives and allied health professions in particular to come in and go out so that they are still retained by the NHS?" The Follett principles were set up for very good reasons. As a clinical academic, I have lived by the Follett principle of being able to hold roles in two institutions, but we must look at

unintentional barriers to that porous movement because some people might want to come in, do one period then go back into clinical practice or hold posts in both. We should encourage that model, underpinned by the professional regulators and the NHS trusts, then going into primary care, as you mentioned.

We know that there is demand for academic primary care over and above demand for standard primary care contracts, so we as funders are certainly interested in how to continue that pull. As you heard from the previous evidence session, it needs to stick. There need to be jobs. Then we get to a really particular point: who pays? For jobs in the NHS, should it be that we take from our R&D budget and pay every consultant in the NHS for a session or two sessions a week, or do we say that research, like education, is part of the job role of anybody in health and care but, where they are going to take more of a role, such as being a site investigator, we will reward that?

We should differentiate between thinking that writing a cheque for the whole of every health and care profession is going to solve it and saying that it is part of our job as health and care professionals, as well as part of the ICB remit under the Health and Care Act 2022 to facilitate and promote research. Some of that is embedded and everyday but, for some of it, we need to go further and, through these incentive schemes, to say, "We do want you to really have a focus".

Have I covered your supplementary question?

Lord Mitchell: I think so. Do you want me to go over it again?

Professor Lucy Chappell: Yes, just in case there is anything else.

Lord Mitchell: We have heard that the ability to engage in research is particularly bad for those in primary care.

Professor Lucy Chappell: NIHR as a funder has been world-leading in saying that careers do not come in a monochrome biomedical flavour. They come in multiple ways. We are really proud of what we are doing, for example, in prevention health and social care research, engaging with less well-served areas. It is not just about disciplines; it is also about geography. If you look at the challenges, we have areas of the country with high disease burden and really large clinical workloads where people feel too busy to engage. Again, in areas where patient need is high and workforce burnout can be quite marked, we are looking at incentives to carve out time for this work, which is so important to improve outcomes and retain staff.

Angela Topping: Following on from what Professor Chappell said, across the country, there is huge variability in where clinical academics undertake their practice. That is adding to the inequality of access to research. A recent report from the CMO around coastal towns, for example, demonstrated that that is where a lot of the inequality exists. How can we get into those hard-to-reach places? Are they hard to reach or are we just not trying hard enough to support communities in those areas where we have inequality?

For me, research is not mandatory. Clinical research, in some instances, is an optional extra and is seen as not being a part of routine clinical care. At a system level, we need to work together to get that research embedded and get that behaviour as part of the culture in NHS and social care settings. We somehow need to protect that time. Following on from the previous evidence, the pressure is on the backlogs we have in the service, so how can we change to a culture where we do see that as part of everyday clinical care?

The challenge in primary care is very similar to those we have in secondary care in managing the clinical pressures. There are also different funding models in primary care. Practices are actually paid by their size and their demographics, which does not necessarily lead to them choosing to prioritise research in those settings. We do have challenges there. When we are looking to do research in the communities as a prevention rather than as a treatment, we desperately need to start looking at how we invest in primary care research.

Professor Lucy Chappell: Can I just note one enabler? We have academic health science networks across the country. They have complete coverage in England. We should endeavour that no area is left behind as a desert of R&I. We should be asking, "How do we continue to ensure that coverage?"

Q24 **Baroness Sheehan:** Concerns were raised in the first session about the potential pipeline for future clinical students. I wonder whether I can address the question first to Angela Topping and then to Professor Chappell. There is a problem of precarity for all researchers and academics but there is a recourse to alternative careers for clinical academics, in that they can easily switch to becoming a consultant if they wish. What would you propose to safeguard clinical academic careers in the light of this precarity?

Angela Topping: You heard in the first session that being a clinical academic is riskier than taking up a full-time consultant position in the NHS. There is a feeling that these roles are more demanding because you have two masters, in effect. You have the clinical research master in the university setting and the delivery pressures within the NHS, so you have that tussle as to where you prioritise your work. Again, going back to the previous session, how can you embed that protection of time for those clinical academics in the service?

There was also mention of clinical excellence awards. I do not believe that clinical academics can do private practice. That might be something to consider.

In order to minimise the risks, the question is how we support the clinical academic workforce and increase the opportunities at the same time for those NHS consultants who would like to be part of research, not necessarily being the leaders but being those who support the delivery and then become the leaders themselves as a team approach. That would be one way of looking at it.

A review of the more flexible training programmes is something else to consider as a way to address the equality, diversity and inclusivity issues we have had in the past, particularly around women coming into that career pathway.

We also need a spectrum for the amount of time that we do spend. Currently, the split is 50/50. Does it have to be 50/50? Could we have clinical academics focusing up to 90% or down to 10% of their time on this so that we have a mixed economy, if you will, as to the amount of time these individuals spend on delivering research?

Professor Lucy Chappell: We heard in the last evidence session a whole range of thoughts about the pipeline and where the blocks are. We definitely need to look at our offering at undergraduate level and ensure that it is equitable. You heard about the intercalated BSc, which is mandated in four medical schools. We are concerned that the incentives to pursue a BSc are lower than ever before. We should look at whether that is the right approach.

I did a seminar at Imperial a couple of months ago. Really interestingly, it mandates them but it was also talking about having a BSc in business, for example, or in engineering. For me, that was a real opportunity to say, "Do not stay funnelled and blinkered". If we want competent healthcare managers of the future, who are doctors as well, to lead the health service, we should be open to that very broad offer.

Then you look at all the steps of the pipeline beyond that. We need to distinguish between saying that there will always be a job at the next level and saying that there are always opportunities. Across the health service, it is quite normal to go and apply for jobs. You get some of them; you do not get all of them. We have to be competitive; that is how we get the best people into our jobs. We should be asking, "Do we have the opportunities? Can we have a much more heterogeneous offer, with the right opportunity, in the right place, at the right time?"

One thing that was mentioned was this in relation to senior lecturers and new consultants. I was a new-blood DHSC NHS consultant some years ago now. It was that vital stepping-stone that transitioned from training into independent consultant life. For example, through the NIHR Academy, we are looking at what we can do in NIHR, but we are never going to do it by ourselves. We need that input from multiple funders and from the NHS to ask, "What does our workforce of the future look like?"

For me, that workforce has to have R&I. Within the DHSC and NHS England workforce reviews, it would be really positive if that came out strongly. You cannot just think that they are fully fledged at a consultant level; we have to invest in all parts. That is what we are doing as a funder but there is much that we can do across the system in that way.

Baroness Sheehan: Is there any evidence that funding or the number of applicants for postdoc clinical academics is declining and, therefore, that the interest from PhD students is waning?

Professor Lucy Chappell: No. I can follow it up with specific numbers but the data we have is that that is not the case. We are still getting

many more applications than we can fund. In our research programmes, we fund about 16% of our applications. In our career development applications, it is around 30%. We still have many more applicants than places and we are looking at where we expand our offer. As of the autumn statement, it looks much more positive that we will have that commitment to R&D spend. We would like to be sure that we are utilising it. It still needs that scientific quality check but I am not seeing that fall-off.

Angela Topping: I totally agree with that. The schemes are oversubscribed. It is the funding that is the challenge.

Q25 **Lord Krebs:** To some degree, we have already discussed the point that I wanted to ask about, but I will ask it just in case there is anything that you wish to add. I wanted to ask about what funders of research, universities, the NHS or other government bodies could do additionally to ensure that they have the flexibility to support clinical academic careers, where people are trying to navigate a path that, as you, Professor Chappell, said, is not necessarily linear and not necessarily straightforward. Are we doing enough or are there additional measures that could be taken?

Professor Lucy Chappell: We should look again at ensuring that the Follett principles address the ability of all clinical staff, not just medics, to move between the NHS and academia. As a very specific example of that, we might have nurses and midwives who are employed by the NHS and have service rights within that organisation but need to come into a higher education institution, for example, for the purposes of a three-year PhD.

At the moment, it is quite hard to make that happen, for example, on a secondment. Most secondments are one year or maybe two years but, because there is much less history of nurses, midwives and allied health professionals doing three years—possibly longer if they are part time—I cannot find the mechanism to make this seamless and straightforward. Particularly for women and in trusts that have less of a track record of research, it can be really hard to navigate this.

We should just have reciprocity of agreement on employment so that we can see this transition in and out. It does not feel like it should be this hard. They are being told, "We will hold your post for only one year". These healthcare professionals want to stay in the NHS. I want them to be going back into the NHS and applying their research knowledge to clinical practice. It is something that I am bothered about. We have a team looking at how we make this more possible and how we issue guiding principles for trusts. It will not be just NHS trusts; it may be local authorities or other types of primary care or mental health trusts. We need to have something that works more broadly, looking at the system barriers—it is very rarely any single individual who is doing this—and always asking what more we can do to dismantle the system barriers that are not pointful.

Angela Topping: To echo what Professor Chappell said, we need a systems approach, not an organisational approach. For years now, we have had the challenge where NMAHPs—nurses, midwives and allied health professionals—in particular have had to leave a contract of employment with an NHS organisation and lose all their rights around maternity to take up a role in a higher education institution. That is not right. How can we address this through a systems approach, such as a different way of pooling resource, so that we have a career pathway that enables you to move between systems that exist already, is straightforward and streamlined, and protects that person who wants to do the right thing for their career?

Q26 **Lord Krebs:** In previous sessions in this inquiry, we have heard arguments that every medical school should provide the opportunity to develop research as well as a clinical career. Given that there is a limited amount of jam to spread, does spreading the jam more widely to all medical schools imply cuts in resource for the big medical schools that have traditionally had strong research bases, such as KCL, where you Lucy, worked, and my own institution, Oxford?

Professor Lucy Chappell: I visited Cambridge last week, where I saw Regius Professor Patrick Maxwell. We met the dean of UEA, which is in Norwich, and the dean of Anglia Ruskin University, which is based in Chelmsford. They were a seamless, collegiate group of medical school deans who were looking at the regional opportunities, not in this ivory tower way. It was really striking how the opportunities across that region were suddenly magnified. It felt like the jam was being offered more equitably to a greater range of students.

If you look at a new medical school such as Anglia Ruskin, it is taking from a different pool, particularly on an Essex base, to serve the needs of the local population. It is essential that we look at joined-up regional schemes such as this to ask, "How do we bring those from a Chelmsford base into Cambridge and vice versa?"

While I was on my visit, there was a Cambridge academic who wanted to be based in Norwich but was unsure about whether there would be the support, so the opportunity for a joint post is already being pursued. If you look at the NHS regions and the ICB footprints, again, we should be approaching this on a population basis, not a single site basis. There are huge opportunities if we can continue to provide the incentives. I will be at the Medical Schools Council tomorrow to talk about that, particularly on the inequalities perspective. We cannot leave people behind.

Angela Topping: I could not agree more. It is about how we move away from competition within higher education and towards collaboration, particularly in this area where those Russell group universities that have had medical schools for a number of years are partnering with the new medical schools that are taking in medical students, to address some of the inequalities that exist; it is also about working together to address challenges of place. I see the ICBs and the ICSs playing a major part in that.

Q27 **Baroness Walmsley:** Professor Chappell, you have said more than once that everyone in the NHS should be engaged in research and that it should be, in your words, woven through the whole system. You talked about normalising research. Other than the service rights that you just mentioned in your answer to the previous question, for those clinicians who want to engage with research part time but without applying for formal academic jobs or grants, are there any mechanisms to match them up with permanent researchers? Are there mechanisms to allow them to access university resources and perhaps some flexible funding? If so, who should be responsible for making those improvements happen?

Professor Lucy Chappell: There are a good number of opportunities, partly underpinned by how the NIHR runs research delivery, which is through the clinical research network. We are interested in how we can ensure that this makes research delivery reach all areas of the country. We are in 50% of primary care trusts and 100% of secondary care trusts, so there are opportunities. We have a whole range of schemes in the CRN for, much as Angela described, stepping in to varying degrees.

For example, we make it very easy to be a site principal investigator. I happen to run multicentre pregnancy trials; we are often open in 40 or 50 sites around the country. I often look particularly for new investigators. We also run the associate principal investigator scheme, which has been extremely popular. It allows somebody less familiar with research to become familiar with the study and take on the role of championing it. I have heard at first hand in one of the trials I am running at the moment about how enabling that is, so that researchers can be given those stepping-stones to greater work.

Yesterday, I was at the Life Sciences Council, jointly chaired by the Secretaries of State for DHSC and BEIS, where it was really clear that we need to think about how we support this from an economic perspective for the life sciences sector. There are two sides to this. One is economic activity for an individual, because health and wealth are so closely related, and one is economic growth for the country. We all know that we need to do our part for that.

Clinical research coming into the NHS and individuals engaging in it has clear possibilities. If it is commercial research, the life sciences sector that we have in the UK will pay into the NHS for investigators to make that happen. There is a whole range and we are doing that not just for medics but very much for nurses, midwives and allied health professionals.

There are other areas where we have worked with the Academy of Medical Royal Colleges to look at credentialling as a clinical researcher. Again, those have become popular because it is a transferable skill that you can take from job to job. We have just been enrolling over the past year in partnership with Exeter and Newcastle.

We see learners from a whole range of clinical professions. They need to

be our ambassadors, going back to their clinic, their ward or their GP practice and saying, "Look at the possibilities". This is very much matched by different ways of delivering trials. If we look at the decentralised models that came through Covid, there is not the approach where a patient goes to secondary care setting and gets things done at them. As Angela described, we have moved to much more patient-enabled, deliverable clinical research, which allows a much wider range of researchers to feel that they have a part to play.

There are schemes available. There is always more that we could do. It is also about changing the culture, not just the system, which goes back to what I was saying about how we normalise it.

Angela Topping: Just to follow on from what Lucy said, there are opportunities with the CRNs to buy out time to engage in research, but it is not consistent across the patch. For me, the big challenge is around mentorship and support for those who are going new into it. Where do they get that from? That is patchy across the country as well so, for me, it would be the mentorship and support that are needed.

Professor Lucy Chappell: A good example is the NIHR CRN Green shoots scheme, which Angela knows about , for newly appointed consultants who do not have a substantive academic commitment in their contract. It is a taster scheme. We try to have something at many levels.

Q28 **Baroness Manningham-Buller:** In a way, Professor Chappell in particular has answered this question, which is really about mechanisms between academics and universities. You described some encouraging news and your ambition for it to be easy to move at all levels between these two areas, including for wider health professionals. You also said that there is always more to do, which the committee completely accepts; you cannot do everything. How far are we from reaching the first ambition that you cited in answer to the previous question, where the movement between universities and the NHS does not engage conflict between the different aims of the NHS and of universities, which we heard about from the previous panel?

Professor Lucy Chappell: I would like to think that we are going in the right direction but there are areas that I would pick out. We have the same goals. The NIHR mission is to improve the health and wealth of the nation. Individual practitioners may not put it quite like that but they still get out of bed in the morning to make a difference to whomever they are looking after that day. We should harness that and say, "Come on, let's look at those blockers". The contracting that we mentioned earlier is one of those.

In this role, I ask myself, "Where do we use metrics and where do we use willingness to shift?" I know that, for example, the CQC metric on research and being included as a well-led organisation really shifted. My question is to trusts and ICBs: "Where is R&I at a board level with metrics that you recognise as being important?" Where do we do a pull and say, "We know that this is important"?

For example, the metrics can sometimes lead to perverse consequences but sometimes they are a route to getting where we want to be. One of the metrics that we use is percentage of patients offered research. That is a bit harder to capture than percentage of patients recruited to research. Typically, one is a shadow of the other, but how do we make that something that, at a board level and with board representation, ICBs and trusts need to know?

There are examples of trusts that are very good at this. Some of them are the Shelford group—the big teaching hospitals that have been doing this for a long time. We need to make that possible across the country, and not just with a secondary care focus.

Baroness Manningham-Buller: That is a critical question. Who is refusing and on what scale? It goes back to your earlier observation about patient confidence in the use of their data. Knowing how many people refused is a crucial metric, is it not?

Professor Lucy Chappell: We have data in different areas. For example, I work with Genomics England. We know that, of the patients who have a genetic test, 80% to 90% will accept participation in research. We have plenty of areas where we know about the take-up of that offer. It is what we call a conversion rate in trials—that is, of those to whom you offer research, what percentage say yes.

I am not looking for it to be 100%. That would be wrong and would feel coercive. For example, we often say that, for trials, 50% would be really good because then you feel that you have genuinely offered it and people feel able, but it is about the offer. For me, it is about reducing that gatekeeping both at an individual level and at that system level, where people say it is too difficult.

To your question of who is refusing, I do not think that it is so much refusing as just feeling that it is not on their dashboard or in their bandwidth. It feels like an extra step but let us reposition it. The R&I is needed more than ever with this backlog of 7 million; this is not the time to shy away. This is the time to say that we cannot do what we have always done, which is the health and care of 10 or 20 years ago. We have to use our innovation, of which research is the engine house, to ask, "How can we do diagnostics in the community? How can we make our treatments more patient-centric? How can we get more precision medicine?"

We have to have that striving for improved outcomes and not just ask how we do things the same way. There are lots of examples where service pathways are innovating. It is not just pharma; it is also tech, diagnostics, digital health and service pathways. They are all under the R&I banner.

Baroness Manningham-Buller: The committee gives you all good wishes for making progress in that area because it is a compelling case.

Professor Lucy Chappell: Beyond good wishes, we need the metrics.

Baroness Manningham-Buller: We cannot give you metrics but we can ask questions of government, wish you good luck and make our recommendations.

Angela Topping: This is a real wicked problem. It does need a different way of looking at it. It needs the systems approach to deal with it. Working in the space between higher education and the NHS, we have different masters, and different targets and metrics to achieve, but there is convergence happening at the moment, particularly around the word "impact". For example, in university settings, we have a system called the research excellence framework. For years, we have started to put more emphasis on the impact of that research and the team approach to research so that it is not delivered by just one academic but is a team approach. That is really helpful to address some of these systemic problems that we have.

Again, in the NHS, there are targets around the number of patients we recruit. That does not necessarily measure impact on quality. With the integrated care system coming through, we have a great opportunity to start addressing these challenges that we have, where we have had targets missing the point. The point is around the best research that we can do in a system for patients and for society as a whole.

Professor Lucy Chappell: If you want examples, the NIHR publishes "making a difference" stories. We pull out where the research has been through this pathway and ask, "What next? What does it mean for the health and care service?", to try to make it tangible and real. On the front page, there is a whole series of stories that illustrate the impact.

Angela Topping: Again, it is about the impact not just on the patient but on their family, on their carer and on the rest of the system. If you do one treatment with one patient, for example in a rare disease study, the amount of impact that has on the entire system that supports that patient is huge. That takes the long term to measure but we work in an environment that goes for short-term gains. We need a bit more long-termism in the work we do.

Q29 **The Chair:** Can I ask a clarificatory question? We keep talking about the clinical academics who have 50% of their time for research and 50% of their time for clinical practice but, presumably, they also do some teaching during the academic 50% of the time.

Professor Lucy Chappell: Contracts vary widely. It may not just be a 50/50 model. I trained part time for 10 years while my three children were younger; I did a 40/30 model. Within that 30%, there was, as you say, teaching, academic management and academic citizenship. You are pulled in many directions; you learn to be quite a juggler and plate spinner.

The Chair: It sounds like quite lot, 50% of your time for research, but, once you add teaching and, as you say, some academic management, it rapidly becomes quite a small amount even for those who have protected time, does it not?

Professor Lucy Chappell: It completely does, particularly when you may be judged against the outputs of others. There is greater awareness that we need to judge people on appropriate metrics for how they are working. It may not always be 50/50. There are different models. For example, some people will choose different percentages. We need that flexibility.

Q30 **Lord Winston:** There was some very interesting stuff there; thank you. I agree completely with what Baroness Manningham-Buller said in wishing you well but I do not understand one aspect. Given that you have this interest in having more consultants spending, say, 10% or 20% of their time in research, I still do not quite understand the point of having a medically qualified academic who is doing 50% research and 50% healthcare work. Professor Chappell, can you make us a strong case for that?

Professor Lucy Chappell: We need different models for different jobs. If we are going to have research leadership of the sort that our senior lecturers, readers, associate professors and professors have, that clearly needs to be on a 50/50 basis. Most of us choose to stay clinically active, and that is important, but that allows the space and time to develop ideas to ensure that they are delivered to time and target, as well as to think about their dissemination and their impact. However, that model should not be the only one.

There is interest in supporting research delivery or supporting the intellectual capital on a different basis. For example, particularly when we are reaching into less well-served areas, we may not be able to start with a 50/50 contract, but we need to reach out to colleagues who start on 10% or 20%. We should then be growing them into clinical academics around the country who can be leaders in their own right. That "multiple sizes" model most reflects the needs of the health and care system and the research system.

Lord Winston: As I understand it, you are an obstetrician and gynaecologist, so I wonder whether you can think of some good examples where people other than those doing a good proportion of the research have made significant impacts on obstetrics and gynaecology and its scientific basis, which, of course, must be so much of what we are talking about.

Professor Lucy Chappell: Am I right in thinking that you are talking about those on a 10% or 20% model?

Lord Winston: No. I am arguing that there is a much greater point in people who have had some basis with a PhD and research training in a laboratory, for example, doing this sort of stuff; that is one of the things we perhaps have not heard about enough. Can you comment on that?

Professor Lucy Chappell: Apologies; I am just checking that I understand the question. You are saying that there should be more people on 10% or 20% contracts.

Lord Winston: No, I am not. I am asking you what you think. It seems

to me that there is a very big difference here. Having a lot of people doing a certain amount of research is a great idea—one that was proposed by the academy some time ago, of course—but what we are talking about here is a much more specialist area, which is certainly under threat, as we have heard. I just wonder whether we can change this passage. I am seeing more and more people who do not want to do a PhD, for example, because they do not think there is much future in it when they have done medicine.

Professor Lucy Chappell: The way that we create that future is to have those hybrid models of working. I still see plenty coming through who want our advanced fellowships and want to be professors. You heard from Katie Petty-Saphon that there are concerns about what that pipeline looks like, but we also see plenty who want to be making a contribution. It is hard to make a contribution on a 0% contract whereas, at 10% to 20%, they are delivering research around the country and making a valid contribution, which is recognised.

For example, if you look at PubMed and the opportunity to name collaborators in a completely different way, we are recognising that people around the country may be delivering the multicentre trials that have the greatest impact. There is discovery science, which is done in the lab. There is early phase work done through our biomedical research centres, which often offer two, three or four PAs to these early phase doctors and others. Then there are those who are on the senior lecturer/reader/professor track, which are more typically offered on a 50/50 basis.

The impact comes from the contribution of each of those groups. We are seeing people who, with the right jobs being advertised by universities, want to apply for those higher clinical academic jobs, but we are moving away from what I saw when I was a trainee, where it was all or nothing, to more of these blended roles, which are important for retention.

We may get some orphan specialties. We try to look out for orphan specialties that need greater support, typically radiology, emergency medicine and those areas that fall across specialties, such as through considering how we care for people with multiple long-term conditions and how we support research. Our model of clinical academia is going to need to evolve with the health and care that we see for the demographic of our population.

Angela Topping: I agree that there is a need for a mixed model approach and that clinical academics are needed, but it is not the only career pathway that we need.

The Chair: Thank you very much for another interesting session. Professor Chappell, you said that you might have some data that you might be able to forward to us. That would be really helpful so we look forward to receiving that. Again, thank you very much. At this point, we will conclude this session.