



Public Services Committee

Uncorrected oral evidence: Medicines security

Wednesday 10 December 2025

11 am

Watch the meeting

Members present: Lord Carter of Coles (The Chair); Lord Blencathra; Baroness Cass; Baroness Coffey; Lord Laming; Lord Mott; Baroness Pidgeon; Lord Prentis of Leeds; Lord Shipley; Baroness Wyld.

In the absence of Baroness Morris of Yardley, Lord Carter of Coles was called to the Chair.

Evidence Session No. 7

Heard in Public

Questions 90 - 100

Witnesses

I: Dr Zubir Ahmed MP, Parliamentary Under-Secretary for Health and Social Care, Department of Health and Social Care; David Simmons, Director for Supply Resilience and (interim) Medicines, Department of Health and Social Care.

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Examination of witnesses

Dr Zubir Ahmed and David Simmons.

Q90 **The Chair:** Minister, you are most welcome. Thank you for coming today. It is nice to see Mr Simmons with you. Welcome, both.

Let me start with a general point about where we are going on this. The sense of the committee is that there are two big issues: national security and the supply of medicines in times of difficulty; and the process of how the supply chain is managed, in particular the slightly inadequate digital aspect in terms of a Government who are committed to digitising the whole pathway. Those are the general things; you know, I think, where we are going to go with those.

Let us kick off. I will ask the first question, which is on the impact of medicines shortages over the past five years. Can you tell us what the department's experience of those has been? We will then move on to the risk register in a moment to see how that is being dealt with at the highest levels.

Dr Zubir Ahmed: Thank you; it is a pleasure to be here for my first time in front of your Lordships.

It is important to set out the context. As a practising doctor, I used to prescribe many medicines. At times, there were shortage issues, and I was as frustrated as anyone else. Let me contextualise it, though. There are more than 14,000 products out there. They are usually manufactured and dispensed by companies and organisations that are, quite rightly, not directly run by government because it is impossible not to do that.

Although shortages can be prevalent as news items, it is important to focus on the data in order to adumbrate the issue or see to what extent there is an issue. During Covid, and even in 2024, there were issues. Some were due to consumer demand after some well-publicised campaigns, some were due to manufacturing and some were due to licensing regulation. However, in the first half of 2025, we saw the levels of what I would call supply chain issues come down significantly, such that they were much lower than they were in 2024. They were returning to a baseline level, rather than there being any specific issues.

It is right that the Government have oversight of the supply chain, of course, but it would be difficult for me to sit here and say honestly to you that we can have direct, granular control over such a vast supply chain. David can tell you about some of the policy and strategic aspects that we have been working on, but it is important for both the committee and the wider public to understand that our overall supply of medicines is in a good place; that can sometimes be overlooked due to the prevalence of the stories that we have seen in the media previously.

The Chair: We accept that. The issue, I suppose, is patient harm through these shortages. Do you have any sense of what that might have been last year?

Dr Zubir Ahmed: I cannot sit here and tell you the exact numbers.

The Chair: I am asking for just a sense, Minister.

Dr Zubir Ahmed: David, do you have anything to say?

David Simmons: Obviously, every shortage issue that comes into the department is risk-tiered, because they are not all equal. The vast majority of them are dealt with with no patient impact at all. A small number of them get to tier 3 or tier 4, where there may be an impact on the patient. Most of that is managed at a local level, and the information will be in the system. It can percolate up through coroners' reports et cetera; that would probably be the most extreme case of where there has been real patient harm, ~~because~~ fortunately we get extremely few of those. I do not have to hand the numbers, in terms of how many we had last year, but such cases will be very small in number. There is definitely distress [from disruption], with impacts on both patients and healthcare professionals, but I do not have the hard numbers.

The Chair: Perhaps you can write to us with those. Basically, the point you are making is that it generally works.

Dr Zubir Ahmed: Perhaps I can add to that. On patient harm, obviously, there are gradations of harm, from inconvenience and quality of life to a material change in clinical condition—the ultimate harm. On that side, I, as the Minister for Patient Safety, can say with some degree of confidence—because major incidents would come across my desk—that the number of those cases is extremely low. What you are talking about there is a medicine, not a class of medicine, so there is an opportunity for prescribers to change course from a particular brand or type to another one in class. It would be very unusual for a class of medicines in its entirety to be unavailable.

The Chair: Going back, can you let us know what the gradations on the risk register are? How do they work?

Dr Zubir Ahmed: That is a good question. David?

David Simmons: Every supply issue that comes in is assessed because, obviously, we may not know at the outset how severe it is. It works on a four-tier system; the vast majority are underneath that fourth tier, where there will be no discernible impact on patients. It may be that there needs to be a red pill instead of a blue pill or something like that but, in essence, it is the same product. The gradations go from tier 1 to tier 4, which is the most serious; in essence, tier 4 is where there is a risk to life. Thankfully, we have extremely few of those cases, but that is the classification of risk.

The Chair: Do they have a colour or are they just numbered?

David Simmons: They have colours on a RAG scale.

The Chair: That leads me on—you can see where I am going to go with

this—to the departmental risk register where, it is said, these risks are at amber/red. Is that correct?

David Simmons: That is correct. Obviously, the department has a high-level risk register of many different things, including cyber threats, and supply chain disruption is one of them. It looks at a broad picture and picks up the acute threats, as I would describe them, which are the shortages and issues of the day that are happening to individual products. That bucket is quite positive, as we have described; the mechanisms that we have in place generally work, and patients do not directly see harm from them.

It also picks up a series of inherent vulnerabilities, which we call chronic risks. These are things related to the national risk register. Some of the products that we use are single-source products, where there is reliance on particular logistics routes, on particular countries or even on particular regions within countries. There are risks around cyber and energy security, which would severely impact—or have the potential to seriously impact—medicine supply and manufacturing. So there is a series of risks.

The risk register picks up quite a large number of things. That is why it comes out as amber/red: there are some significant risks that, were they to come into force—if we had a major energy disruption or a major cyber attack, say—they would obviously cause us difficulties around manufacturing, storage and distribution. A lot of progress has been made on firms' cyber security across the supply chain, both in the UK and internationally, but, as we have seen with M&S and other organisations, if there were to be a significant attack, it would pose a challenge. That is why it comes out as amber/red.

The Chair: Has it moved in the past two years, or is it pretty steady at amber/red?

David Simmons: I would say that the overall colour has been the same. Obviously, there are risks that have grown in that period, but there are also risks that have been allayed.

The Chair: But that is the generality of it—you are pretty steady at that level.

David Simmons: Yes; that is correct.

Q91 **Baroness Coffey:** Differentiating between primary and secondary care, what steps are you taking to improve the sharing of information regarding medicine stock levels and, indeed, shortages?

Dr Zubir Ahmed: Obviously, most medicines are generally dispensed through primary care and pharmacies. We have the DaSH portal for discontinuation and shortages. There is mandation of reporting, which helps us work out supply across the country—whether it is a region-specific issue or a country-wide issue—and we are working closely with devolved nations on that.

On the wider issue of how to strengthen resilience in secondary and primary care, in addressing these issues and identifying them early, we have a fairly multilayered approach. I have already spoken about mandation. We require NHS England to hold stock for products used in secondary care in order to manage that ebb and flow. There is also diversification of suppliers, through the activation of the dormant licence, and there is investment in domestic manufacturing. It is clear for all to see that, certainly when it comes to generic medicines, we rely on imports. However, this does not mean that we do not have the ability, in certain areas—through things such as the life sciences innovative manufacturing fund—to think about where we can add value, particularly in novel medicines, biosimilars and so on.

Baroness Coffey: The Chief Pharmaceutical Officer for England has called for manufacturers to start using 2D barcodes. I am conscious of the falsified medicines directive, which is not there, but, in terms of stock management, a significant proportion of medicines just get thrown away. What are you doing about primary care?

Dr Zubir Ahmed: The first thing to address, when we say that a significant proportion of medicines get thrown away, is that there is an inherent issue for the vast majority, though not all, of those medicines: quality control. Imagine a situation where, at some intuitive level, you might think that, if your mum has a couple of sachets of clopidogrel that she does not need sitting in her cupboard, why can someone else not use it? The answer is that, the minute it leaves the pharmacy, the rightly stringent controls that we put in place for quality assurance are not there. When the packet is opened, although it is an intuitive and logical argument that the medicine should be used, in a practical, patient-safety sense, it is difficult to operationalise that.

Baroness Coffey: We know that, in secondary care, medicines can get reused in hospital settings and similar—that is fine—although not all hospitals seem to invest in that. However, in terms of hospital medicines not even leaving the pharmacy, there is still a limited time to return medicines. Pharmacists say that it is usually not worth their while. So, in terms of stock levels—I am not criticising—is it fair to say that the NHS does not know how much stock of medicines is in pharmacies around the country?

Dr Zubir Ahmed: This goes back to my original point. We have a system that rightly, in some ways, has a level of plurality and heterogeneity; it relies largely on individual businesses to do the front-line work when it comes to dispensing medicines. It is clear for everyone to see that, right now, there is no system that would be practicable or implementable without causing a real clogging of the system and which could work towards the ends you would wish it to work towards at the moment. This is not to say that that could not be an aspiration in future, as the technology evolves, but, at the moment, I cannot sit here and say that there is an easy way that will not be time-consuming and will not divert

front-line staff from their work but will give us what you want, which is, in essence, an inventory of every piece of medicine in the country.

Baroness Coffey: Forgive me, doctor, but reinstating barcodes is something that the Government could mandate. Our supermarkets certainly know where every piece of stock is in the country. Going further, will you consider mandating barcodes being put back on the packages of medicines around the country?

Dr Zubir Ahmed: It is not only about the barcodes; it is about how the information would then be shared by what are, in essence, very individual businesses. A supermarket is a single organisation, so it is easy for Sainsbury's to go and download from its computer where every single packet of McVitie's digestive biscuits is across the country—excuse that example; I am Glaswegian, and that is where digestives were manufactured—but it is much more difficult to do that when you have thousands of individual businesses.

I might bring in David here, as I think he has more knowledge of where we are with barcodes.

David Simmons: I want to step back for a second on the issue of primary care, if I may. One of the things that we are doing in that space is getting shortage information at the point of prescribing. There is no point in a GP prescribing something that the patient then finds is not available, so we are making that information available at the point of prescribing.

We also have a consultation at the moment on pharmacist flexibility. We want to be very careful in that but it is about allowing pharmacists additional flexibility so that, when a patient presents themselves with a prescription and that exact product is not available, there is flex in the system.

We have also published information leaflets for patients and pharmacies to help with what you should do in the event that your product is not available. We are trying to help the people on the front line who go to the pharmacy by making sure either that their product is there or, more often, that someone can help them. That was me stepping back slightly.

On the wastage point, most pharmacists get deliveries from the wholesalers twice daily. Those medicines will largely be returned to the wholesalers as part of that process; they are redistributed because they have stayed within the regulatory controls that the Minister spoke about.

On the collection of data, it is correct that we do not have a system where we track every single item, although we will do that for specific items. Obviously, we are in the advent of winter. We have identified several hundred products that we want to keep a very close track of over winter. We are getting data from the wholesalers—the people with the best knowledge of what has come to them from the manufacturers and what they have sent out to individual pharmacies across the country—so

that we can get from them a sense of the specific medicines that will be of concern for the winter. We have a pretty good sense of the stock levels that they hold, as the people who distribute twice daily to these organisations, and of where there are pinch points. We do not do that for everything; we tend to do it for targeted products because we want to ask for data only when we are going to use it.

On barcoding, again, pharmacies will use that system of knowing what has gone out and what has come in. Barcoding has two main points: one is knowing what the product is, such as via patient information safety leaflets, to make sure of its efficacy; and the other is tracking it through the supply chain. There are limits to what we have in that space at the moment, but we definitely do not collect data. The wholesalers would probably have the best information. We do it on a targeted basis.

Baroness Coffey: Indeed, is it not part of the issue, Mr Simmons, that there is not that understanding? I thank you for your explanation of the consultations you are doing, though.

Turning back to the Minister, I want to go a bit further. Obviously, the impact is on patients. The wholesalers have that data—although it is not so straightforward if there is no barcoding, which could be readily shared. However, we have heard that patients do not necessarily seem to trust the replacement products; they may be a different colour, or other things may be different. What do you think you can do, in terms of patient safety, when trying to help patients consider that the same product could still be given to them? That is a bit about patient confidence, rather than anything else.

Dr Zubir Ahmed: You have hit the nail on the head there. It is really about confidence and communication, rather than safety. Our rightly robust regulatory controls in this country generally guarantee safety, although we can talk about falsified medicines later; I am sure that we will.

You are right that there is a real communication piece that could be upscaled to educate people around what the generic medicinal product is versus what the branding is, including how they differ. Arguably, there is a role for the NHS app there. At the moment, you can see what your medicines are in general, but a communications and information-sharing piece is needed to give confidence around what are, in essence, two of the same medicines with different branding, whether that is in the colour of the pill or the name on the front of the packet. I understand the distress that that causes patients—including my own mother, at times; I have to spend a long time explaining to her that different types of aspirin are actually doing the same work in her blood. That is a very valid point; it is something that we need to work up.

Q92 **Baroness Cass:** This might be a dumb question—I take the point about McVitie's being a bit different from medicines—but, when pharmacies do flu and Covid vaccinations, they presumably have to communicate with the primary care database, so there is scope to get lots of different

pharmacies to relate to a single database. Would it not be possible to use that to set up a system whereby that happened with barcoding?

Dr Zubir Ahmed: It is possible, but it is a case of proportionality. As you know better than me, we can collect all the data in the world, but it can sometimes be a very labour-intensive and energy-intensive exercise. What is the opportunity cost and long-term benefit of that?

Your point about immunisation is slightly different, in the sense that it is not only dispensed but, generally, delivered. That allows access through APIs to the GP record, so that it can be embedded in the GP record; this is quite different from dispensing a medicine.

I take your point, though. If you are asking me whether there is more to do in this space to try to get a better understanding of inventory, I would say yes. However, being honest with you, do I have in my mind's eye an easy landing zone as to how we will get there, even in the data-intensive AI world in which we live at the moment? It is an open question, in terms of how we do it—indeed, if we should do it and to what extent. Again, with proportionality in mind, as salient as the issue is, it is a relatively low-incidence issue in this country, thankfully.

Q93 **Lord Laming:** Minister, can we carry on with the theme that we have been discussing: data and its management? We understand, and you have indicated, that the Government identify medicines that are considered to be clinically critical but have a potentially vulnerable supply chain. We are interested in why the Government will not publicise this critical issue, which is so important to many patients.

Dr Zubir Ahmed: There is an issue, which David can speak to in a bit more detail, around how you can have a self-fulfilling prophecy in certain areas of the supply chain if you go early with the publication of these issues. A lot of the time, when we are getting signals, they are not about an issue as it is now; they are about an issue that might occur in a few days, weeks or months. We are trying to get up stream of that issue to prevent it ever becoming an issue, if you see what I mean.

There is always a patient information piece, as I said to Baroness Coffey, but, if we are trying to get an early-warning signal or system in place, there is an argument to be made that sharing that information more widely could make the prophecy come true because it would change behaviours that are not always helpful. We may want to talk about stockpiling as a nation in future but we certainly know that, when stockpiling at an individual level occurs, it has wider harms across a population's health.

Lord Laming: We understand that the European Union publishes information on this basis. If it works for the European Union, why would it not work for Britain?

Dr Zubir Ahmed: I am not clear on what information the European Union publishes as compared to us; perhaps David can answer that question.

David Simmons: You are correct that a number of countries—obviously, the EU is not a country—have published their critical essential medicines lists. It is a An important debate, and one that we have quite often, is around the right level of transparency in this space. We currently have very good data on this. We have developed something called the global risk register, which takes all of the licensing data and can identify where those single-source challenges are, where the vulnerabilities are and where we are reliant on individual countries. That informs and underpins all of the work that we do.

On lists, we tend to take a more agile approach because, if I were presented with a reasonable worst-case scenario—say, significant energy disruption in this country—the list of critical products at risk would be a different one. We would create a list based on the risk of energy disruption in this country, which would focus on items manufactured in this country—in particular, the energy-intensive ones. It would focus on those with a short shelf life or with specialised storage conditions, such as freezers. I would come up with a different list for that risk than I would for the risk of a trade restriction in one part of the world.

We have collected information to understand the supply chain. I totally understand that other countries have published lists, but we have chosen not to do so at this point; it is informing our work in the same way as it is in other countries but we are using it in a more agile way, in essence, to have a different list depending on the challenge that is presented to us. As the Minister set out, if, as a patient, your medicine were published on a critical list, it could engender unhelpful behaviours, so there is a risk to balance there.

Lord Laming: May I ask about the resilience of the data that you have? We assume that hospitals and ICBs maintain a critical list of pharmaceutical products. We understand that not all hospitals maintain a list; some do and some do not. It would be helpful if you could share with us how resilient your data really is, because there are so many different people who could and should contribute to it; perhaps they should contribute to it but do not.

Dr Zubir Ahmed: Your dataset is only as good as the people willing to enter it; that is an adage of clinical medicine, as much as it is about the supply chain. At any one point, because we have a National Health Service, the helicopter view that we have or have an ability to get insight into—even if it is not in the system right now, we have an ability to access that information—is much better than that of any of our European counterparts. Arguably, their health systems are much more fragmented, because of the nature of the way in which they are set up.

I can totally sit here and say to you, “Obviously, there are times when we all have frustrations about the gaps in data and knowledge”, but, if those gaps in data and knowledge are related to a genuine supply issue and if we needed to get up stream of that, our ability to get into various systems and get that information quickly would probably be unrivalled in

Europe because of the way in which we are set up. David, do you want to add anything on access to secondary care data?

David Simmons: The list that I mentioned, in terms of this understanding of the supply chain, is based on clinical input as well. We have had the national clinical directors of every specialism look at what is critical in their area, so this comes at it from a supply chain angle as well as a clinical one. The data and where we get everything from are underpinned by an extremely highly regulated system, from which we benefit.

Every single licensed medicine in the UK says on the licence where it is manufactured—and those production sites are inspected—and where the API, the active pharmaceutical ingredients, that go into those products are from. So we have total confidence in all that data because you do not get a licence if you do not provide it. Obviously there are weaknesses in that; when it comes to the chemicals that go into the API that then go into the medicines in tiers 2 and 3 [of the supply chain], the data is less robust, as we discussed in the last session when I was here.

Mandatory reporting has been fantastic in terms of industry sharing sooner and faster with better data. As we discussed last time I was here, we are probably not at 100% compliance with that, so we are doing some work on the information regulations to work out how we can improve compliance. On the whole it is very good, but obviously we want it to be 100% so we are looking at that.

The last point here is on industry relations. In my time in this world, relations between the Government and industry have strengthened a lot in terms of the willingness to share information and the confidence that we will do the right thing with it, treat it commercially where it needs to be treated commercially, act on patients' behalf and help companies to mitigate problems. I am confident in those flows as well. Is it perfect? No, but it is far stronger than where it was, and overall I would say that we are in a pretty good place in terms of data reliance.

Lord Laming: It is just that the Minister has already referred to the volume of pharmaceutical products that are available every day to patients throughout the country, and the range of outlets is enormous. Some of the evidence we have had is as if it gets by on a hope and a prayer. Are you confident that you are able to say that this data, despite where it all comes from and the range of products, is reliable and resilient?

Dr Zubir Ahmed: It is hard to make it completely contemporaneous and real time but, in terms of the macro data, given the way that we have set up our NHS supply systems and where we have got to with our relationships with industry, we get a relatively good and at times quite granular helicopter view of what is going on. As I say, it is just not completely real time.

Q94 **The Chair:** To build on Lord Laming's point, I thought that other

countries maintain a critical medicines list, in the sense of prioritisation, or at least the Americans do. They say, "These are the 25 most important medicines that we consider absolutely critical". Why do we not publish that? I cannot understand that. There are two issues here. One is the reporting around it, which, as you say, might create a run on a particular pharmaceutical product, and the other is a general issue: what are the big things that you have identified that feed into the risk register, and why do the public not have access to what they are? We should all know what they are, surely. Is there a reason?

Dr Zubir Ahmed: At times, it is very hard to sit there and say that these are the 25 medicines that we—

The Chair: Other countries do. Maybe we are unique; I do not know.

Dr Zubir Ahmed: There is a reasonable amount of subjective analysis when it comes to defining what a critical medicine is at a particular time. It is not only about the clinical indication for that medicine or the harm caused by its absence; it is also about the availability of supply, the medicinal product and our resilience to produce it. Listen, I am always open to doing things better.

The Chair: It would just be interesting to understand why other people do it and we do not. But perhaps we can leave it there and push on.

Dr Zubir Ahmed: David, do you have any thoughts on the risk register?

David Simmons: It is a debate that we often have, and it is a balanced one, about whether or not to publish the list of products. I would probably surmise that the publishing of the list is a process, and the most important thing is what you are doing about those things. For example, we know that the French have published their list of 25 medicines, but what action have they taken as a result of publishing it and has it worked? That is something that we talk to them regularly about, and we try to observe what happens in order to inform our future thinking. So that is a good debate that we often have in the team and it is finely balanced, but at this point we have not chosen to publish.

The Chair: Shall we say you are keeping it under review, Minister?

Dr Zubir Ahmed: There is a nuance there in addressing what we consider to be medicines that are essential to the running of our countries at times of national or international distress versus the risks in the supply chain at the moment. That would often produce two different lists.

Q95 **Lord Blencathra:** I take your point that essential medicines depend on the individual; if I do not get the little medicine that I want then I think it is absolutely essential. I want to ask you how you are incentivising manufacturers to invest in UK manufacturing to increase the resilience of medicine supply in the UK. I have three specific questions. First, the Government's contract with Moderna regarding a vaccine and component stockpile seems to represent a clear example of the Government placing greater priority on resilience. What other medicines or manufacturers are

you taking this approach with?

Dr Zubir Ahmed: The Moderna example is a good one. I was there to open their facility earlier this year. The company is genuinely going great guns in terms of not only manufacturing footprint in this country but the clinical trials that it is doing, and we are trying to support Moderna with our clinical trial target of getting patients into trials within 150 days. That is a real partnership between industry and the Government, but it also speaks to our national resilience at times of crisis; it can basically provide priority access for up to 250 million doses of vaccines, should there be another pandemic within a year. Sorry; I have forgotten your second point.

Lord Blencathra: What other medicines or manufacturers are you taking this approach with?

Dr Zubir Ahmed: Through the life sciences innovative manufacturing fund, we are looking at places where we have a genuine competitive advantage to turbocharge medicines manufacture. Like I say, we are very plain about saying that we are not competitive in terms of [genetics-generics](#) manufacturing globally. Will we ever be? Probably not, and that speaks to needing to optimise our relationships with international partners, like I did at the G20 Health Ministers meeting last month. We have to have a twin track here about doing things at home but also maintaining relationships that maintain supply chains abroad.

When it comes to doing things at home through the life sciences innovative manufacturing fund, at the regional investment summit we announced support for Sterling Pharmaceuticals, which will support [genetics-generics](#) medicines manufacturing through that fund. More importantly, we also need to look—both from a resilience perspective and in order to be first in line for things—at what we are doing to manufacture, on British soil, innovative medicines that will be truly life transforming and life changing. Our focus should be there, and it is.

Through the manufacturing fund, we have been able to help Autolus, a company just down the road in White City, which is doing something with CAR T-cell therapy, which basically turns off childhood cancers that would have killed children a few years ago. That is the right approach. We could easily get into a conversation about how much we produce here and how much the state funds that production for a bunch of medicines where we are never truly going to have the scale and ability to do that. That is fine; we can have that conversation at the same time as having the conversation about international partnerships and multilateralism, which are really important to maintain those supply chains. At the same time, the interesting conversation is about how much innovative stuff we produce in this country, both because it is important for our citizens to be first in line for treatment and because it gives us a competitive advantage for our life sciences sector.

Lord Blencathra: I think my colleagues Lord Shipley and Lord Prentis will be asking you about reshoring and so on. Can you provide some

examples where the Government's focus on resilience through value-based procurement has secured a more resilient supply of medicines?

Dr Zubir Ahmed: David, do you want to take that one?

David Simmons: Value-based procurement is a broad financial commercial change that has happened. It essentially allows that in the NHS procurement frameworks we are not just focused on price. Price is an important factor, and obviously we want to get value for money, but price should not be the only factor in determining who wins commercial tenders.

Value-based procurement looks at the life cycle of the product and the resilience of the supply chain so that, when new tenders come through the NHS, we do not make decisions on who wins those tenders based purely on who is the cheapest but, instead, look at a broader system of value-based procurement that takes into account resilience and the life cycle of those products.

Dr Zubir Ahmed: To be honest, the Birmingham example is a good example of that. The manufacturing fund is also a good example because it is not necessarily set up to fund whoever can do things the cheapest; it looks at what they are investing in our country and what social value they are producing.

Value-based procurement will get interesting in future, I think—especially in the light of recent conversations that we have had with the US on medicines pricing. Instead of thinking about outcomes in a very narrow band, it is about thinking about how we price a medicine based on longer-term outcome, rather than just having a fixed price at the start. These are all conversations that are live at the moment as we try, with the pharmaceutical industry, to sort out medicines pricing for 2029 and beyond.

Lord Blencathra: Finally, when considering bids for different pots of funding, what weighting is given to resilience of supply and improving medicines resilience?

David Simmons: As has been mentioned, the life sciences innovative manufacturing fund is the main fund in that space. It is 50:50. We have done a lot of work on getting a better assessment of resilience in order to make it more of a factor. In essence, half of the fund's weighting is on jobs and growth; the other half of the score is on the resilience benefits of whichever bid has come through. So resilience and growth are of equal importance.

Q96 **Lord Mott:** I am interested in your reference, Minister, to the US and other international partners. In the pretty uncertain world in which we currently live—and will, I suspect, live in for the foreseeable future—who do you consider to be strong international partners upon whom we can genuinely rely in this regard, at the moment?

Dr Zubir Ahmed: There are two facets of that conversation as it applies to medicines. One is generic medicines. As I said to Lord Blencathra, 95% of all the medicines we use in this country are generic, and the majority of those are not manufactured in this country; there is no realistic possibility of that being the case in future, so we have to address this area as it is, not as we would hope it to be.

In that sense, the big generic manufacturers increasingly tend to be on the Indian subcontinent. That is an important relationship. We have gotten a lot closer to them recently, in terms of trade ties, and we have a good working relationship with them at the health department level. We are looking at closer co-operation on things such as medical technologies—for example, passporting our regulations with layers when it comes to the interchangeability of medical technologies between two countries.

That relationship has real importance when it comes to medicines supply as well. We are also looking at manufacture there; the MHRA is looking at what can be done on the ground, in terms of quality assurance and regulation, to make those supply chains a bit more agile and, where they need to be, fast-tracked.

On innovative medicines, you mentioned the US deal, which was done primarily because of that Administration's view of what medicines pricing across the world should look like in thinking about their own large pharmaceutical businesses. The deal we came to was really about making sure that the UK continues to be at the front of the queue for medicines being launched in this country—medicines that, in the very near future, will be disease-modifying and disease-curing. These are not medicines for just symptom control, adding a small amount of value on clinical outcome; some of them are truly revolutionary. This deal was important for that.

More broadly, when it comes to innovative medicines, although the deal was between the UK and the US, it applies to everyone—including our European partners and pharmaceutical companies in Europe such as Novartis and Novo. We have had positive soundings from most pharmaceutical companies that that will incentivise their ability to operate in this country and, more importantly, to invest in this country in the long term. If they do that, it will be a completely direct corollary to our resilience and our ability to have a manufacturing supply chain of innovative medicines in this country; more importantly, it will enable us to have a thriving life sciences sector and to fulfil both our life sciences sector plan and our industrial strategy.

If we do that and it organically attracts more people—including more innovative companies and biotech companies—to our shores, that can only be a good thing when it comes to resilience.

The Chair: Do you have a good example of value-based procurement? We have heard you describe it, but can you share any examples with us?

David Simmons: I have examples in my head but I want to check the commercial nature of them; I will write to you to make sure that I am not saying anything incorrectly.

Q97 **Lord Prentis of Leeds:** To some extent, you have already touched on the questions that I am going to ask, mostly in your answers to the questions from Lord Blencathra.

Reshoring and nearshoring go to the heart of the investigation that we have been looking into, as do the various elements that go into the policies that are being carried out. We already know that the Government have stated that they have no list of medicines to prioritise for reshoring and nearshoring. My question relates to that. First, which medicines would you like to manufacture on UK soil? Secondly, what would you like to manufacture abroad or continue to buy from international partners? Finally—my question has a third element—what are you doing to invest in UK manufacturing in order to support this? You have already been asked that, to some extent.

Let us deal with the first part first: which medicines would you like to see being manufactured on UK soil, against the background of the Government having no priority list?

Dr Zubir Ahmed: First, I wish I had such a level of control over an agency as to decide exactly which medicines I could manufacture here and which ones I could outsource, as it were.

In terms of a policy objective—that is, an aspiration and a plan—this country should be focusing on the manufacture of innovative medicines, as I said to Lord Mott. Innovative medicines are now a conglomerate of traditional pharmaceutical chemistry and some quite sophisticated cell biology, which is, at times, infused into medical technology. A lot of the time, these are not just pills that you pop at home any more. With our deep ecosystem of pharmaceutical chemistry and basic science, as well as our rapidly evolving biotech ecosystem, we are at the forefront in the world in this area. We should grab that opportunity with both hands and accelerate hard into innovative medicines manufacture.

Again, I go—completely unapologetically—back to Autolus as a fantastic example of a grass-roots technology that was started here and, thankfully, finished here. It is now benefiting patients and children in this country first. That is what we should unashamedly go for. We are, by any stretch of the imagination—certainly with our population—a medium-sized country. We cannot be in all lanes going at 70 miles an hour; we have to pick our lanes, in that sense. This is the lane that I would pick.

That then exposes us, as I said to Lord Mott, to the question of what we do about [genetic-generic](#) manufacturing. Is [genetic-generic](#) manufacturing where I would want it to be at the moment? The answer is no. We would want more [genetic-generic](#) manufacturing than is happening right now. However, as I said, I do not think that it is realistic, or indeed desirable, for us just to do everything on our own shores. Again, the life sciences

innovative manufacturing fund gives us the opportunity to invest in innovative medicines, while still having at least a slight focus on the generics.

In summary on your question, we should go gung-ho on the innovative medicines but we should also keep an eye on the generics. Keeping an eye there is as much about what we do at home as it is about our relationships abroad. Again, our advantage in the innovative medicine field, as well as our advantage, which is sometimes underplayed, as a standard-setter of regulation across the world via the MHRA—I can tell the committee that I saw in my trip to South Africa that we are reputationally riding very high because of what we are doing in the MHRA—opens up lots of opportunity to make our generic supply chains very resilient. People want to talk to us about other things, so we can bring in the generics conversation at the same time, to make sure that we do that more.

Lord Prentis of Leeds: I will follow that through to our investment. There is investment in generic medicine. There is also investment, as you said, in innovative approaches to things. Where is the money for that? What has been set aside? What work has been done to establish how much can be spent, what needs to be spent and what results it could bring?

Dr Zubir Ahmed: The Office for Life Sciences mainly takes responsibility for that. It sometimes works with venture capital to make sure that there are investments available for start-up biotech companies. I can write to the committee with the exact amount, but it is in the order of billions of pounds of investment. There is obviously the life sciences innovative manufacturing fund. We are very conscious that we should use even our research delivery arms, such as the NIHR, which has a £2 billion budget, to leverage and support the high-flyers and the potential winners in the sector. We should be very selective about which research we support.

Lord Prentis of Leeds: Thank you. Perhaps the information could be sent to us.

Dr Zubir Ahmed: Yes, I could do that. We could send you a detailed letter on exactly where the OLS is spending its money on innovative manufacturing.

The Chair: I would appreciate it if you could circulate that. Thank you.

Q98 **Lord Shipley:** Minister, I thank you for the clarity of your answers so far. I want to pursue the questioning from Lord Prentis towards another aspect of manufacture. Have you and the department given any consideration to the wisdom of putting all our eggs in one basket and being very reliant on single countries for supply? Obviously, there are China, India and possibly others. Is it wise for us to be reliant on single countries for the supply of medicine ingredients, particularly APIs?

Dr Zubir Ahmed: Diversification is always desirable. We do that as much as possible with how we license and regulate products. I might get David

to speak about that in a second. Frankly, it is genuinely challenging at the moment to find some medicinal products in more than one region or country in the world. Antibiotics is a good example of that: very few facilities in Europe have the ability to make penicillin-based antibiotics. That speaks to our worldwide leadership on antimicrobial resistance as much as anything else.

There are genuine challenges in that sense, because it would take an order of a significant magnitude—many billions of pounds—to invest money somewhere to build another facility. The argument is not only that it is cost effective; in the changing ecosystem of microbiology and antibiotic resistance, we have to ask how long those antibiotics would actually work. That is why for a lot of the areas we are talking about—where we are relying on less-than-ideal supply chain systems—we have to think more widely about how they intersect with areas such as research and innovation. I will pass to David, who will discuss what we are doing to maximise the diversification of the supply chain.

Lord Shipley: Before doing so, I will pursue a further question, which may assist us to answer that. I think you just said that the supply system was less than ideal.

Dr Zubir Ahmed: Yes, for certain products.

Lord Shipley: The question then is: who are the UK's strategic partners for developing the resilience of medicine supply? How are you working with them?

Dr Zubir Ahmed: Again, there are multiple levels to that. Obviously, we develop relationships with the people we trade with and through the trade deals we do organically. In the WHO and the G20, we have good relationships in terms of intelligence sharing. We are trying to develop relationships on pathogen sharing too, which will then inform what medicines or antiretrovirals we might need, particularly in times of pandemics or epidemics. It is usually those types of medicines that we are talking about when we discuss supply chains being less than ideal—antimicrobials and antivirals.

Lord Shipley: Is resilience seen as part of wider UK foreign policy? In other words, you talked about the G20 and the WHO, but do you actually have discussions between the department and the Foreign Office about the resilience of supply?

Dr Zubir Ahmed: We do, but obviously the frame of that discussion is always changing as the geopolitics are changing. A live discussion is going on at the moment about where we find ourselves in Europe, given the landscape of increased defence spending. We are asking how that translates not only to the medicine supply chain but to other things such as blood products. That conversation goes in myriad directions. In short, conversations are happening interdepartmentally.

Lord Shipley: Sorry; I interrupted David Simmons earlier. Is there more

you wanted to add to the replies we have had already?

Dr Zubir Ahmed: It was on what we are doing about the diversification of supply chains.

David Simmons: One of the things we are doing is trying to bring back dormant licences. There are licences that are valid in the UK but are not producing at the moment. They are therefore dormant. We are trying to bring those back on stream again, to get a broader supply base.

I echo the comments on international relations because we are—there are various measures—about 3% of the global market. A huge shift to change our reliance on certain areas of the world would cause us more harm than good in the near term. To give a couple of examples, we are a member of the EU's Critical Medicines Alliance, which brings together international Governments, not just from the EU but from countries such as Japan, and companies to try to look at how we can work together on some of those things. There are all the multilateral fora that have been mentioned, including the deal with India, which talk about resilience.

Finally, I echo that we work across government on all these matters. I suggest that national security resilience, including for the supply chain and other critical sectors such as defence and chemicals, is an absolute priority for the Government. We work regularly with COBRA, the DBT and the FCDO to share information and to work together where we can.

Q99 **Baroness Pidgeon:** Our discussion this morning has been very informative. I will pick up on what you just said: we are a member of the EU's Critical Medicines Alliance. It has recently put out a report that recommends collective stockpiling policies. The OECD and others have talked about the creation of national stockpiles for critical APIs.

Look at what is happening in the United States; it is stockpiling APIs for 26 critical medicines. Is this something we are going to consider? I understand about the generic medicines, but on specific APIs, are we going to be part of a partnership with Europe or by ourselves in terms of stockpiling? Perhaps the Minister could answer first.

Dr Zubir Ahmed: It feels intuitive to say that one should stockpile, but it can have quite counterproductive outcomes because a lot of these things have a time stamp on them in terms of expiry. It reduces your stock and flexibility to stock allocate. There is a large degree of waste. Our department's view in general, and the advice I have received, is that stockpiling is not an appropriate policy-level lever instrument. Whether we should think about how we engage with our European partners on certain APIs is a more open question, especially given the response I gave to Lord Shipley on antibiotics. That is an open question and maybe David can come in and say what conversations we are having with our European partners on that.

David Simmons: We moved away a little from stockpiling big levels during Brexit. We are obviously aware of other countries doing that. We have the secondary care frameworks that have eight-week buffer stocks.

A lot of times, "stockpiling" is the term used but sometimes it is a buffer stock. The stockpiling might be held by industry or by government and so on. A lot of the announcements that the EU and the US have made are just announcements at this point. There are conversations going on with industry partners too, because the API ask in the US was also made by the first Trump Administration but not fulfilled.

Dr Zubir Ahmed: It never came to fruition.

David Simmons: Yes. We are alive to it and trying to look at how it would work with them. We have to remember that it is an end-to-end system. The APIs are helpful but if the API then needs to go to a plant overseas to be manufactured and then come back, you have not fully onshored the end-to-end system. We do stockpile for certain pandemic responses scenarios and we have those eight-week buffer stocks, so it is not that we are not doing any buffer stockpiling to provide us with that security for when there is a disruption.

As I said, this is an ongoing debate across the world. Some people have announced policies and are going through their governance arrangements to see whether this is practical or implementable. What are the company responses like? We have had some instances with companies suggesting, "We are not going to supply that market because that is just too big a hurdle. The cost of capital for us to store that volume of product in a country will make it unviable".

It is complex. We talk to international Governments regularly about what they are experiencing and to industry about their responses. We are not a closed book to it in any way; we constantly talk about it. But a lot of this is in the announcement stage rather than the implemented state.

Dr Zubir Ahmed: I should add, Baroness Pigeon, that that is an important point around what individual countries are mandating pharmaceutical industries to do in their countries. That is not an insignificant consideration for them in terms of where they invest and choose to house themselves. It is not for us, either, an issue that we should overlook when we are thinking about becoming, as we are, strategically the biggest life sciences economy in Europe by 2030. Mandating, as some countries have done on the European continent, large amounts of stockpiling, to the point where it makes business unviable, has unhelpful consequences in terms of the investment present in those countries, as well as on jobs and the spin-off impacts downstream on the life sciences sector.

Baroness Pidgeon: Is this an area that is under review as part of your work with the EU and others?

Dr Zubir Ahmed: Yes. Some of it is a bit of dancing on the head of a pin of nomenclature. When does "stockpiling" become "buffering", and when does "buffering" become "stockpiling"? The conversations are live, but that has to be in the context of the wider impacts on our economy and the practicability at the implementation level. It is easy to make policy on

this but, as David says, even the biggest countries in the world have found it difficult to deliver on it.

Q100 The Chair: I will end with something about resilience. It obviously costs money, does it not? That is the dilemma we are facing. We talked about value-based procurement, which is about moving money to provide some defence. During the pandemic, there were many instances of people trying to queue jump and national Governments putting their interests ahead of the wider world community. What arrangements have you been thinking about for things such as subscription models, whereby you pay people to hold capacity for difficult times, so that you can have some degree of buffering with APIs? However, the point was made that, if you do not have the plant to make it, then there is no point. Is there any thinking on that or is it also part of the work in progress?

Dr Zubir Ahmed: I have a more generalist view on that. The subscription almost has to be a co-investment and co-partnership, as we have seen with companies such as Moderna. You say, "Come into our country and we will support your presence here. We'll facilitate your clinical trials here because we want to grow. But, in return, we partly need this level of resilience in the system at a time of national crisis". That is a better model than just paying upfront for something that may never occur. That is my view on it.

The Chair: It worked for generics. The fact is that, as you said, 90% of the drugs we use are generic. Is there any thought about the subscription model, as you described it, for generic capacity?

Dr Zubir Ahmed: We are an attractive country for generic manufacturers because of the weight and buying power of the NHS. It is quite an attractive piece, whether you are generic manufacturer or an innovative medicines manufacturer, to break into the British market. This is why we have had so much of the noise around medicines pricing from global institutions. Underlying it all, as happy or unhappy as they may be with us at times, this is a valuable market to them. That is its own attraction in terms of resilience, if we maintain that buying power and leverage it.

The Chair: We should be confident, Minister.

Dr Zubir Ahmed: We should always be confident about our country.

The Chair: Me too, but I mean in relation to this specific point.

Dr Zubir Ahmed: What I think you are talking about there has an international, multilateralist resonance and lens too. Many times, when we are—as we would say in Scotland—in a bit of strife when it comes to an issue on the supply of medicine, the wider relationship, if it is good, can help to oil the wheels of that issue. That is why it is important for us to be present on the global stage, such as in the G20.

The Chair: That is tremendous. Thank you, Minister. We would say that there is a chance that you may become Secretary of State one day. If

some of this stuff comes to pass on your watch, we hope that you will take heed of what we have said and make sure that these policies are put in place promptly. We can have a lot of planning but the world changes quickly, and we would not want you to be found wanting in that case.

Dr Zubir Ahmed: Thank you for your time. I am also conscious that Lord Laming asked me a question about the secondary care supply chain. Perhaps we could get back to him in writing, because we did not give him the detail he was looking for. We can sort that out.