HOUSE OF LORDS

Public Services Committee

Uncorrected oral evidence: Medicines security

Wednesday 12 November 2025

Noon

Watch the meeting

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

Evidence Session No. 6 Heard in Public Questions 70 - 89

Witnesses

I: David Watson, Patient Access Executive Director, Association of British Pharmaceuticals Industry (ABPI); Mark Samuels, Chief Executive, Medicines UK; Dr Martin Turner, Director of Policy and External Affairs, Bioindustry Association (BIA).

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Examination of witnesses

David Watson, Mark Samuels and Dr Martin Turner.

Q70 **The Chair:** Welcome to this meeting of the Public Services Committee in our inquiry into medicines security. I am delighted to welcome our witnesses today. To start, can you please introduce yourselves?

David Watson: I am from the Association of the British Pharmaceutical Industry. We represent research-based, branded manufacturers.

Dr Martin Turner: Good afternoon. I am the director of policy and external affairs at the Bioindustry Association. We are the UK's trade association for innovative life sciences and biotech companies, primarily SMEs developing innovative new medicines, be they antibody therapies, cell therapies or gene therapies—that type of thing.

Mark Samuels: I am the chief executive of Medicines UK. We are the trade body for generic and biosimilar medicines, and our members supply 85% of all NHS medicines.

Q71 **Lord Mott:** The DHSC's written evidence states: "Manufacturing has been the most dominant root cause" of medicines supply issues in the last five years. How would you respond to that?

Mark Samuels: First, I know what it is like to experience a medicine shortage. Last Christmas, I had an antibiotic-resistant infection and I could not get my own medicines, so I know first-hand how stressful that can be.

I want to make three initial comments on that question. The first is around the leanness of the supply chain. As was mentioned in the earlier session, prices have been getting lower and lower, particularly for generic medicines. I did some market research on the way in this morning by comparing the price of chocolate to the price of generic medicines. The average generic medicine costs around £3 per pack; these are life-saving medicines for cancer, heart disease and so on. In the case of the majority of generic medicines, that is less than the price of a large bar of Dairy Milk where I was shopping this morning. This morning, the Cadbury's Flake I have here with me cost me £1.99.

The Chair: That must have been at a railway station.

Mark Samuels: Yes, it was; you are right. Some 80% of the generic medicines in this country cost less than £1 per pack. That is great news for NHS affordability and for treating patients because, obviously, it means that more of us can be treated, but it also means that supply chains have gotten leaner. Human resources are lean, with fewer people, and the amount of stock that is carried in a global supply chain is less. So there is no fat in the system; that puts a strain on things and has resulted in some of the issues that we have had.

The media has been full of the US-UK trade discussions and the possibility that the UK Government might choose to put more money into

medicine spending. If that were to be the case, it would be vital that any increase in medicines spending applied to all medicines across the board. It cannot just be at the behest of American pharmaceutical companies for their products; it needs to be for all of the products that we all use as patients in the NHS.

My second point is around making sure that we make strong use of the UK's trade deals, in particular the EU reset and the Indian trade deal, to maximise our medicines resilience. The current situation with the EU means that, if a company manufactures in the EU, it can sell those medicines here in the UK. However, the reverse is not true. If you were to manufacture in the UK and try to sell in the EU, that would not be allowed under the current trading arrangements because there is no mutual recognition of something called batch testing.

Our members—45 pharmaceutical companies—operate 14 manufacturing plants across the UK. They make around a quarter of all NHS medicines here in the UK. However, the incentive for them to expand is constrained by the lack of mutual recognition for manufacturing. The Government's reset with the EU must, therefore, include medicine manufacturing. There has been talk in the press that it will include the food industry. Much as I love British sausages, I would much rather that we had a well-supported medicine manufacturing base here in the UK; I would love it if this committee recommended that as a priority.

On India, let me give some praise to the Government. They got the Indian trade deal over the line. Government colleagues in the Department for Business and Trade and, specifically, in the medicines resilience directorate at the Department of Health and Social Care have done a great job in getting medicines on to the agenda, but that needs to be strengthened.

My last point is around national security. Around half of our active pharmaceutical ingredients come from China, and virtually all of the raw materials needed to make them come from China. It strikes me as unusual that there is no national risk register for medicines resilience asking, "How many people might die if there were shortages of APIs?" The answer is, "Probably more people than if Russia were to launch a nuclear war against us".

Dr Martin Turner: I absolutely agree that the biggest threat and challenge has been manufacturing capacity. I can talk from the innovative end of the industry. We have a fantastic number of innovative companies researching and developing medicines—we lead the world in that—but we have not managed to translate that into a manufacturing base as well. We missed out significantly on earlier generations of medicines. However, we now have a real opportunity to improve and capture the manufacturing of cell and gene therapies, mRNA-based vaccines and so on.

There is an increasing urgency to this. I absolutely echo Mark's points about national security; this is a national security risk. With what is going

on both east and west of the UK, it is really critical that we do as much as possible to shore up our manufacturing in the UK and to promote manufacturing in the UK. However, that threat is also an opportunity, of course, because these companies are creating high-value jobs and export products.

Unfortunately, our sector is a very global sector. That is a benefit in many ways, but it also means that we are at the behest of global investors, global supply chains and other countries. At the moment, we are in the storm of a global funding crisis in investment into life sciences and biotech. We have many great companies that are now having to make difficult choices about where they will make their R&D or manufacturing investments. In many ways, the UK is not an attractive place to do that, so we absolutely need to make sure that, as the Chancellor is looking at the Budget on 26 November, she is ensuring that public investment is going into life sciences; that tax incentives are being fine-tuned to support knowledge-intensive companies; and that we are accelerating programmes such as the Mansion House compact to increase domestic investment and private investment in life sciences.

David Watson: I think that, as the other witnesses have said, saying that it is a manufacturing issue is too simplistic. The high-profile examples that I would give are: HRT; some of the weight loss drugs, when those first came out; and treatments for ADHD. They show that there has been a mismatch between demand and the economics of making sure that patients can get these things very quickly. The manufacturing side will always be able to catch up if it has enough time and if the right incentives are in place, but, in those examples, things did not quite work.

As far as manufacturing specifically is concerned, the research-based industry has—certainly since Covid—diversified its supply base quite a lot. For example, it is much less reliant on single countries for APIs. A lot of pharmaceutical companies have multiple places where they can make products because it makes their supply chain more resilient. The UK can be resilient even if it is relying on, say, products made in Belgium or France. So, that is a slightly different question from, "Is it attractive for the UK to have manufacturing and research?" The answer is yes, of course, but, from a resilience point of view, there is a need for manufacturing here; the economic value of that is perhaps the second question.

Q72 **Lord Carter of Coles:** Can we come back to the economic point? Why is it so cheap to make generic medicines somewhere else? What are the factors? The API is the same, presumably, so the cost there is the same, but how can we establish that cost? If the Government were being encouraged to onshore, do you have any sense of how much more the generic basket would cost if that were the case?

Mark Samuels: It is not quite as simple as that. India supplies about a third of the NHS's generic medicines—this is why I suggested that strengthened ties through the trade agreement really matter—but that is

not to say that it is necessarily cheaper to manufacture in India. Nowadays, many of those plants are highly automated; in some cases, they are more high-tech than the factories over here in the UK. We simply need stronger bilateral relations, as David said—I agree with him on that—so that, if products are made in the EU, we have access to them.

We also want a good, healthy manufacturing base here in the UK. There is the Life Sciences Innovative Manufacturing Fund. However, removing batch testing and the manufacturing disincentive to investing here, rather than in the EU, is probably is the biggest thing that would happen. A number of our members are Indian-owned companies—including Accord, which manufactures 10% of all NHS medicines here in the UK between Newcastle and Devon. It routinely makes choices on whether to expand its plants here or expand its plants in India. Along with many of our other members, it has said that the mutual recognition of manufacturing between here and the EU is a critical deciding factor in whether or not the UK gets more investment.

Q73 **Baroness Cass:** We have heard variable takes on how effective the DHSC is in prioritising resilience over pure value for money, as well as on the differentials between primary and secondary care. I am keen to hear your take on those. What do you feel about the incentivisation on resilience?

Mark Samuels: I will take primary care and secondary care separately. On the pricing policy in primary care, I am not going to touch on VPAG because we all agree that the clawback rate is extremely high.

The primary care system has to tread a very fine tightrope between affordable medicines for the NHS versus supply resilience. It is hard to think of another pricing system that is better. I do not think that we should be touching the primary care pricing system; disturbing that tightrope would probably cause all sorts of unforeseen consequences. When there is very low supply, prices can go up, and, obviously, as supply and competition increase, prices go down. We probably have the lowest generic medicine prices in Europe as a consequence.

There have been some issues with secondary care but, to be fair to NHS England, it seems to be addressing them; I give it some credit for that. It is moving to what it calls value-based pricing, which means that suppliers have a track record of whether they ran into shortage or lived up to delivering stock on time. All of that will be taken into account when it comes to winning any future hospital tenders. We think that that is fair enough because it will incentivise and reward companies that are good at supplying secondary care; the companies that have not historically been good will be penalised. Market forces will work and the more reliable companies will, of course, win more tenders, which is to be welcomed.

We have suggested to NHS England—I hope and think that it has listened—that, when companies are told they have won a tender to supply a hospital, they need enough time to manufacture the product. On

average, it takes our members about five and a half months to manufacture a product; if it is a complex biosimilar medicine, it can be 12 to 24 months. If you get only a few weeks' notice, obviously, you cannot manufacture it. To be fair to NHS England, though, that has improved.

One thing that it would be helpful for the committee to highlight is the resources for the Medicines Value and Access team in NHS England. Obviously, today, the news is full of the redundancy payments for NHS England as it becomes part of the DHSC. There are some critical capabilities in NHS England; if the Medicines Value and Access team, which runs those tenders, were to lose resources in running them, that would be highly detrimental to both secondary care in the NHS and the industry.

Baroness Cass: That is a good point. Do you want to add to that?

David Watson: I would differentiate. When we talk broadly about shortages, the issues behind individual types of medicines can be very different. There can be very different reasons for shortages. It is important that NHS England, the Department of Health and the relevant parts of industry can work together to identify the root causes in each case; they are not the same. If I look at the more innovative pipeline, generally, there tend to be fewer shortages. Initially, there was a huge global shortage of weight loss drugs; that was eventually resolved with better manufacturing. Again, to some extent, it comes down to what systems we have in place to understand things such as horizon scanning; what treatments are coming along; and whether we can jointly have a view of the UK demand picture. All of those things are essential.

Dr Martin Turner: I can talk about resilience to public health emergencies, particularly pandemics, because this is something that the BIA had an awful lot of experience in during the Covid-19 pandemic. A lot of lessons were learned in that time. If you have not read it, I would really recommend Kate Bingham's book, *The Long Shot*, which details how a very collaborative and well-networked life sciences sector in the UK came together—large and small companies and academia—to deliver something quite remarkable. That was enabled by a Government who were willing to invest, take risks and change the standard procurement processes. Some of those ways of thinking have been lost, though not completely; we have a life sciences sector plan, which recognises some of that and is trying to support those parts of the ecosystem that were so important during the pandemic. However, the urgency and the willingness to invest has been lost to an extent.

Q74 **Baroness Cass:** Can I stay with you, Martin? We have talked about stockpiling. We recognise that, although it is not what you would pick as your number one strategy, there are some circumstances in which it has to be a key strategy; pandemic preparedness is obviously one of those. In terms of pros and cons, clearly, there are some things that you have to stockpile but which will inevitably go out of date if they are, thankfully, not used, as well as other things that might have a longer shelf life and be critical. You want to have some mechanism for keeping the stockpiles

mobile. Can you talk a bit about the pros and cons, as well as how we can manage them better?

Dr Martin Turner: Stockpiling has a very important role to play but, considering that you do not know where the next pandemic is going to come from or what type of pathogen it will be—whether it will be bacterial, fungal, et cetera—you cannot stockpile for all eventualities. That is where we need a diverse and flexible manufacturing base that can either produce those products or, as we saw in the pandemic, pivot to producing them. That is what the UK needs to have in mind when it is building up its own capacity to deal with these things.

Mark Samuels: This is where manufacturing agility comes into play. In the pandemic, the AstraZeneca vaccine reached a manufacturing capacity ceiling. We did not have enough capacity—I should not speak for AZ, but I know it did not have the capacity to manufacture it. Wockhardt, which is one of our members based in Wales, did have manufacturing capacity, so it could just switch to vaccine manufacture. Alongside strengthening trade deals to shore up our supply of medicines from those manufactured overseas, there are benefits to having manufacturing in the UK.

Generic manufacturing is unusually agile because it is normal business to switch products, so that is helpful. We should also have an API strategy for the UK, full stop, but, even in the absence of one, if you have the manufacturing here, those base factories will often carry around a year's worth of ingredients on-site; that is a helpful tool as part of the pandemic planning.

David Watson: From a national security point of view, there will be a critical medicines list. There is a set of issues around how you manage that, but, if you take the HRT shortage as an example, a lot of the HRT presentations—in other words, the unique formulation—may not have been on a national critical medicines list. We went into a crisis driven by unplanned policy switches, which determined that patients should be on a particular type of medicine or should get a prescription for X number of months' supply. That was not anticipated, and industry was not involved in the discussions. You need a combination of different policies through the Department of Health to manage these things—including very strong collaboration with industry, because, ultimately, industry is going to be critical to solving these things.

Baroness Cass: The overall message, then, is that you want to minimise stockpiling as a strategy and prioritise agility. Is that fair?

David Watson: Yes.

Q75 **Lord Laming:** From the perspective of the large pharmaceutical companies, would they view the UK as extremely good for research, evaluation and innovation but not good for manufacturing, or would they have a more even-handed approach?

David Watson: That summarises the position. For many years, industry has seen the UK as good at research—we have discovered lots of new

medicines here, and we have great universities and talent—but the current sentiments about the UK are that it is a very tough country in which to run a business and that, in some cases, it is not entirely viable to invest in, unfortunately. We are good at some things, but we are not good at others.

Mark Samuels: If we could use the EU reset to ensure mutual recognition of the EU's and the UK's manufacturing, it would be a huge step to addressing that. In the last six years, our members have invested an estimated £4 billion in new and expanded manufacturing across the European Union; in contrast, in the UK, in the same period, they have expanded manufacturing by just over £50 million. If we had mutual recognition of one another's manufacturing as a result of the EU reset successfully negotiating it, we would be getting a much larger share of that £4 billion of investment in the UK.

Lord Laming: Is it right that a number of large pharmaceutical companies have decided not to proceed with plans to manufacture in this country, but to go elsewhere, probably in Europe?

Mark Samuels: Some of those have been well publicised, such as AstraZeneca. It is not alone because more than more than one of our members, which are generic manufacturers, have also had potential manufacturing investments of the same size and scale as the AstraZeneca Speke factory, £400 million, and have chosen to go elsewhere. If more priority and emphasis is put on UK manufacturing, I think there is potential for genuine investment to come into the UK, even in the short term.

Dr Martin Turner: Those large companies are well-known names. They get the headlines, but it is important to remember that 70% of medicines currently being developed around the world are being developed by smaller companies. The UK has some fantastic smaller companies and is in a global competition to keep them in the UK and to attract small companies from other countries to manufacture in the UK as well. We want an ecosystem of large, small and medium-sized companies.

Lord Laming: I have difficulty understanding the use of "development" and "manufacturing". Am I right in thinking that manufacturing is a separate process from development? Therefore, it is a comfort to think that there are so many small companies doing fantastic development work, but not a comfort to think that they are going elsewhere for their manufacturing.

Dr Martin Turner: I would say yes and no to your question of whether research and development and manufacturing are separate. You have to manufacture an experimental medicine in order to do clinical trials with it. Almost from the beginning of a discovery of a medicine, you are starting to think about how to manufacture that to the standards needed for it to be put into human beings. They very much run in parallel.

In the UK we have some fantastic companies, as I said, developing high-value, low-volume medicines. It is realistic to base all that manufacturing in the UK, as well as the research and development. Companies such as Autolus are doing that; it is manufacturing in Stevenage and it did its R&D in London. If you can attract and anchor that early-stage manufacturing, which is R&D manufacturing, in the UK, you are much more likely to have the commercial-stage manufacturing base in the UK as well, because you need the locality of the expertise.

Mark Samuels: I agree with Martin around the biotech and the more innovative ends. I just add that the very large-scale generic manufacturing has separate issues. Manufacturers that run high-volume manufacturing organisations are focused purely on where the best location is for manufacturing.

Lord Laming: The UK is not one of them at present.

Mark Samuels: The UK does a lot of manufacturing. We make about a quarter of all our medicines here in the UK, at least in generics, so we are not out of the game but we need to be more competitive.

Q76 **Lord Laming:** You have touched on this, but what do you think the Government could do to help that process of getting more manufacturing located in this country?

Mark Samuels: I have already touched on the on the EU reset. I would add that the Government have a *Life Sciences Sector Plan* that was announced mid-July. That explicitly stated that they wanted to make the UK a top destination for generic and biosimilar medicines, and indeed for novel medicines. There has been no action on that plan since it was published in July. We have asked the Government, at least for our area, which is the high-volume medicines used by the NHS, whether they could at the least have a task and finish group for generic and biosimilar medicines, but to no avail so far. We have had a four-month hiatus with no action from the Government on the sector plan for generic and biosimilar medicines in the UK.

David Watson: I agree. I think we have reached an odd and frustrating sort of block in the development of the sector. The industry is global and we are in a unique situation with China investing a lot very deliberately in research, not just making ingredients, but researching and discovering new medicines. You have all the US Administration's changes and trying to onshore manufacturing. We are sort of sitting in the middle of that and sitting slightly outside of Europe as well.

As Mark said, the sector plan is so important, but unfortunately at the moment, because of the concerns about the viability of the market for some companies—and that includes the cost and how much the country is willing to spend on medicines—that has created a major block in some of the decisions to invest here.

Lord Laming: Are you all travelling hopefully or are you feeling rather pessimistic?

David Watson: I think we are hopeful because the UK still does a lot of the fundamentals very well. This is a genuinely good place for the industry to operate and we say that honestly. But there are some challenges holding us back from being the sort of life science superpower that the Government would like the country to be.

Dr Martin Turner: It is ours to lose; that is how I would phrase it. We are world leading in research and development, and we have all the skills that we need to be able to manufacture. We just need to get the fiscal framework in place with other policies that will make sure that it is attractive to start, scale and stay in the UK, and attract global companies to base themselves here.

Q77 **Lord Mott:** Mark, your stats of £50 million against £4 billion should probably embarrass Ministers of all Governments over the last few years. What response do you get from Government Ministers when you talk about the need for action? I get the sense that, over the last few years, we have had lots of announcements, statements, speeches and action plans, but they do not appear to be moving the dial. When you talk to your members and companies, what are Government Ministers saying to them?

Mark Samuels: Our experience has been that Governments of all political persuasions and all parties have, for many years, been blind to recognising the opportunity not just for the UK's medicines resilience but for the UK's economic growth that generic and biosimilar medicines offer, despite the very high volume of manufacturing done here. I had hoped that, when the *Life Sciences Sector Plan* was published, it would change that because it was the first government life sciences strategy that talked about generic and biosimilar medicines—most of the medicines we all use if and when we are ill—but there has been no real action on that.

We are pretty frustrated and it seems like there are open goals where Governments have missed opportunities. I cannot, for commercial reasons, go into the very large-scale manufacturing investments that we have missed out on in recent years, but on of one of those, and there have been more than one, the UK started as the lead country. The global headquarters of the company in question was thinking UK first and then we lost it.

We need Ministers at a very senior level to respond to the chief executives of our members when they fly into the UK to engage with them. I will not name the company, but the chief executive of one of our companies flew into the UK and said, "I am here. I would like to engage with the Government". He got no response from the two Ministers he contacted. In contrast, he flew to another country and the Prime Minister came out to meet him. Guess which country got a very sizeable investment in new facilities? It is about recognition of both the critical role that generics play in our medicines resilience and the GDP and economic growth opportunities that are there.

Q78 **Lord Carter of Coles:** Can you give us any sense of who got the £4

billion? It is very good that a Prime Minister comes out, and obviously that affects things, but are there tax incentives? What is driving it within the European Union? Can you give some sense of who got most of that investment, without naming names?

Mark Samuels: It is relatively well spread across European Union countries. There is a cluster of generic manufacturing in eastern Europe and Hungary, but it is not just those countries. It is not just where the cost of employment is lower; it is also across other countries comparable to the UK. I would have to provide written details as I am going from memory but, when France supports the innovation that Martin was talking about, as it then goes into manufacturing, the French Government make sure that, where there is government support, that manufacturing is anchored in France. So it does better. Canada has a better balance in how much it supports domestic manufacturing, not just innovation. It does both. There are other comparable first-world countries which make sure they lock in the economic and GDP benefits into their home nation when they are supporting the essential research and innovation that takes place there.

Q79 **Lord Blencathra:** We are world leaders in innovation and inventing things, but we fail to follow through with manufacturing. It is a long and historical-cultural thing; we invented TVs and we do not make any. We invented the hovercraft. We invented the vertical take-off jet, and now the Americans are selling our own invention back to us. This could be a cultural thing among professors and scientists. I understand that—I hope this is correct—those who invented graphene in this country said, "Our job is only to invent it; we're not going to patent it", and the Chinese have more patents on the graphene our people invented because they thought it was too sordid to get into manufacturing this sort of stuff. That is my observation. You may disagree or not.

Mark Samuels: I agree.

Dr Martin Turner: I think it is getting better in academia. Academics are becoming more entrepreneurially minded.

Lord Blencathra: But not like in California, where kids invent something and then go into manufacturing a month later.

Dr Martin Turner: We are getting there. We just have to make sure that those entrepreneurs can also access the finance to grow their companies.

Mark Samuels: We need to do both. We need to innovate and support innovation here, and we need to be able to manufacture it here. The risk is that, if we support the innovation here without also anchoring the manufacturing here, and it gets manufactured overseas, we are actually supporting other countries' GDP.

Q80 **Baroness Wyld:** Could I bring you back to the supply chain? I think you have all touched on this, but Mr Samuels in particular started to talk about it. You will also have heard the first session. How effectively is information on shortages in stock shared across the supply chain?

Mark Samuels: Well, there is a lot of that. If manufacturers think there will be an issue, they normally notify the shortages team at the Department of Health and Social Care in two weeks. In hospital tenders, there is an eight-weekly rolling notification of stock levels. In secondary care contracts, manufacturers are required to carry eight weeks of buffer stock. All of those things happen.

In terms of culture, if I can give some positivity, there is a long-term positive impact of the pandemic, which Martin touched on before. We all worked on it together. I was part of that as well. There is a good cultural collaboration between NHS England, the shortages team in the Department of Health and Social Care and us and our members to address it. None of us wants shortages here in the UK, and there are processes in place to address it. The DHSC will look at whether there are other alternatives or a different formulation and try to address it through that route.

Could it be better? Yes. Is it bad? I would not say so. I will not go into it now, but the Royal Pharmaceutical Society did a really comprehensive report on shortages that goes into all of this in chapter and verse. All of us who were involved in that—pharmacy, community, manufacturers, the DHSC—have a supportive view of that report, if you want further details.

Baroness Wyld: Yes, that would be great. Before we come on to the challenges, which you touched on and which we must explore, you started off in an optimistic tone. Is that shared by your colleagues?

David Watson: The notification processes and the dialogue between teams and trade associations work. There are two levels that we are probably missing. I do not think we are particularly well set up to have dialogue about long-term, big clinical needs and NHS demand, anticipating what might happen with those and how industry should react. I am talking about things that might be coming in two years' time. We are a bit weak on that. Secondly, we know from talking to patient organisations that the patient's experience of information about medicines is not as good as it should be. That is another area that probably needs to be resolved.

Baroness Wyld: On your point about long-term needs, from your perspective, what might help with that forecasting?

David Watson: It ties into things such as horizon scanning. What types of treatments is the industry developing? What types of targets and priorities is the NHS identifying? What policy changes will it bring in to diagnose and treat in a different way patients who might not have been treated in the past? For things like that, you need a one-year or two-year horizon to have the proper planning in place for not just the medicines but the pathways and other partnership needs where industry needs to engage. Honestly, we do not do that as well as we should. In some cases, we do not do it at all. However, I think the department does identify short-term problems day to day with the sector.

Baroness Wyld: Why do we not do it as well as we can? Is it a cultural issue? Are we too busy with the day to day?

David Watson: It is because it is hard to do. It takes some thought and planning to see what those two-year or three-year issues might be. Everybody has their head down thinking about this month's problems or those two or three months ahead. Whether it is weight loss, ADHD or HRT, with a bit more forward planning, we could probably have walked into those with more of a joined-up plan.

Mark Samuels: Something that has not been well looked into but is a growing issue, and which I suspect may be one of the main causes of shortages in the coming couple of years, is trading algorithms. People in pharmacy procurement are increasingly using AI-driven algorithms for procurement, whereby they monitor the price of a medicine and, if it drops below the drug tariff price, they automatically cease to procure it. We are in the process of trying to get some data on that, but the mood music among my members and the anecdotal feedback is that this is increasingly a critical and perhaps the largest cause of shortages at the moment. I cannot say any more on that, because I do not really have any evidence on it. It is quite difficult to look into, but that would be worth exploring if this committee had the time.

Q81 **Lord Blencathra:** To pick up something that Dr Turner said when he was praising the book, I think the UK Vaccine Taskforce was led by Dame Kate Bingham. All of you and she did a brilliant job, but you hinted that the lessons had been lost. I read somewhere that, as soon as the pandemic was over, the Department of Health scrapped all the lessons of it, went back to reappointing the same useless officials and the same dead slow-and-stop overbureaucratic system. Is that a fair characterisation? Has the Department of Health and Social Care gone back to the original, pre-pandemic way of doing things?

Dr Martin Turner: There were some programmes and contracts cancelled with companies, much to their consternation, which suggested that some of the lessons had not been learned.

Q82 **The Chair:** Just a little bit about the regulatory organisations: do you have any comments on the role they play in the shortages in terms of either effectiveness, speed or anything else?

David Watson: Listening to the previous witnesses, I completely agree with what they have said. A properly resourced regulator that is able to look at licensing variations and do so quickly is enormously helpful. That has been a bit of a struggle over the last three years. It has got better, but there is still a case to improve it.

Q83 **The Chair:** Could you tell us a success story? Is there something where we have got it right—where the manufacturing has happened? One of the things I am trying to piece together is this. Our previous panel said that if you do the research here, because you have to make the drug, you very often stay here, yet my understanding was, as you described it, that we do a lot of research here but we do not then keep the development and

manufacturing. That was not quite what the previous panel said. I could see the rationale of what they said—that, having invested and got your staff and building, you stay here. Where am I going wrong in not being able to piece those two things together?

David Watson: On the previous panel was the CEO of Moderna, which is I suppose a case study. The Government had a policy to incentivise a particular type of manufacturer—a particular technology—to come into the UK, and because it is in vaccines, it has a slightly different commercial footprint because vaccines do not have to make payments in the way that other medicines make them back to the Department of Health. So the economics of it are different. If you look at other types of manufacturers and other products, those incentives are not in place.

The Chair: Moderna said that in the previous panel.

Q84 **Lord Carter of Coles:** Going back to generics, what percentage of generic manufacturers are owned by non-UK companies?

Mark Samuels: About a third are Indian-owned. I do not know in terms of the number of companies but I can tell you in terms of volume manufactured and then I can come back on company numbers, if that would be helpful. About a third of all generic medicines used by the NHS are made in India, about a third are made in the EU and about a quarter are made here in the UK. That is the finished products, not ingredients.

The Chair: But not with the ingredients.

Mark Samuels: No. If you look at the active pharmaceutical ingredients, it is broadly 50:50 between China and India, and if you look at the starting materials for those ingredients, it is largely China. The API difference is interesting because India had been previously highly reliant on China like everyone else. Its Government decided that they wanted to have some independent production, so they have successfully built up their API manufacturing in India to be much more self-reliant. Obviously it is a different scale country from the UK, but it shows that it is feasible.

Q85 **Lord Carter of Coles:** How did they do that? How do you create an API industry? Was there a government incentive?

Mark Samuels: Yes. Companies are Pavlovian: if it is cheaper, easier and more effective to make something in a country, that is where you will go.

Q86 **Lord Laming:** I go back to a point that you made about a sudden drop in the price of products. Is that caused by volume availability or is it caused by other factors that I have not understood?

Mark Samuels: It is because competition has got fiercer. One of the benefits of the system we have here in the UK is that there is fierce competition among generic manufacturers, and that drives down prices. The price of an antibiotic on average today is around 10% cheaper than it was five years ago, despite all the inflationary increases in the costs of

ingredients, shipping and so on. Sheer competition has been responsible for that.

Lord Laming: Does it not work in that the competition drives down the price and then they sell less or make less profit and so they have to put the prices up again?

Mark Samuels: Yes, that is right.

Lord Laming: Maybe this is naive, but why is it not recognised that stability is a very important thing in the provision of services?

Mark Samuels: One of the important issues is that we are in a global market so companies can put their price up, and indeed they often choose to do that and then that helps us get some more supply when there is a shortage. But the other dynamic in this is that a company might look at the UK and say, "Well, I've got a finite amount of stock and manufacturing worldwide; actually, I can get a better price for it in another country. It's just easier—I'll just allocate stock to the other country".

Q87 **Lord Blencathra:** How big a problem is this situation I read about, and how do we deal with it, whereby a company buys up an old pill that is out of patent and it is the only supplier, and the NHS has been getting it at a penny a pill, and then the company ups the price by 1,000%? Is that a big problem, and what can be done about it?

Mark Samuels: Thankfully it is a rare problem, and the Competition and Markets Authority quite rightly takes action in those cases, and we support its approach to that. What concerns me more is where you end up with a generic medicine and there is a sole supplier because the market is small or the price has reached a low point, and it is a complex molecule to manufacture—it is a complex generic so it is expensive to manufacture. That is what we would call an orphan generic situation. Those medicines can be very important medicines—the medicines to treat sudden death syndrome, for example, had this situation, which was as bad as it sounds. We are highly reliant on one manufacturer making a product for an unattractive market, and that is a shortage risk. It would be very helpful—I have said this openly to the DHSC—for us to have some government policy on orphan generics, because they are an important category. If you are that patient, you do not want to be reliant on one manufacturer that has a very unattractive market—

Lord Blencathra: It is called orphan generics.

Mark Samuels: Yes, that is our term for it. It is generic, complex to manufacture, and there is only one supplier.

The Chair: Before we go to the last question, in terms of supply and resilience, is there any other country that you look to and think that they have got their best practice right?

David Watson: As the previous witnesses said, every country is dealing with some of the same global issues—the challenges of the Red Sea, the Ukraine war and even tariff issues around China. The particular challenge that the UK has is the sort of fragility there is to the medicines market in some sectors, including funding in pharmacy, driven by the fact that we basically spend a lot less on medicines than other countries do. We spend about 9% of our health budget and the average in Europe is about 14%. As a function of that, there is just a lot less money to go around and, when things occur, they are probably more likely to turn into problems in the UK than they are elsewhere.

Q88 **The Chair:** On that cheery note, I will go to the last question, which is about our recommendations. During the discussions, you have given us some good ideas on what the recommendations could be but, David—I will start with you—what recommendations would you like us to put in our report to the Government?

David Watson: The key one at the moment is the ongoing discussion with the Government about what the UK should spend on medicines. That is tied into the UK-US trade deal, as well, which we are urgently waiting to be solved to give the industry some clarity going forward, and confidence and predictability about what it is like to operate here.

Beyond that, the level of partnership between industry and the Government is really important for horizon scanning and identifying problems with shortages. As part of that, we have to sort out some of the data that we have, which includes patients' access to information about these things. That still needs some further thought, because it is not as good as it should be.

Dr Martin Turner: I would say that we need to deliver on the life sciences sector plans, so that we have that flexible, agile, strong life sciences sector of small, medium and large companies in the UK. To deliver on that plan, we need cross-government collaboration, buy-in and investment.

As I have said, the UK has a fantastic opportunity, but it is a fragile situation and there is great international competition, so we need to be top of our game. The Chancellor must not raise business taxes further and should not increase business rates on facilities for R&D or manufacturing, which would be counterproductive. We need increased public investment through Innovate UK, the British Business Bank and the National Wealth Fund to really shore up our manufacturing capacity in the UK. We need to get R&D tax credits working right for knowledge-intensive companies and to increase access to private capital, primarily through reforming our pensions industry.

The Chair: That was a good shortlist—or longlist. Mark, I come to you next.

Mark Samuels: Mine may be a slightly shorter list. On David's point about medicine spending, if there is to be more medicine spending as a

result of the US trade deal, it must be for all medicines. It cannot be for just a select group of them. That must include generics, because the NHS runs on generics.

We need the UK Government to make mutual recognition of manufacturing between the EU and the UK a top negotiation priority. We need the UK Government to build on the positive, good work that they have done with India, but to really strengthen that trade relationship so that, if we were in another pandemic or a conflict situation, we would have a binding agreement for the supply of the medicines and ingredients that we rely on from India. We need the UK's medicine supply to be treated, like defence, as a national security issue. It should be on the national risk register and treated like that.

The final thing is on the life sciences sector plan. We need a task and finish group for generic and biosimilar medicines to start without any more delay to deliver the intention of the life sciences sector plans.

Q89 **Baroness Cass:** I am really sorry; my brain was ticking too slowly on the last thing that David said before the last question. Do you mind if we just go back to that, because it was quite important, though it may be me being thick? You said that we spend 9% of our health spend on medicines compared to 14% in Europe. Is that because our staff budget is relatively higher, because we have higher remuneration? What are the absolutes? It could be a good thing—not overmedicalising—but I am not sure what the implications are.

David Watson: The reason that it is 9% is that we value new medicines through this health technology or health economics model, which puts a lower threshold on people's lives than most other countries that use the same process do. That is the first part. We tend not to use innovative medicines quickly; it takes a few years to get them to the right population—it is often low and slow. On the more generic side of the market, we have very low prices. It is a combination of those things.

The Chair: Thank you all for coming to spend time with us today and for the information you have given. It has been very interesting and a good pairing with the other panel; it was good to hear the different perspectives. We will close our meeting now, and I thank you very much for your time.