Cynulliad Cenedlaethol Cymru
National Assembly for Wales

Cofnod y Trafodion
The Record of Proceedings

Y Pwyllgor Cyfrifon Cyhoeddus

The Public Accounts Committee

6/3/2017

Agenda'r Cyfarfod
Meeting Agenda

Trawsgrifiadau'r Pwyllgor
Committee Transcripts

Cynnwys
Contents

Aelodau'r pwyllgor yn bresennol
Committee members in attendance

Mohammad Asghar Bywgraffiad|Biography	Ceidwadwyr Cymreig Welsh Conservatives
Neil Hamilton Bywgraffiad|Biography	UKIP Cymru UKIP Wales
Mike Hedges Bywgraffiad|Biography	Llafur Labour
Neil McEvoy Bywgraffiad|Biography	Plaid Cymru The Party of Wales
Rhianon Passmore Bywgraffiad|Biography	Llafur Labour
Nick Ramsay Bywgraffiad|Biography	Ceidwadwyr Cymreig (Cadeirydd y Pwyllgor) Welsh Conservatives (Committee Chair)
Lee Waters Bywgraffiad|Biography	Llafur Labour

Eraill yn bresennol
Others in attendance

Alan Brace	Cyfarwyddwr Cyllid, Llywodraeth Cymru Director of Finance, Welsh Government
Andrew Evans	Prif Swyddog Fferyllol, Llywodraeth Cymru Chief Pharmaceutical Officer, Welsh Government
Dr Andrew Goodall	Cyfarwyddwr Cyffredinol Iechyd a Gwasanaethau Cymdeithasol Llywodraeth Cymru, a Phrif Weithredwr GIG Cymru Director General of Health and Social Services, Welsh Government, and NHS Chief Executive
Dave Thomas	Swyddfa Archwilio Cymru Wales Audit Office

Huw Vaughan-Thomas	Archwilydd Cyffredinol Cymru Auditor General for Wales
Yr Athro/Professor Jean White	Prif Swyddog Nyrsio, Llywodraeth Cymru Chief Nursing Officer, Welsh Government

Swyddogion Cynulliad Cenedlaethol Cymru yn bresennol
National Assembly for Wales officials in attendance

Claire Griffiths	Dirprwy Glerc Deputy Clerk
Meriel Singleton	Clerc Clerk
Katie Wyatt	Cynghorydd Cyfreithiol Legal Adviser

Dechreuodd y cyfarfod am 14:00.
The meeting began at 14:00.

Cyflwyniad, Ymddiheuriadau, Dirprwyon a Datgan Buddiannau
Introductions, Apologies, Substitutions and Declarations of Interest

[1] **Nick Ramsay**: Can I welcome Members to this afternoon's meeting of the Public Accounts Committee? Headsets are available in the room for translation and amplification. Please turn off any electronic devices. In an emergency, follow directions from the ushers. No apologies have been received. Do any Members wish to make any declarations of registerable interests? No. Okay.

Papurau i'w Nodi
Papers to Note

[2] **Nick Ramsay**: Item 2 on today's agenda is papers to note. First of all, can we agree the minutes from the meeting held on 27 February 2017? The second paper to note is the strategic approach of councils to income generation and charging—that is pack pages 5 to 18. We've received some additional information from the Welsh Government. Are we happy to agree

that? Yes. Excellent.

14:01

Rheoli Meddyginiaethau: Sesiwn Dystiolaeth gyda Llywodraeth Cymru
Medicines Management: Evidence Session with the Welsh Government

[3] **Nick Ramsay:** Item 3 on the agenda is medicines management, and an evidence session with the Welsh Government. Can I welcome our witnesses to this afternoon's meeting? Thank you for being with us today. There are a number of you, so I'll ask you to give your names and positions for our Record of Proceedings. It's probably best to start with Andrew.

[4] **Dr Goodall:** I'm Andrew Goodall and I'm the director general for Welsh Government health and social services. I'm the NHS Wales chief executive, and I have a blend of management and professional views for you today.

[5] **Mr Evans:** I'm Andrew Evans. I'm the Welsh Government's chief pharmaceutical officer.

[6] **Professor White:** Hello. Jean White, the chief nursing officer.

[7] **Mr Brace:** Alan Brace, director of finance.

[8] **Nick Ramsay:** Thank you. Clearly, there are a number of you, so if I'm moving things on at any point during the meeting, that's so that we can make progress with our questions. If I can kick off our questioning today, and on the issue of electronic prescribing, why has it taken so long to implement electronic prescribing in Wales?

[9] **Dr Goodall:** Okay, Chair, I'll start but I'll probably draw Andrew in, if that's okay, for his professional oversight. So, we've known that we can introduce a new prescribing system for Wales and, indeed, a range of health systems. There are examples elsewhere, but it's a very significant system change. It's not merely about putting in a local system and switching it on. It is a process that is as much about change of behaviour of professionals as it is a safety issue.

[10] We've tried to set up an approach over recent years where we've been layering the available systems in Wales. So, that starts on the one hand with primary care. So, we've had good success over recent years. We're now down

to two general practice systems in Wales, which, of course, drive the prescribing approach in primary care. There were previously a myriad of systems, and we actually facilitate that nationally on behalf of all the GP practices in Wales, which has been a change over recent years. We have needed to focus most recently on an upgrade to the hospital pharmacy system, which is connected to e-prescribing. We have taken approaches around discharge mechanisms, certainly around electronic discharges, for an approach. But it's very true that we need to move ahead with the e-prescribing system in Wales, and hopefully what we can do is move ahead now with a broad, countrywide implementation. Andrew may reflect on this himself. Typically, across the UK, there are still only a number of limited systems that are successfully in place, just because of the change that needs to happen. As I said earlier, it's not just an IT issue; it is relevant for the 22,000 whole-time equivalent nursing staff who will trained personally in what the new system would mean, which we're happy to respond to. But we're the only country that is suggesting a countrywide approach for a single system, and I think that is an advantage for us, because our information approach does allow us to do it once for Wales, but even a local implementation system, for example in a foundation trust, would probably take that organisation about 18 months to two years, just on a single issue. It's obviously more complicated.

[11] When I came into my own role, despite a history of talking about moving ahead with the system, I was concerned that we needed to find a way of moving on. So, back in November 2015, I'd asked the chief pharmaceutical officer, Roger Walker at that time, just to bring a paper through to the NHS Wales executive board so that we could get some agreement on moving forward. We've now got a project management infrastructure in place. We're expecting various documentation on proposals to come through. I would hope that, by April, we'll have a submission to Welsh Government. It should allow us to go to the national informatics board in June, and I hope that we shall be able to move into the procurement stage at that point. But I wouldn't like to understate the significance of the system given this will be operational in every ward and clinical area, in every hospital and set of services across the whole of Wales, and that is more the significance. But it may be helpful for Andrew to just reflect more professionally on your challenge, Chair.

[12] **Nick Ramsay**: Andrew Evans.

[13] **Mr Evans**: Yes, thank you. Not a great deal I can add; I think Andrew's

covered all the main areas. I think it's worth reflecting on the situation in other parts of the UK. So, there has been some progress in England around e-prescribing, but, even then, Lord Carter's report into operational productivity and efficiency within the NHS there talks about, perhaps, only 13 per cent of in-patient settings having access to e-prescribing, and only 4 per cent of out-patient settings. So, it's far from the case that e-prescribing is ubiquitously available across other parts of the NHS.

[14] I believe that's a product of the scale, the complexity and cost associated with doing this. This is a significant project. Nobody, to my knowledge, has proposed undertaking e-prescribing on the scale we're talking about—all our district general hospitals, all our wards, cancer centres, out-patient settings, in-patient settings. The complexity is significant, and it is right we take our time to consider doing that appropriately, and engage with all the professional groups who are likely to interact with an e-prescribing and medicines administration system. So, we often forget the medicines administration part, but, equally, that's critical, and engaging with nursing representatives, nursing staff who work on those wards to make sure that system suits their needs is something we must do and take time to do properly.

[15] Across NHS Wales, it's not fair to say we've not been looking very strongly at the medicines agenda—we have. We've looked at how IT can support medicines use in a number of ways. So, the roll-out of the medicines transcribing and e-discharge system—the so-called MTED system—is facilitating much prompter access to discharge information for people leaving hospital, going back to their GPs, and that's a really important thing to do and something the Auditor General picked out in his report as being something that was absolutely critical in making sure, in the transfers of care, we weren't getting breakdowns in that care.

[16] As Andrew said, we've also done a great deal of work with GP prescribing systems and, perhaps importantly, in hospitals we've made access to the Welsh GP record far more available now, so that it's available not only in emergency settings, but also in elective settings and to a wider range of professionals. That's improving the transfer of medicines information when people are going into hospitals and leaving them. So, we've made some progress, albeit there is work to do, around the prescribing of medicines administration agenda in our hospitals.

[17] **Nick Ramsay:** I'm going to interrupt you there, because Lee Waters is

champing a bit to come in. So, Lee Waters.

[18] **Lee Waters:** Can I just take you back a second? I was struck, in the auditor's report, that, in the last 10 years, there's been a 46 per cent increase in the number of items dispensed. I wonder if you could just, very briefly, tell us why that is.

[19] **Dr Goodall:** Andrew's best to give you a professional view.

[20] **Mr Evans:** Sure. Essentially, it's related to changes in clinical practice. So, the way in which we treat people's morbidity now perhaps lends us to use a far greater number of prescriptions than we would have previously. So, some of that is just down to the drive to treat people more aggressively, get control of their conditions, and, inevitably, that results in more prescriptions being issued. Some of it is about innovation, so the reality is there are now medicines available that treat conditions for which there would not have been medicines that would have treated them 10 years ago, and, inevitably, that leads to greater use, again. There is also some work in Wales and some evidence—and, again, this is picked out in the auditor general's report—that, in Wales, we've driven towards shorter prescription intervals. So, we've looked to drive down towards a 28-day prescribing interval, and that's right in our attempts to tackle waste. I think we need to be flexible around that. But, it does give the perception of there being a greater number of items in Wales than perhaps there might if we were using comparable prescribing intervals to other parts of the UK.

[21] **Lee Waters:** Do you think there is a link between the increased volume of prescriptions and the number of prescriptions that are given in error or not taken properly? The increasing rise of hospital admissions, which has gone up by 50 per cent—sorry, it hasn't gone up by 50 per cent. Up to 50 per cent of hospital admissions may involve a prescribing error. Do you think there's a link between those two—the system is struggling to deal with that volume?

[22] **Mr Evans:** I think what we know is that, as you increase the number of medicines somebody takes, you exponentially increase their risk of those medicines being given concomitantly, interacting with one another and therefore causing harm. There's good evidence from Scotland that looks at the incidence of harm in people taking two medicines together, five medicines together, 10 medicines together, and so on. So, that's an inevitable risk, I suspect.

[23] There is also an element that, as we give people medicines that cause side effects, we have a tendency to give them medicines to counteract those side effects as well. So, it may well be a problem, although I'm not sure there's any evidence to support a case that that is necessarily avoidable. Most of the harm that comes from medicines is through medicines being used therapeutically. It's just an unfortunate consequence of the way they're used.

[24] **Lee Waters:** Okay. Just going back to Dr Goodall's point about it being time to move ahead now with the e-systems, can you just help us to understand why it's taking so long? I appreciate that this is a very complex system, but this was first identified in 2007. The figures that I've seen estimate that it's going to be 2023 before the roll-out is anywhere near complete, and that's assuming it goes on track from here on in. So, can you tell us briefly why that's gone awry?

[25] **Dr Goodall:** Yes, I think part of it is trying to make some of the infrastructure fit for purpose. Some of it is recognising that it is effectively a change in behaviour programme at the professional level. So, you have to ensure that all members of staff, ranging from doctors to pharmacists through to nurses, all have to be individually part of the process in here. We know that if we were implementing it just within the local organisation it probably would represent one of their largest implementation programmes for an IT system and would take them 18 months to two years. We have to go through a procurement process for it. So, part of what I instigated, going back just over a year or so ago, had to be done in the context of us being very clear on our requirements and working it through—and it does look as though we're in a position to have the specification ready for the procurement in June at this stage—but also that we need to make sure that we implement it carefully.

[26] So, I think there is a danger of feeling that we're piloting these issues. This would absolutely be about an implementation stage, working through each of the organisations in Wales. That will require national expertise on the one hand, but it will also require local implementation boards to be in place. Other examples of large-scale change, like our 111 programme, for example, in itself is going to take probably a three-year period for us to work our way through just in terms of the available expertise. There is also a cost issue as well that, as we're trying to manoeuvre our way through the systems, we'll also have to find the £20 million to £30 million cost to

implement this. Of course, we will look to be prioritising that within the annual capital amount that's available for the NHS in Wales.

[27] **Lee Waters:** You mentioned earlier that nobody's talked about doing e-subscribing on the scale that we're talking about here. Given the difficulty that we've had to date, (a) is that sensible, and (b) how robust are the assumptions, given the evidence you've previously given us, both written and oral, about the delays in the hospital catering IT systems?

[28] **Dr Goodall:** Well, they're all of different scales, firstly.

[29] **Lee Waters:** And a lot of stuff going on, and you can't cope with much of it, it seems.

[30] **Dr Goodall:** Well, there is. There is a lot of ICT, but I think that's also why it's important for the e-prescribing system to be very much professionally vested. So, although there is ICT support, of course, available to make sure that it's actually the profession driving it on—and I think that's been the advantage of the experience around hospital pharmacy systems—it was certainly the experience in implementing the changes within the GP surgeries that it was owned, actually, by the GPs themselves. I just wonder, Andrew, whether it's worth making people aware of the groups that are in place to support this, like the clinical reference group with the pharmacists across Wales, just to demonstrate that it's professionally held. I think that they will look to drive this as their local and national process.

[31] **Mr Evans:** I think there's also a point around whether doing this at this scale is sensible. I think that's a fair question. To my mind, it's essential. So, it's a real strength that we have in Wales—the ability to use a single national infrastructure to make the system seamless. Were we to rush off and buy perhaps seven different systems covering seven different health boards, we know that we wouldn't be able to integrate that as effectively with our infrastructure to allow the sharing of records, to allow the sharing of the Welsh GP record, to integrate with the medicines transcribing and e-discharge system. So, we would actually lose some benefits in taking that approach, and we've seen that with the pharmacy systems in hospitals. Historically, they've been purchased at different times from different providers, and that's given us a real challenge in driving some of the efficiencies through understanding the different approaches being taken in our hospitals.

[32] **Lee Waters:** I accept the logic of that, and that was a rationale behind the approach you've taken on hospital catering, and that has fallen way behind. So, why, when you can't fix that, which is more modest than this, are you confident that you can do this on time?

[33] **Dr Goodall:** I believe that we have got skills and experience around these very large system implementations that change the system, ranging from the patient management system in Wales through to 111—just as two examples. We've just recently finished the roll-out of the pathology systems in Wales, and also radiology—so, from the clinical perspective. I think the catering one was just different in terms of needing to fight its case along the way, but the lack of the catering system in itself did not stop us from getting to the outcomes that were expected about the reduced wastage, for example, in catering. So, we were still able to demonstrate that within our system.

14:15

[34] I think the concept and principle of having an e-prescribing system for the whole of Wales, not least around its safety focus, irrespective of what it can help just in terms of the available data, I think the case is made. So, I will be hoping to just manoeuvre it through in these next few weeks and we'll be getting on, as I said, with the European procurement in June.

[35] **Lee Waters:** And just finally from me, 2023 remains your targeted roll-out, does it?

[36] **Dr Goodall:** I think from a date perspective, we need to have some flexibility on it, but I think it's really important to have a clear timetable in place for it at this stage. I think we always have to learn from the first phase and stage of the implementation, and that's been our experience elsewhere in Wales. If we are able to successfully roll it out in the first phase, and this will be after 2019, we would be very happy to revisit it to use the skill set as well, but I think it would be right to say that a three to four-year period for the size and scale of such a large system wouldn't be unusual; in fact, sometimes it would be much longer again.

[37] **Lee Waters:** So, we can't be confident in 2023.

[38] **Dr Goodall:** I think we can be confident about aiming for 2023. What I'd like to say is that if we achieve the successful roll-out on the first stages, we may look to revisit that timetable, but it would seem to be a reasonable

experience, based on what's happened elsewhere in the UK.

[39] **Nick Ramsay:** If you are going to miss that target ultimately, at what point do you think you'll be able to tell us that?

[40] **Dr Goodall:** It would be good to get to at least the procurement stage at the moment, which is through this year. Obviously, we'll be manoeuvring our way through the procurement through 2018-19. We'll know who the expected supplier is, and on the basis of our experience, we'll be looking to make progress on it. We were able to meet defined milestones, for example, around the radiology and the pathology systems over time, so they themselves showed that we can meet it, but I would have thought that it would be the through the procurement process through 2018-19 that we know what the difficulties are. What I wouldn't do is commit to suddenly trying to roll it out in seven health board areas, because we all want it to be in as quickly as possible to support patient care, but we don't want it to be implemented inappropriately. And as I said, the scale of this one, it's not a background IT project or in a discrete area; it cuts across the range of services and practice that's in place across Wales.

[41] **Nick Ramsay:** Rhianon Passmore.

[42] **Rhianon Passmore:** Thank you. You've mentioned some key dates in terms of 2007, the costs of the programmes and some of the major challenges that you actually face in rolling out this seismic agenda for change in terms of the NHS. So, could you just talk me through—? You've mentioned pathology, radiology and phase 1 work that you've just touched upon. What are the major steps along the way to be able to actively state, as you've said it's essential to do so, to implement this, and in terms of having those processes in place? Perhaps a question to the nursing side in terms of the local operational side, once we've got the infrastructure in, in terms of a cultural shift: what are the major steps for us to be able to get into that position of operation?

[43] **Dr Goodall:** A lot of time has been spent over this last 12 months with the various professional groups, but, as an example, we have needed to have, through the reference group in place, all of the pharmacists in Wales to agree the core specification, which has meant that they've had to pin down 397 requirements for the system in terms of what it can do. At the moment, it looks as though they've pretty much finished off that work and they are in line so, actually, the provisional target, subject to approval of the national

informatics board, will be to get it out for procurement. We will need to have a sense of who the suppliers are who are prepared to participate in this. We'll be looking, obviously, for the best value for money, but also the best quality approach within our respective systems in Wales, and we will need to manoeuvre that through. That in itself, because it's the OJEU process, obviously is going to take some time, and this is probably a system that's going to cost somewhere in the order of £20 million to £30 million, and we'll have to make sure that we deal with all of those issues appropriately.

[44] I think we need to identify it not as an IT programme; I think we actually have to identify it as a change programme for professional staff across Wales, and that might be a good way to just get reflections from Jean in terms of what that will mean for the front-line nurse, for example.

[45] **Professor White:** So, it might be useful to reflect on what they currently do because, obviously, the system is paper based. So, on a ward, you have your prescription charge, you take it to where the medicines storage is, you choose the drugs, you put them on a trolley and you take them to the bedside. So, that means that the individual nurses must have access to the electronic record through whatever portal, and that might be a hand-held tablet in future. They will still have to take the drugs from the cupboard to the bedside and know how to administer the drugs to the patient, but they will have to think about how they will access the information and then record that they have given the drug to the person. So, that means everybody involved in getting those, from how you'd have the pharmacist making sure that the stocks get to the ward or to vending machines, which I think will be the way for the future, to then how you record it when you get to the bedside. And as you heard Andrew say, there are 22 whole-time equivalent registered nurses—.

[46] **Dr Goodall:** Twenty-two thousand.

[47] **Professor White:** Sorry, did I say 100? [*Laughter*.] So, the answer is to have more nurses. There are 22,000 whole-time equivalent, registered nurses, but alongside them there's a lot of support staff that also take part in the administration of medicines and that's just in the hospital. When you think about what you're going to do when you're on the district, it gets more complicated. But part of this will be the knowing how to use the new hardware, as well as knowing what the software requires them to do. That will take a bit of time, I think.

[48] **Rhianon Passmore:** It will do. Thank you.

[49] **Nick Ramsay:** Neil Hamilton.

[50] **Neil Hamilton:** Can I just come in? Well, £20 million to £30 million is peanuts compared with the amount of money NHS England has lost on failed computer projects over the years. I find it difficult to understand why a project costing only £20 million to £30 million is going to take 10 to 15 years from start to finish to roll out.

[51] **Dr Goodall:** I think partly because of all the other competing demands on other systems that we want to buy in other ways. So, as I said earlier, just listing off, we've invested and implemented in patient-management systems in a consistent way across Wales, radiology systems and GP systems. So, the pharmacy setting and e-prescribing is the next avenue. It would be wrong to say that there aren't systems in place around pharmacies. They are supported and there is an infrastructure in place, but this is going for the next level of support around data and quality in terms of what's happening. I think we did need elements of infrastructure, though, to be in place. So, I think it was right that we've had to prioritise other aspects to make sure that we're in the best premise for this. As I said, as I came into my own role, it was to me quite clear that we needed to have a proper focus on this. I brought it through to the NHS board for that reason and have had the work in place over the last 12 months or so.

[52] **Neil Hamilton:** Do you think you're trying to integrate too many things into one project here?

[53] **Dr Goodall:** We have a lot of IT programmes going on, on a range of different fronts, in areas ranging from integrated community systems between health and social care right through to emergency department systems that we're looking to implement. I would hate to give the impression that there's not a lot happening. I think the benefit for us in Wales will be the overall aggregate of all of these systems, which will give us the basis for a very strong set of clinical information systems in Wales—most importantly, information systems that will support the transfer arrangements for patients who are accessing care in different organisations in Wales. One of our problems in the past has been individual systems just not talking to them and patients having to, for example, access specialist services.

[54] **Neil Hamilton:** I understand that.

[55] **Rhianon Passmore:** On that particular point, a huge issue has always been historically that they don't talk to each other, they don't integrate. How confident are you going to be, with that historical legacy of governmental non-integrated systems, and what we are going to be doing here in terms of this absolutely critical step forward in terms of prescribing and also cost-effectiveness? How certain are you that we're not going to be in that position in the future, in 2023 plus?

[56] **Dr Goodall:** Experience will tell us that there's a natural caution about the way in which ICT systems are approached, but I do think we have got some successes under our belt through a number of different ways. I do think that NHS Wales is in a better position to give confidence on the implementation of these systems from, say, 10 years ago. I think we've got good progress. I think the key to our experience at the moment has been these cross-organisational systems, where we've done it under the 'once for Wales' principle. Given that I've listed at least four off that are very significant changes, and that's before we even look at particular individual systems like the 111 system, I do think we've been able to demonstrate it. I would be cautious in the first phase because I simply want to demonstrate that, working properly and hard in one system, we're able to make sure that it does the business for the local organisation and for all of the outcomes that we're expecting. But as I said earlier, if we're successful, I've got no objection also to trying to bring together some of those timescales as well. But hopefully we'll be building up some of the professional experience in Wales during that time as well.

[57] **Nick Ramsay:** Mike Hedges.

[58] **Mike Hedges:** You were talking about the medical appraisal and revalidation system or, basically, hospital recording. I read in great detail, because I live in the AMBU area, the 'Trusted to Care' report. Tell me if I'm wrong, but it didn't seem to be about people not having an ICT system, it was about people not recording things. I have this fear that people seem to think an ICT system is the solution to all our problems. Making sure that people record things is surely the solution to a lot of our problems. Why can't we have a system, or why haven't we got a system—or you might say MARS would do it, in fact—where people can't take medicines out without recording where they're going? So, there's double-entry bookkeeping for medicines, as it were, so that every medicine that goes out has to be logged. At the end of a month, or every two months, it would balance. So, you've got

some sort of control. Why can't we have that? It's not high tech, but it does actually mean that you should know what medicines have gone out, and for it to balance, the people who've got the medicines should be being recorded as well. Not high tech, not clever, not a computer in sight, but it does actually get you control of what's going on. I mean, why can't we do something like that?

[59] **Dr Goodall**: Well, I would comment in a couple of ways, and perhaps Jean can give you a professional perspective, but I think it's certainly possible for us to make sure that we can put a greater emphasis on patients, to some extent, about their own responsibility for it. It's why you'll see, referred within the auditor general's report—the Wales Audit Office report—about areas like patient-owned medication, and the principle that what we're trying to do is to allow patients to have some overview of, actually, the drugs that they have themselves. I do think that it's possible to have some ways of automating these things. Obviously, one avenue that we've gone down in Wales—and, indeed, the rest of the NHS—is around the ability to put in automatic vending machines that track and give an audit trail on this range of issues. But, actually, there is a core safety issue with medicines, in general terms, about wanting to maintain their safe use, and that does require professional oversight in terms of the way that they are dispensed and issued at the ward level. Jean, you might be able to help Mr Hedges.

[60] **Professor White:** You're absolutely right: IT systems don't cure a problem. You have to have the right processes in place, first of all, and IT systems then help to improve the quality and safety of what you're doing. So, I absolutely agree with the point you're making. Under the MARS work that came out of the 'Trusted to Care' report, there were a number of requirements that the NHS had to work on, and are continuing to work on. So, some of that was to do with where drugs are stored. For example, we were trying to set, if you like, a gold standard for the storage facilities on each and every ward and unit, and from that, then, we were looking to see how the drugs were actually administered. So, the findings from 'Trusted to Care' were showing that some of the nurses and nursing assistants, rather than making sure the patient had swallowed the drugs, were putting the drugs in pots next to their lockers. That was one of the key findings that came out of it. So, the standards were revised and a quality checks toolkit was developed—which is this document here—for all of the health boards in Wales, and this is around practice. So, last year, we introduced a revised prescription chart, which makes it easier to record, making sure that the person who was supposed to have the drug actually took and swallowed the

drug, or had it administered at that time.

[61] So, the next phase of the MARS work, which is going to kick off in the spring of this year, is going to refresh and reconsider some of those things we put in place as a result of 'Trusted to Care'. So, the quality check tool, which is now used across NHS Wales is going to be refreshed, looking to see particularly how the new administration chart that was brought in last August—. Has it corrected some of those things that were found in 'Trusted to Care'? Because this is about practice, and there are lots of reasons why people were doing that, which we could go into if time allowed, but it's not the right way of delivering things. So, that work will be undertaken.

[62] In terms of the storage areas, as you heard Andrew say, we have got some methodology to do with making sure that we improve the way we store drugs on the wards, which isn't necessarily doing lots of estates changes to physically change rooms, and that is on the back of the vending machines work. So, the question you were getting at is: how do we know how the drugs are given? And it is about this system of recording. I hope I got that right.

[63] **Mike Hedges:** The point I was trying to make is: you know what drugs you've got there; if some of them go out, then you need to know where they've gone; and, at the end of the week, if you've given out 100 units, you should have 100 units having been administered to individual patients. That should balance. If that doesn't balance, then something has gone wrong in the system. And that's not about an ICT system; that's about a system and how people are working. I hate to be technical. I spent 30 years in the computer industry. The number of people who think that a computer system is the solution to their problem where it isn't always. It's a bit of help, but if what you're doing is fundamentally wrong, the computer system will not ensure that patients get their medicine; that's down to individuals.

[64] **Professor White:** I think I'm agreeing with you there.

[65] **Mike Hedges:** Okay. I'll stop at that piece of agreement. My other question is: we have some very expensive medicines in Wales, and a number of them end up going out of time. Why can't we have a central system for the very expensive medicines?

14:30

[66] I'm not asking it for the simple stuff but there are some very

expensive ones. It always reminds me of the way that organisations run, where every department has its own printer cartridges, which are drying out over a period of time, whereas if we'd actually held three centrally, you'd actually get better use of it. The same with some of these very expensive medicines: if you've got a very expensive medicine—. I think they ought to be held centrally, but I have a view—. I mean, I don't like the structure of the health boards in Wales, but that's for another time. But actually holding things centrally in terms of the very expensive ones and letting people pull them out of a central store, rather than every health board have them and some will run out of time, and, if you have to have them in every health board, actually letting people know that you've got one that is two weeks or within a month of going out of date—so, instead of it going out of date in north Wales, and Abertawe Bro Morgannwg University Local Health Board buying some new, you could actually move them between them.

[67] **Dr Goodall**: Chair, it's probably for Andrew to respond to that one.

[68] **Mr Evans**: I think that's an absolutely valid point.

[69] **Nick Ramsay:** There was quite a bit in that question, wasn't there?

[70] **Mr Evans:** I'll make a start, and if it's not quite the right answer then do stop me. I think, on the whole, most of our health board pharmacy departments will operate on the basic lean principle of 'just enough, just in time'. So, they won't have—particularly for these high-cost medicines—large stocks that aren't clearly identified for patients who will be in receipt of them. Of course, what we need to balance is not having a situation where we're presented with a risk of not having enough stock and a patient presents who needs that stock and then unduly has to wait for it. So, there is a balance, but I think, on the whole, people are very judicious in their use of the high-cost medicines, how they're stored, and ensuring they don't go out of date. There is some data I've seen related to NHS benchmarking, which looks at the stockholding of health boards within Wales and the NHS trusts in England. We, actually, in many of our health boards, carry rather a low level of stock. So, we have a low stockholding, which is a good thing in terms of efficiency and productivity.

[71] **Nick Ramsay:** Mike Hedges.

[72] **Mike Hedges:** The point I was trying to make, and obviously didn't make, is that, if you have things that are used infrequently, why has every

health board got to have one or two of them? Why can't you have five held centrally, and, when one is used up, you keep on topping up to five, in which case, you don't have the danger of them going out of date?

[73] **Mr Evans**: I think that's absolutely a sound principle. If we were to take the example of—and I'll use this as a rather extreme example—the sort of anti-toxins that you might use in rather extreme circumstances where you might have been bitten by a snake or a spider that's come in from outside the UK, then some hospitals will hold those products, but not all, but we'll know we can quickly transfer them from one hospital to another. We also work with the supply chain to ensure that, where wholesalers hold those stocks, they're able to distribute it to hospitals so that our hospitals don't hold it at all, and then they're able to apply exactly the scenario you're describing, not only on an all-Wales basis, but perhaps on a whole-UK basis or a more regional basis. So, I think, on the whole, people make good endeavours to best use and distribute medicines in a way that avoids waste.

[74] **Mike Hedges**: Yes, but the auditor general some time ago produced a report—I don't know if I can remember it now, but it was showing tens of millions of pounds of medicines that were out of date being got rid of.

[75] **Nick Ramsay**: The danger is, though, on the flip side of that, then, if there's a delay in getting, for instance, the anti-toxin medicine, you then get sick, because why wasn't it there at the appropriate time?

[76] **Mr Evans**: Absolutely. And that's why in that sort of area we seek assurances from, if it's hospitals holding it, those hospitals, or, as increasingly, if it's wholesalers, on their minimum delivery time from depot to hospital. So, they're strategically placed to minimise the risk that you're describing.

[77] **Nick Ramsay**: Lee Waters.

[78] **Lee Waters**: Thank you. Just a quick follow-up—Dr Goodall and Jean White both mentioned the automatic vending machines, which seem like a sensible innovation. Why is it that only 8 per cent of wards have one of these?

[79] **Dr Goodall**: Some of it is down to environment, because wards are going to have to be adapted for that. Often it becomes part of the local approach towards refurbishment. Sometimes it's down to affordability

locally. So, actually, from a Welsh Government perspective, we have put some funding into this just over recent years, so around £4 million, for example, has been allocated in order to help with the local roll-out. There are also some particular clinical arenas that are best suited for this, but you don't need to have it on every single ward in Wales. Our coverage at the moment, Andrew—.

[80] **Mr Evans:** Around 25 per cent. So, in the last two years, since the field work was undertaken by the auditor general, we've invested over £2 million centrally in increasing the availability of automated ward vending cabinets. We now estimate, from some work we've just done with our health boards, that the coverage is around 25 per cent of wards. Not all wards will want it; it won't suit their working practices. But we're seeing, particularly in some health boards—in Aneurin Bevan and Betsi Cadwaladr health boards in particular—their working practices are really evolving to use automated ward cabinets, and their coverage is perhaps higher than that 25 per cent.

[81] **Lee Waters:** Do you have a figure in mind, where it would be suitable, that you're working towards?

[82] **Mr Evans:** I think that's very difficult to predict. It really does depend on the particular approach on individual wards. So, if we're using patients' own medicines, which I think is something that we should be driving towards—the patients who can use their own medicines on a ward bring them in with them and use them themselves whilst they're in-patients—then automated ward vending isn't necessarily the solution for those wards. So, without looking at the detailed practices across all wards, it's hard to say. I've recently written to all chief pharmacists in Wales, asking them what their intentions are around automated ward vending, and taken some feedback on what they've got at the moment and their future intentions. So, I think that's something that might become clear over the next year or so.

[83] **Lee Waters:** Shouldn't there be something a little bit more analytical, robust, given the clear clinical benefits from having these machines, of knowing what the optimum level would be for maximum efficiency?

[84] **Dr Goodall:** I would say, other than trying to balance different initiatives that give you different outcomes. So, the focus that we've had over recent years about the patient-owned medication coming in was to stop a system where, even if you had just had prescribed your latest 28 days, but were subject to becoming a hospital admission, they would be immediately

discarded and the hospital would effectively start from scratch. So, I guess, in the pursuit of how we manage some of the costs within medicines management, and certainly to avoid the wastage, over the last eight or nine years or so—and it was the practice in previous health boards that I was responsible for—we did roll out that kind of patient-owned medication. So, I think we just have to look at the balance between that technology and make sure that we don't lose the benefits that we proved there at the same time.

[85] **Lee Waters:** Sure. I'm not entirely sure that was the point I was trying to make. The point I thought I was trying to make is that, if these have a clear clinical benefit, having automatic machines, should there not be some kind of robust assessment that says that they would be a benefit in x per cent of wards, so that you could work towards that?

[86] **Dr Goodall:** Sorry. I misunderstood your point, yes.

[87] **Mr Evans:** I think they have a clear clinical benefit when they're used appropriately on the wards where automated ward vending suits the way they work. So, I guess that's the challenge within what you're saying. If it were the case that medicines were used on every ward in exactly the same way, then it would be possible to drive towards a particular figure.

[88] **Lee Waters:** I accept that, but are you going to be making an assessment of how many of those wards exist, working towards giving them the equipment they need?

[89] **Dr Goodall:** We'll do an evaluation, based on the prompt of your question today, that gives a feel for how many at this stage, just so that we know what the percentages could look like. We'll probably clarify the tensions in the system at the same time, but we'll see whether we can give you a steer on the back of the evaluations that we've been doing.

[90] **Lee Waters:** Thank you.

[91] **Nick Ramsay:** I'm mindful that we are questioning you very heavily on hospitals and ward prescribing, but there is, of course, an issue as well with GP prescribing, and in that situation you're looking at the role of pharmacies as well, so—.

[92] **Dr Goodall:** Yes, indeed.

[93] **Nick Ramsay:** I know that you're aware of that. If Members could be aware of that as well during your line of questioning. This isn't all just about hospitals, is it, Dr Goodall?

[94] **Dr Goodall:** Well, shall I respond to that anyway, just to show—? We obviously have to recognise that the majority of the spend is occurring in our GP practices across Wales. It's really important that we understand the variation in place. Obviously, the drivers remain the same: it's a focus on making sure that there is the right use and outcome for patients, and that we can make sure that we're able to discharge the quality measures in place as well. GPs, however, irrespective of their own experience, do take different approaches to how they want to have support in place. So, we, over time, have seen particularly large practices actually employ their own pharmacists, and actually be part of the multidisciplinary team, but, over recent times, we've seen much more progress where health boards have actually used some of their own health board pharmacists and they've gone in to actually help out with medicines reviews or practices or different choices by different GPs within those arenas. Most recently, Chair, we've actually used our approach to clusters across Wales—so, the breaking up of Wales into these 64 general areas—and have seen a real requirement and request from GPs for more support on the pharmacy and prescribing side. So, just as an example, over the last 12 months or so, although we have put some additional pairs of hands in and we've used some of the central funding for this, we've seen now up to 100 pharmacists who are actually employed as extra pairs of hands within the cluster models. That means that they can give general support based on local advice and analysis of relevant areas, but also give advice around patient care and treatment as well, and—

[95] **Nick Ramsay:** Because there have been some issues recently—well, up until this point—where pharmacies have not had that access to medical records to the extent that they would need, and they've been relying too much on word of mouth from the patients themselves, rather than access to the medical records. Would I be right in saying that?

[96] **Mr Evans:** I think there's a distinction between the pharmacists working directly in general practice, and community pharmacists who are also making a contribution to care. So, in the scenario we're describing, we're now talking in excess of 100 pharmacists working regularly—that is, daily—in GP practices, much in the way a nurse might, or physiotherapists, increasingly, with full access to the record as part of the practice team. That is slightly different to community pharmacists who, as you say, don't yet

have full access to the Welsh GP record, although that is in hand and I'm working very closely with the medical directorate, the NHS Wales informatics service, to put that in place over the next few months.

[97] **Nick Ramsay:** Good. Lots of interest spurred now—a number of supplementaries, before I bring in Neil McEvoy. Was it on this point, Neil?

[98] **Neil McEvoy:** It was on medicines management.

[99] **Nick Ramsay:** I'll bring you in shortly, first of all I want to bring Rhianon in.

[100] **Rhianon Passmore:** Very briefly—I don't want to go back. So, in terms of the clarification report, that's welcome around automated dispensing, and it would just be, really, a further comment in terms of what is driving that. It seems to me, from what's been said, that we are waiting for health boards to come to you to say that they're ready for this. I'm just wanting a little bit more clarification that this is being driven centrally in terms of—. It's either a good idea or it's not a good idea, and, if it's a good idea for one health board, it's surely a good idea for another.

[101] **Dr Goodall:** I think we endorse it—

[102] **Rhianon Passmore:** I don't want to go back too much.

[103] **Dr Goodall:** We endorse it in the right circumstances, and I agree we can help to just clarify some of the evaluation criteria for it. But I first and foremost see it as within the gift of health boards in terms of the improvements that they can bring into their local areas. The fact that we've been able to find central funding to enable some of that is a factor that's probably allowed us to make some speedier progress, but, you know, if I am the health board chief executive, and a nurse director feels this is an appropriate mechanism, alongside the chief pharmacists in the organisation, then I think it's actually well within your gift to set up your own implementation programme and, actually, to show the case that it makes to the board.

[104] **Rhianon Passmore:** Okay, thank you.

[105] **Nick Ramsay:** Mike Hedges, briefly.

[106] **Mike Hedges**: Very briefly. We all saw the picture in the auditor general's report of a patient from Cwm Taf who had a table full of medicines that obviously hadn't been used. I've been asked by some of my constituents to raise this at the appropriate stage—this is probably it—that it's almost impossible, they tell me, to get something off a repeat prescription. You're on a repeat prescription, you get your seven or eight items, you don't need one of two of them, but it's almost impossible to stop them coming—they keep on coming and they fill up your cupboard. Are you aware of that, and have you got any suggestions on what can be done to stop that happening?

[107] **Dr Goodall**: Well, Chair, there are different mechanisms to try and do it. So, we would need to understand some of the reasons for not using the repeat prescriptions in the first place. There are regular medicine reviews in place, and certainly the evidence tells us that the public, patients—even, indeed, ourselves around the table—don't always comply with the prescribing regime that we've been given. We kind of think that sometimes we are finding ourselves improving and don't follow things through. But we have to make it easier for people. The medicine reviews established by GP practices to go through an annual process and talk to patients is meant to be one of those. Certainly, as we extend the range of access through My Health Online—just as one avenue, every patient can register with it now through our GP systems. We've currently got about 250,000 of the Welsh population who have registered, and that can allow them to change their regime of repeat prescriptions by choice through that mechanism. I'm not saying that's the only answer, but that is one way of dealing with this. But a professional perspective, Andrew—.

[108] **Mr Evans**: I think it's fair to say that the situation you describe is one that's been described to me by others. I think what we need to recognise is that repeat prescribing, whilst it seems a relatively straightforward process, can be rather complex. I'd consider it to be a tripartite thing: so, there's the patient, there's the pharmacy, and there's the prescriber, and they all have responsibilities within that to make sure repeat prescribing is done effectively. It certainly needs to be far easier for patients to have a conversation that says they no longer want to use their medicine, and the work in Cwm Taf is a really good example of where they're promoting this concept of telling a professional if you can't take your medicine or if you won't take your medicine and having the opportunity to have that reviewed.

14:45

[109] There are some examples across the UK of trying to take greater control of repeat prescribing to prevent the situation you describe. Online ordering is one example of that and My Health Online, I think, provides a good opportunity to be much clearer, when a patient is ordering medicines, about what it is they want and therefore what should be translated into the prescription and supplied by the pharmacies.

[110] But there are other schemes that have been implemented in clinical commissioning groups in England looking at centralised ordering points for ordering your repeat medication. So, rather than phoning your GP practice, you might phone a single telephone number that covers a range of GP practices where the intervention or the contribution of staff there is to help you understand what it is you want to order and get your order correct. Whereas in a GP practice it might be that that is one of a number of things that the person you speak to within the practice is responsible for. So, the quality of that interaction might not be quite so good. In reality, I think, we're not sure that the evidence supports which of those interventions is absolutely the most effective. We are working through something called the prudent prescribing group to consider various models for repeat prescribing systems, and once we have a clearer sense of where the evidence lies in that, we'll be working with health boards to see them implemented to try and eradicate the problem you describe.

[111] **Nick Ramsay**: I want to move things on now, because we do have limited time. Neil McEvoy.

[112] **Neil McEvoy**: I just wondered whether you think medicines management should have a higher profile within NHS bodies.

[113] **Dr Goodall**: I think it does have a high profile. In my experience, it always has done over the years, and I think it has to have a high profile for reasons of safety, quality and finance. It would be true to say that the 'Trusted to Care' review and its focus around, for example, medication storage, has made sure that, from a professional perspective, we really do need to understand the safety and control issues around all of that. I think in the financial environment that public services are working in, actually, it's really important to make sure it's very high profile in terms of recognising the level of spend that we have in Wales. We're spending £850 million on prescribing, and any benefits that we can track through there will have an impact in terms of the ability to develop and respond to other services. So, my personal judgment is that it's a view.

[114] I've also wanted to make sure that the medicines management review that's been done by the Wales Audit Office has got a profile, because we've drawn it into our national efficiency group work and it will be a particular area where we look to to set out other expectations that are driven by the recommendations that we received here. But it certainly needs to be a clear component of health boards' local responses and in their three-year plans, as well.

[115] **Neil McEvoy**: The auditor general said that he felt that it needed a higher profile. Does anybody feel that or do you think it's right where it's at at the minute?

[116] **Dr Goodall**: Personally, I feel that with a combination of the money and 'Trusted to Care', it's been the highest I've ever known in the last two years or so, but certainly, it needs to be maintained at this kind of level—if I was answering generally. And it's important to make sure that the profile is not just around the table here as the Public Accounts Committee, but it absolutely needs to be where boards are putting their time and attention as well.

[117] **Neil McEvoy**: Do you have any idea, in terms of a ball-park figure, how much is wasted in terms of prescribed medicines?

[118] **Dr Goodall**: Andrew.

[119] **Mr Evans**: It's an emotive subject, wasted medicines. There isn't a specific figure that I can give you for Wales. I'd draw your attention to some work that the University of York's health economics consortium and the University of London undertook in relation to evaluating the scale and cost of medicines waste back in 2010. That places the figure at about £1 of waste for every £25 in medicines spend, so around 4 per cent. They also make the point very clearly that, of that, less than 50 per cent is likely to be economically recoverable. So, we may be looking at less than 2 per cent of the medicines spend actually being a figure that can be recovered, and even then, that would have a cost to try to recover it. So, there are no robust estimates, to my knowledge, in Wales. I've got no reason to believe that waste is any higher in Wales than it is anywhere else in the UK.

[120] **Neil McEvoy**: You mentioned a figure earlier and I missed it. How much is spent on—?

[121] **Dr Goodall**: It's about £850 million on medicines.

[122] **Neil McEvoy**: It's £850 million.

[123] **Dr Goodall**: Over £800 million.

[124] **Neil McEvoy**: Okay. So, obviously, even if you had a 1 per cent saving, then that would be significant.

[125] **Dr Goodall**: We accept seriously the challenge on waste. We have a series of actions and interventions in place to mitigate it. We need to work with patients in a different way on it, as well as with organisations.

[126] **Neil McEvoy**: If you speak to any delivery driver of medicines, they're always talking about the amount of drugs they have to throw away, which are not actually touched—they're in their boxes. Isn't there a way of securing those drugs and using them, instead of having to throw them away?

[127] **Dr Goodall**: We spend a lot of our system—and, again, going back to 'Trusted to Care'—to demonstrate that we've got good safety arrangements in place that make sure that drugs are under proper temperature control and that they can't just be released—that they're inaccessible and that they are locked away and stored properly. So, to allow a mechanism where that would change would be a concern, but it's probably worth just giving an overview of the UK approach to the safety of medicines.

[128] **Mr Evans**: Absolutely. So, the UK-wide regulator, the Medicines and Healthcare Products Regulatory Agency, as well as professional bodies across the UK, are very much against the idea of reusing or redistributing medicines. Essentially, it's a public health issue. So, once a medicine has left the healthcare system, we can't guarantee its safety, its efficacy or its quality.

[129] **Neil McEvoy**: If they'd been nowhere but the van, then I don't see the issue.

[130] **Mr Evans**: There's a point at when it leaves the healthcare system. I think there are very few things that will go into the van and be returned without having been passed to a patient, and our concern is when it leaves the controlled environment—that's the problem.

[131] **Neil McEvoy**: Yes, I understand that, if they've been given to patients, clearly, but what I'm told is that, anecdotally, a lot of things are thrown away without reaching the patient, and you don't know that because you've done no analysis in Wales.

[132] **Mr Evans**: Having not undertaken an analysis doesn't mean we don't have a sense of the scale of medicines waste.

[133] **Neil McEvoy**: No, no, but you don't know. From my perspective, we were on two different buses then. What I was talking about was the drugs that don't reach the patient and are thrown away. You didn't seem to appreciate that. I want to know how often that happens and nobody can tell me, because you don't know in Wales.

[134] **Nick Ramsay**: I think you appreciate there's a problem there, but I think what Neil McEvoy is asking is how successful is the quantifying of that problem.

[135] **Neil McEvoy**: In Wales.

[136] **Dr Goodall**: It's difficult to follow the precise example through. We have a sense of the scale of medicines management. We have lots of things going on. I don't know if that's a very specific example that's been given that we would need to understand, just to—. I'm not recognising the example, I guess is what I'm saying.

[137] **Neil McEvoy**: All right, I'll be specific. Boots delivery drivers throw out a lot of medicine every single week before it reaches the patient. People flag that up speaking in pubs about the problems that they think could be ameliorated by saving money and not doing that. That's the issue I'm raising, really. I think it should be taken seriously and there should be some analysis of how often that happens.

[138] **Mr Evans**: I think we need to understand why that's happening. That's a scenario I wouldn't recognise as being a universally recognised position across Wales. I think it's disappointing if that's happening, for a number of reasons.

[139] **Neil McEvoy**: Okay, you don't know, because there is no analysis of what's happening, is there?

[140] **Nick Ramsay**: I think to be fair to our witnesses, probably the NHS is big enough without blaming you for Boots's procedures as well.

[141] **Neil McEvoy**: That's just one example. But if that's happening there, then what I'm saying is surely this needs to be looked at. You're telling me that you've not looked at it in a Welsh context.

[142] **Dr Goodall**: As a commercial organisation, Boots have their own access to drugs and they obviously sell them and prescribe. The fact that we spend a level of money through a prescription process isn't the same as Boots's access to the commercial availability of drugs. So, I think their delivery mechanisms are an issue for them. We're probably looking a little bit surprised; we probably just need to understand the example outside of here.

[143] **Neil McEvoy**: Well, they're prescribed drugs, aren't they, and those prescriptions are wasted, essentially.

[144] **Mr Evans**: The greatest waste—and this is the need to really understand the issue you're describing—is that those medicines were prescribed for people and they didn't get to those individuals. Therefore, the health gains that are lost in medicines that we assume are appropriate and indicated for those individuals are not getting to them. We need to understand perhaps why people are not using medicines in that way, and that's resulting in that waste. I think focusing on the isolated element of what gets thrown in the bin is perhaps—

[145] **Neil McEvoy**: Okay, we're going down a—. I did want to touch on—. No, I'll leave it, Chair.

[146] **Nick Ramsay**: Mohammad Asghar.

[147] **Mohammad Asghar**: Thank you very much, Chair. Thank you very much, Andrew and all the team here. I know the NHS is under a hell of a lot of pressure; we know that. I go to hospital with either my clients, constituents or even family members. There are wonderful people there who are working, but, sometimes, we hear that their hands are tied behind their backs—one hand tied behind their back on certain areas. First, I will tell you about one of my constituents who had 14 injections in his eye. Each injection costs in Wales £700, whereas he could be easily treated with laser for less than £5,000, which is not available here; it's available in England. Andrew, you're doing a wonderful job, don't get me wrong, but it's such a massive

department. Another one: only last Friday, I was in one of the local pharmacies, Pill pharmacy, and that is wonderful in one of the most deprived areas in Newport. They were using the most advanced system of dispensing medicine through robots, which I saw for the first time. I wish that could be used in the hospital where the patient can spend hours and hours waiting once they're discharged from the hospital to get the medicine from the hospital. Have you ever considered those areas?

[148] **Dr Goodall:** Actually, we have a significant number of robots available across Wales and in different places. So, many of the hospitals are purchasing them at the moment.

[149] **Mr Evans:** Absolutely. We have, for some time, had robots in all our hospital pharmacy departments across Wales. We have complete coverage, and in the last 12 months we've invested in some new robots to replace some of the older technology, so that it's more efficient. I believe we've either put wholly new or replacement robots in eight hospitals across Wales, and three upgrades to improve the efficiency of existing robots. So, that's an area that I'm very interested in. I think we do it well in hospitals. I'm very interested in your description of it happening in a community pharmacy, because I think there's a real benefit to it there as well.

[150] **Mohammad Ashgar:** Further to Neil's question, how are unused and wasted medicines disposed of by your department, and are the procedures for disposal adequate and cost-effective? If not, what do the witnesses believe should be carried out in order to improve the system in the NHS? That would save you quite a lot of money.

[151] **Dr Goodall:** I'll go straight to Andrew, Chair.

[152] **Mr Evans:** Waste medicines—so, medicines that are returned from patients or clinical settings, or medicines that go out of date—are disposed of through incineration. It is likely that a small amount of medicine, or a proportion of medicine, is put into domestic waste and down drains by individuals. We know that people don't necessarily take their medicines back to pharmacies in the way they should, that would allow them to be disposed of safely. Our arrangements for disposal of medicines will be through contracts that are appropriately tendered, so we will have arrangements for disposing medicines that will be undertaken by a third party. I won't be able to talk with any great authority around that process, but I assure you that there is a very robust process put in place by the NHS Wales shared services

partnership that looks at tendering and procuring disposal for medicine services. But I think it's—

[153] **Nick Ramsay:** I'll stop you there. We've spent quite a bit of time on the disposal aspect of the medicines. Going back to the actual prescribing, I noticed that there are certain areas of Wales, like Powys, for instance, where antibiotics seem to have a lower prescribing rate than elsewhere. Without going into the whys and wherefores of that, have you got procedures in place to see that best practice in parts of Wales is being disseminated to other areas as rapidly as possible? Because that will have a huge effect on budgets, won't it?

[154] **Dr Goodall:** Yes. Naturally, the chief pharmacists group itself is the main focus for this. Andrew.

[155] **Mr Evans:** Yes, absolutely so. The chief pharmacists group meet monthly, or bimonthly, and they take the opportunity to share best practice. We also have an organisation that will have been referred to in the auditor general's report, called the All-Wales Therapeutics and Toxicology Centre, who host something called the Wales analytical prescribing support unit. Their role is to provide comparative analysis of performance between health boards and identify opportunities for them to share best practice. So, in June of last year, there was an all-Wales event where health boards were encouraged to come together and share their best practice across a range of prescribing topics. That was very successful and will be repeated again this year. We also have audits and a range of other activities that allow people to reflect on their practice and that of their neighbouring health boards.

[156] **Nick Ramsay:** Oscar very briefly, then Rhianon very briefly, and we'll move on.

[157] **Mohammad Ashgar:** Just in terms of being head of the NHS and medicine—. With this Brexit from Europe, is the medicine going to cost a little bit extra in due course when you're going to put your plans before 2019 or something—or 2023? So, basically, your medicine costing is prudent on that line, or you haven't thought about that yet?

15:00

[158] **Dr Goodall:** We know that, obviously, some of the pharmaceutical environment will, inevitably, be affected, not least around regulation, for

example. From a local service perspective, I think we can continue to focus on our current actions and interventions, and push things forward. Obviously, we'll be looking to continue to broker commercial arrangements and contracts to be in place, and to make sure that we are able to negotiate. Having said that, there are times when that's necessary now, and Wales is actually able to have an individual negotiation, for proper reasons, in the Welsh context. But the Brexit assessment, and the implications around Europe, will need to be worked through for the NHS more generally, on a range of areas. But it will include some of the medicines—

[159] **Nick Ramsay:** That's absolutely fine; I don't want to go off on a huge Brexit tangent, in the middle of discussing disposing prescription medicines. [*Laughter.*] Rhianon Passmore, briefly.

[160] **Rhianon Passmore:** Thank you. And, briefly, in regard to the all-Wales approach that, I believe, the efficiency, healthcare value and improvement group is driving through around cost implications—how, in that regard, are NHS bodies and local health boards going to be held to account?

[161] **Dr Goodall:** We'll keep it through a professional route on the one hand, but it's really important, because of the scale of the investment going on, that we do look at this, particularly as an efficiency and value issue. Alan, maybe it's worth just describing some of our initiatives.

[162] **Mr Brace:** The efficiency board is, basically, a joint board between Welsh Government and the NHS, chaired by Dr Goodall. And, in summary, we've probably got two approaches. One, I guess, is what we would call technical efficiency, which is how we cut our costs—so how we get more for our current investment, and that would be, I guess, the normal, traditional approach of the NHS. It doesn't tell you a lot about effectiveness, so the other strand of work is, I guess, what we are calling allocated value. So, how, in an integrated healthcare system, with a population health focus, can you actually use resources to drive the best outcome for people, based on need [correction: identified needs]?

[163] On the technical efficiency side, the NHS has produced, developed, and we've supported, a framework that, basically, looks at two areas. One is that traditional, sort of, how we take costs out of the system; the other area is how we contain the growth in cost. And they're doing that over service area—planned care, unscheduled care, community, primary care—and also doing it over, I guess, the functional split of spend, be it in workforce, be it

in non-pay [correction: non-pay expenditure], or be it in facilities. So, they've developed the framework, they've populated that with what the opportunities are for improvement, so that, I guess, gives us a bit of information about the benchmark opportunities for us to do better. They've all shared their current plans, and populated that, so we can see the variation across Wales.

[164] **Rhianon Passmore:** So, when you say they've all shared their current plans, you're talking about health boards?

[165] **Mr Brace:** And trusts.

[166] **Rhianon Passmore:** And trusts.

[167] **Mr Brace:** Yes, across that framework. That is being considered by finance directors, chief execs, and has come back through the efficiency board. That's now being used to inform plans. So, the expectation is all of the plans that are now coming in for approval have got a fairly consistent approach that identifies the opportunity for improvement, and where they are against some of those measures. And what we will do then is, through the plan monitoring mechanism, our normal performance monitoring, we will now see how those opportunities are being pursued, but, more importantly, how they're sharing those opportunities with each other. And that's starting to recognise that there may be opportunities to take advantage of other all-Wales groups, be it professional, be it clinical, to drive some of this change a little bit quicker.

[168] On the allocated side, which I think is probably more of a unique opportunity in Wales, one of the key developments that we've supported is an agreement, which has now been signed by LHBs, with an organisation called ICHOM, which is the International Consortium for Health Outcomes Measurement. So, this is a set of internationally validated outcome measures. The boards are in the process of implementing that; we are in the process of tracking resources to some of those outcomes. And because it's an international organisation, it gives us the opportunity to benchmark, on a much wider scale, in terms of how we were using resources to drive better outcomes for the people of Wales, based on internationally validated measures.

[169] **Rhianon Passmore:** Okay. So, Chair, to interrupt there, basically, you're talking about your normal performance indicators, as to how you're going to

be holding trusts and boards to account on this matter?

[170] **Mr Brace**: Yes. On the technical side, they'll come through plans. Once those plans are approved, we will then use our normal mechanisms, and we'll use the efficiency board. The finance directors will monitor it monthly, so will chief execs, and we will do it through our joint executive performance monitoring as well.

[171] **Dr Goodall**: What medicines management gives us is a chance, I think, to look at spend but also make sure that we can track quality as well. Actually, that's quite an important focus for us.

[172] **Nick Ramsay**: That's fine. I want to move on now to the medicines approval process and Neil Hamilton.

[173] **Neil Hamilton**: There's a well-defined process for appraising medicines in Wales and deciding whether the NHS is going to use them, on grounds of cost effectiveness and so on, involving NICE and the all-Wales medicines strategy group. The auditor general's report identified three cases where that system was bypassed. I wonder if you could set out for us the circumstances in which such a decision comes to be made.

[174] **Dr Goodall**: I would say at the outset I do think we have a good and strong national process and that combination of NICE guidance along with a Welsh approach does seem to have put us in a really good position. I wonder, Andrew, whether it's worth just using one of the examples that were highlighted in the report and describe why.

[175] **Mr Evans**: Sure. If I take the example of albumin-bound paclitaxel Abraxane, a drug for pancreatic cancer, we had a situation there where the all-Wales medicines strategy group had considered the availability of that drug in Wales a number of years ago and agreed that it should be available. NICE subsequently appraised it as part of their England-and-Wales-wide appraisal process and felt they couldn't recommend its use.

[176] **Neil Hamilton**: Was that in England or generally?

[177] **Mr Evans**: The way NICE and AWMSG work is that AWMSG will appraise all medicines unless they happen to be on NICE's work programme within a period of six to 12 months. In this particular case, when AWMSG appraised that medicine, it wouldn't have been on NICE's work programme, but

subsequently it has come back in and that's just a quirk of the way that NICE recommendations apply in England and Wales but AWMSG recommendations only apply in Wales.

[178] So, in providing advice to NHS England, NICE brought in new guidance, in effect, for NHS Wales. That left us in a position where we would be removing access to a drug for pancreatic cancer, where the outcomes are generally pretty poor for patients in that area and the treatment options are very limited. It felt like, in a discussion we had with the manufactures, it would be appropriate, given their commitment to produce new evidence at a subsequent appraisal, to ensure that that medicine remained available for patients in Wales whilst they were seeking to do that.

[179] It also gave us the opportunity to talk to them about how they were going to collect data to support their subsequent appraisal. Had that been needed, we could have looked at this concept of real-world data collection where they'd have monitored use in Wales and used that to inform the subsequent appraisal. As it happens, we're not doing that with Abraxane because they have ongoing trials that are going to result in data being made available for them.

[180] So, I guess there are a couple of things. There are no hard-and-fast rules for why a national recommendation might be bypassed. But it's clear from that case, I hope, that this was a condition with a poor prognosis, with relatively limited treatment options, and a firm commitment from the manufacturer to go back into the appraisal process with revised data, and also that there is a very strong hand on the Government's part in ensuring that the price that NHS Wales is paying for Abraxane reflects the uncertainty as it stands at the moment.

[181] **Neil Hamilton**: So, you got a better deal out of the drug company.

[182] **Mr Evans**: We did get a better deal as part of those discussions, yes.

[183] **Neil Hamilton**: That's really a question of clinical appraisal, rather than cost-effectiveness. Would there be circumstances in which you would bypass this process purely on cost grounds?

[184] **Mr Evans**: I don't believe so, I think the hallmark of the agreements that have been made are that these are, as I said, for conditions with a poor prognosis and with a limited range of treatment options. They seem to me to

be fundamentally important principles, as does the one around ensuring that we're not simply looking to get a good deal. All of these agreements are predicated on the basis they will come back to health technology appraisals, which we hold very dearly in Wales, and is something that is a founding principle of the way we make medicines available. So, simply coming in and offering this at a slightly lower price is not going to be enough to guarantee one of those agreements, I would say.

[185] **Neil Hamilton**: Right, and who actually then does take the decision to bypass the system? Is that you, or a combination of the four of you, or however many are involved in this?

[186] **Mr Evans**: There will be discussion between policy officials within Government and manufactures, informed by NHS stakeholders. So, wherever possible, we'd engage clinicians and patient groups in that discussion. There'll be a discussion across the health and social services group within Government and, ultimately, where we choose not to go with a national recommendation or to go outside of one of those recommendations, then that will be a decision made by the Cabinet Secretary.

[187] **Neil Hamilton**: Oh, really. That's interesting.

[188] **Dr Goodall**: But it should really be an exceptional event, you know, given the numbers of approvals that are going through, and we would agree with the auditor general's report in the sense that our national process does work. Certainly, these individual case reviews probably require us to set out criteria, which will happen, as Andrew said, through a combination of issues, ranging from clinical perspectives through to the negotiations. But I wouldn't want you to have a view that we're looking to undermine the national process. We actually think it's very effective and works very well.

[189] **Neil Hamilton**: I wasn't suggesting that it was being undermined, it's just that there are examples of bypassing the system, so it would be interesting to know more about how that comes about and what systems are in place to ensure you safeguard probity on the one hand and cost-effectiveness on the other. So, ultimately the buck stops with the Cabinet Secretary, who may have no expertise in this area at all.

[190] **Dr Goodall**: Any decision clearly comes through a clinical and professional sense of areas, and it will be a very exceptional event, but, of course, he'll need to receive the professional recommendations from the

department.

[191] **Neil Hamilton**: The auditor general provided these three instances. Obviously, we don't know any more than that. Is this something—over a period of years, could you add to that list significantly? How extensive is the bypassing of the system in any one year, I should have said?

[192] **Nick Ramsay**: We are into the last few minutes now of the session as well, so feel free to be succinct.

[193] **Mr Evans**: These are the only three examples that exist. As I've tried to describe, there are no hard and fast rules for how we do this. Therefore, it's hard to say in what circumstances we might do it again, but the case, as Andrew has quite rightly said, is they are all exceptional and our approach is very much to support the appraisal process undertaken by NICE and the AWMSG.

[194] **Neil Hamilton**: Okay. Well, I'm taking my hint from the Chairman. [*Laughter.*]

[195] **Nick Ramsay**: Thank you for taking the hint and I hope Lee Waters takes the hint as well as he asks the final couple of questions.

[196] **Lee Waters**: Yes, just briefly, I'm interested in this whole issue of how many people who are admitted to hospitals because of problems with their medicines. It does seem from the auditor general's work and the work of others that the data that we have just aren't very robust and we aren't really able to have a very clear idea of how many we're talking about here. Are you doing any work to give us better data on this?

[197] **Dr Goodall**: Yes, we are doing better work through a couple of different areas. What I would also say is that we do try to use the international evidence in place, which talks about likely admissions for medication errors and issues as well. So, the 6 per cent figure that's portrayed in the report is seen to be the kind of the general UK and international experience in this arena. But it's quite right that as we—

[198] **Lee Waters**: Sorry, that's not based on the actual data of the hospitals, though—that's based on international studies, isn't it?

[199] **Dr Goodall**: No, I agree, national studies, and, you know, trying to find

national data, we do end up with about 0.6 per cent, if you crank the handle of the NHS machine and come out with an answer. That will, however, be also—

[200] **Lee Waters:** Sorry, that's my point: there's a huge disconnect between the data we have from hospitals and data in national evidence.

[201] **Dr Goodall:** There's a huge disconnect between the international classification system that is in place, which the NHS uses, which is basically focused on the procedures that are undertaken and the diagnosis. What they're not trying to do is actually have the underpinning messages about the medication error. But I do think that there is more that we can do there and there are certainly other classification systems that can act in support of this to see whether we can make sure that this is a robust part of the data. Andrew?

[202] **Mr Evans:** We need to reflect on the international evidence. So, the Pirmohamed study from 2004, published in the *British Medical Journal*, looked at around 19,000 admissions and identified the rate of around 6 to 6.5 per cent. That required researchers to run through people's notes in great detail, to compare those notes between different reviewers, to get to a definitive position where you could get the 6 per cent. The reality is when people are admitted, identifying that it's a medicines-related admission is not apparent, or is rarely apparent at the point of admission and the work you have to do to try and get to a figure of 6 per cent, identifying all your admissions, is disproportionate.

[203] What I would say about the work that's gone on in Wales—and there's some very good work going on particularly in Wrexham Maelor Hospital around looking at medicines-related admissions—is that it proves what's in the international evidence. So, the type of medicines that are most likely to be implicated in medicines-related admissions in Wales are exactly the same as the ones that were in the international studies. Our focus is, perhaps—and I'd argue that we're doing an awful lot of work around trying to tackle medicines-related admissions—on not focusing on the admission itself but focusing on the quality use of the medicines that are most likely to be implicated in an admission. So, we're doing work around anticoagulants, we're doing work around antiplatelet drugs and reducing non-steroidal anti-inflammatory drug prescribing around tackling acute kidney injury.

15:15

[204] We're doing a lot of work around that area and the medicines that are implicated in those cases, and that will have a positive effect on admissions without us necessarily having to go back and trawl through everybody's notes to identify the six in 100 people who've been admitted because they've had an adverse effect from their medicines.

[205] **Lee Waters:** And in terms of working with the academic—

[206] **Nick Ramsay:** Last question, Lee.

[207] **Lee Waters:** Indeed. In terms of working with the academic community on this, as I understand it, one of the world's leading experts on medicine safety is based in Cardiff—I believe his name is Dr Andrew Carson-Stevens; I'm not familiar with him. Are you able to involve those experts in the work to get them at the clinical interface, so they're feeding into the Welsh Government's work?

[208] **Mr Evans:** Absolutely. Dr Carson-Stevens is talking at an event organised by the 1000 Lives improvement service tomorrow, looking at error reporting. He's actively engaged in a number of programmes, and I think, as we discuss with 1000 Lives over the next year what a medicines safety programme for Wales might look like, how we engage that academic expertise across Wales is something I'd be keen to discuss with them.

[209] **Lee Waters:** Sure, but beyond speaking at a symposium, are you planning to get them in for the day-to-day operational activity as well?

[210] **Dr Goodall:** What we're looking for from the 1000 Lives team is a focus—national, across organisation, at the front-line level—which gives us a beat about the approach that this will look to do and some advice around things like the classification mechanisms. We would see that all as part of the same work, and, yes, we'll be making sure the academic mechanisms are lined up as well.

[211] **Nick Ramsay:** Marvellous.

[212] **Lee Waters:** Thank you.

[213] **Nick Ramsay:** That's a very positive point to finish on. Can I thank Dr Goodall and our witnesses today? We will send you a transcript of today's

proceedings for you to check before it's finalised. But, thank you, that's been really helpful.

[214] **Dr Goodall:** Thank you. Diolch yn fawr.

15:16

Cynnig o dan Reol Sefydlog 17.42 i Benderfynu Gwahardd y Cyhoedd o'r Cyfarfod
Motion under Standing Order 17.42 to Resolve to Exclude the Public from the Meeting

Cynnig:	*Motion:*
bod y pwyllgor yn penderfynu gwahardd y cyhoedd o weddill y cyfarfod yn unol â Rheol Sefydlog 17.42(vi).	*that the committee resolves to exclude the public from the remainder of the meeting in accordance with Standing Order 17.42(vi).*

Cynigiwyd y cynnig.
Motion moved.

[215] **Nick Ramsay:** I propose, in accordance with Standing Order 17.42, to resolve to meet in private for items 5, 6, 7, 8, 9 and 10 of today's meeting. All content?

[216] **Mike Hedges:** Content.

[217] **Nick Ramsay:** We'll go into private session.

Derbyniwyd y cynnig.
Motion agreed.

Daeth rhan gyhoeddus y cyfarfod i ben am 15:17.
The public part of the meeting ended at 15:17.