SCOTTISH HOSPITALS INQUIRY

Hearings Commencing
19 August 2024

Day 21
12 September 2024
Dr Christine Peters (Continued)

CONTENTS

10:03

THE CHAIR: Good morning. I think we're ready to resume with Dr Peters?

MR CONNAL: Peters. Indeed, my Lord.

THE CHAIR: Right. Good morning, Dr Peters. I think we're ready to resume. Mr Connal?

Questioned by Mr Connal (Continued)

Q Obliged, my Lord. Now, when we left off, just to go back to your witness statement and use it as a general guide to take us forward, we were at paragraph 74. Now, that will be something like 131. Just make sure we get back to it, oh, 74. Yes, let's go on to the next page, 130, just to get the context here.

In July 2016, Dr Wright was no longer an ICD, and you were sharing the sector ICD role with Dr Inkster. Is that right?

A That's correct, yes.

Q Now, there are a couple of incidents that follow thereafter that I don't think I need to take from you in any detail. You've been brought in, I see, to check the consequences of fungal growth in rooms in 2A. And then you had a discussion – if we see further down that page, paragraphs 77 and 78 – about problems that you found in room 25, and that's really a point you make simply to say that if you have an alarm system indicating pressure issues, then you would know about it without having to find it in other ways. Is that right?

A Yes, and furthermore doing air sampling regularly, you may pick up these problems earlier as well, rather than waiting for an infection, so---

Q You understand that's not currently being done on Ward 2A. Is that right?

A That's my understanding.

Q Now, if we go on to 131, at paragraph 79, we come onto a topic that you've already indicated is not your specialist area, which is chilled beams; that you were copied into an email about water dripping from chilled beams, which was said to be due to condensation. And you say you were in touch with Mr Hoffman, who had a view on this, and we can ask him in due course about that when he comes to help the Inquiry. So I won't trouble to take you through that paragraph.

So, moving on, into October 2016, it seems a long time since 2014, but, anyway, we're now October 2016, and this is the point at which at long

last you're allowed to step back from your Infection Control remit or at least your official Infection Control remit because a colleague from elsewhere came on board, and you provided a handover. Now, the point you make I think in 81, if I'm right, is that even though you're not an ICD, you're still doing ICD duties sometimes. Is that right?

A Yes, out of hours, weekends, public holidays, and to cover annual leave of the Infection Control doctors, and sometimes I was asked to assist with specific tasks.

Q Who would typically ask you to do that?

A Typically, Dr Inkster would ask me.

Q Thank you. No doubt that's for the reason you told us yesterday that you had a particular interest in ventilation, whereas Dr Inkster's perhaps larger interest was in water. Is that right?

A Yes, generally speaking, yes, or it could be because of time pressures for the ICD team, and I think that speaks to all the microbiologists being a team and Infection Control being a job for the whole team. So you would try and support-- if there was a lot of issues in Infection Control, then we would try and arrange the rota so that we could assist, and, generally speaking, others weren't as keen to do infection control at all, so I would step in to-- or be invited to assist.

Q Thank you. We can go on to 132. Again, this is something I'm not going to take from you in any detail, Dr Peters, but you're talking here about something called Mycobacterium abscessus, which you say is similar to TB, and you were trying to work out whether the problem was historic or was ongoing, and you prepared a report. Do I understand that the purpose of mentioning this is to indicate another issue where you had difficulty getting the information you thought you needed to find out the answer?

A Yes, it was a very significant issue and it was extremely difficult to get the basic levels of information when people had already investigated over a number of years. There was, as far as whole genome sequencing data, timelines, investigations that were already there, and that were not disclosed, not shared, despite people knowing that's what I was looking at, and that really hindered the ability to ensure that things were in place currently in the building to make sure that we didn't have a current problem. So that's

why.

Q I can understand that.

A Yes, and it was-- again, Prof Jones suggested I-- if I was saying these things, I would have to write it up in a way that could be shared with Dr Cruickshank.

Q Yes, thank you. Now, we move to April 2017, and whatever has happened in the past, it appears you then take over the role of clinical lead for microbiology from Professor Leanord, and you're asked to start doing some integrating work. I think we have other evidence coming about, how at times Paediatrics and Adult Microbiology had been separate, and you were asked to try and pull them all together. Is that right?

A Yes, so, historically, Yorkhill had a very independent setup with both the microbiology lab, and they had a staff of three or four clinical scientists who worked with Craig Williams and Alison Balfour as the clinical microbiologists. While the labs had integrated on-site at the Queen Elizabeth, the clinical liaison hadn't. Although prior to me officially trying to harmonise or to bring together the two teams, we had mainly Prof Jones and another colleague who would primarily do the-- the microbiology liaison with Paediatrics but we had separate rotas. They were sort of clinically separate, and I think for contingency and support, peer support, it was thought to be a good idea to bring them together, and also we had lost three of the clinical scientists, so that workforce had really been decimated. So it was really about trying to absorb that work into the rest of the microbiology team.

Q Yes, thank you. Now, I just want to take briefly from you a reference you then go on to make. You talk about being called to a particular patient who had a particular gram-negative bacteria and then handing it back, but subsequently something new has come to your attention, which you wanted to mention to the Inquiry about the connection between that case and possibly other ones. Is that right? I think we see that set out in paragraph 85, which runs on to 133. It's the name that I always struggle to get my tongue round, Stenotrophomonas.

A Stenotrophomonas. Yes. Yes. So, I mean, it's not an unheard-of organism. It's very well understood and, you know, we isolate it from time to time, but not from bacteraemias very often, and it has a significance in this patient cohort. It's much more pathogenic. So if you got a Stenotrophomonas in a blood culture

in a different patient cohort, you wouldn't expect it to be so serious. But in this patient cohort, it has a higher mortality rate, and we hadn't seen it in bacteremia-- I think there was 18 months or a long run of not seeing it in that patient group. At the start of what I began to realise that there were bacteremia at a level that was higher than normal, would be about that time when I was on call over the weekend, and what's interesting about that patient and what's significant is that the typing at the time had it as "unique".

But then, over time, a number of years later, we sent other samples, and I would always type the Stenotrophomonas from cystic fibrosis sputum samples to make sure that we don't have cross-transmission or issues in the CF cohort, where it's also got particular clinical significance. It was reported as a match to this case.

Now, if you looked at a database, it would come up as unique for that original bacteraemia but, retrospectively, we now have a match in a different patient cohort. But we don't see-- Because I look at all the Stenotrophomonas typing, we don't often see matches. The reference lab in Colindale will comment on, "This is striking." I think that that was the word that was used for this. This is an unusual thing that a number of years later, the same type.

Because Stenotrophomonas is a very plastic organism, genetically. It changes very, very quickly and, even within one CF lung, you can have huge diversity. So, even in one patient, you can have very big genomic differences. So I think that was striking but, at that time, we didn't have that information and all that I noted on call-- because on call at the weekend you covered pediatrics and at that time I wasn't really-- hadn't been covering pediatrics. I just handed over to infection control and the pediatric team, "Here's what we've got." There were six cases and that seemed to me, having covered a lot of weekends over my years in microbiology, that was a lot. Sorry.

THE CHAIR: That's a lot of information. Mr Connal, could I ask you to----

MR CONNAL: I think what I'm trying to----

THE CHAIR: -- point it to the----

MR CONNAL: What I'm keen to get at is what this means, or might mean. So, you have an isolate which is very specific, marked as unique, and then some years later you find the precisely same isolate, as I understand

it, in other samples. Is that right?

A Yes, not precisely the same. So it's the same type.

Q Right.

A So it depends how much detail you want on typing systems, or if you'll get that from someone else, but, from my point of view, that's something that-- you need to think of an explanation and the most-- It's not the only explanation but a serious contender is that there is somewhere in the environment, a source, that has-- that these different patient groups have been exposed to over time. And because it's such a plastic organism, you would-- it would fit with something like biofilm where it changes and doesn't become quite so changeable because it's gone into a quiescent biofilm phase of its lifecycle.

So that's why it's striking is that, over a long period of time, you have a very similar, not precisely identical, organism and it was actually one of three. So there's three linked to our, and I say, hospital premises. So either the big building or the small building, and over a number of years in different patient cohorts. It's hard to explain that. Strange things happen. You can say, "Well, that's something that you can just chalk up as, "That's odd", or you can be alert and think that it fits with the idea of a water source that has biofilm in it. It certainly fits with that.

Q Thank you. The issue that you're highlighting, in a sense, here, apart from the fact that this is a striking matter that perhaps ought to be investigated, is that to investigate it you probably need to do more typing. Is that right? Which wasn't regarded as a priority after a lot of the events that we've been through.

A I think this is really at the core of a lot of the controversy around typing and what it means and the typing-- in and of itself, a standalone typing means nothing. You have to understand what the idea is of where the organism has come from and how it's behaving. So in order to understand the genetic diversity within the whole water system, you need to have taken an awful lot of samples.

Also, the how of that water system being contaminated really matters as well. So if you think it's one-- you've only ever had a problem with one outlet, then you're going to expect much less diversity and you're going to expect all the patients to have had exposure to that one same tap, whereas in the context of the Queen Elizabeth, where there was-- appears to have been, right at the beginning

when you were building, the pipes getting contaminated with lots of potential different sources, you're going to expect a lot of genetic diversity right from the start. Then, it's being seeded through into a tank where there's potential for biofilm, and then it's being seeded through without any filter at one point, and we don't know how long for, and then could potentially go anywhere within the system. It could potentially build up biofilm at any point in a bit of pipe or with the sealant that's a bit wrong and is giving it a carbon source or within the taps. Then, there's the wrong temperatures. Then, there's the not flushing. It's been a wet system for a year. So, we don't actually know the full extent of the diversity, particularly for, say, one organism, Stenotrophomonas, and then how that's evolved over four, five, six, seven years.

So, you always fit the typing into the context of where the patient is. So, for example, if a patient's come in, and we do screen-- in our haematology-oncology patients when they come in, we do screening to see if they are already carrying organism like Stenotrophomonas. If we haven't grown it on screening on admission and they've not been unwell and then, some time later, they become bacteremic, and then you get an organism that is a water type organism, it's a very sensible idea to think this could have come from our water system as a whole. So it's not as simple as, "This type is unique," or not. You take it in a context.

THE CHAIR: Yes. On a matter of detail, just something you mentioned incidentally, what exactly was the policy on screening on admission? Is that regularly done with-- what cohort of patients?

A The BMT patients, the Schiehallion patients. So, it's been a very long -standing screening system for fecal samples and, say, they have wounds or----

Q Sorry, did you say of fecal samples?

A Fecal samples, yes. Fecal samples to look for fecal carriage, and that's just-- that was in Yorkhill, that was in place. Kathleen Harvey-Wood was the one remaining clinical scientist. So she has 40 years' experience of pediatric microbiology and those-- I mean, at this point, in April, I was really just beginning to start into pediatric microbiology. So, those SOPs in the laboratory, so a standard operating procedure in the laboratory for screening, is already set

up. It's standard. I know Great Ormond Street and other centres also do that. Not every centre, but that has been our practice.

The idea is that you can, both for clinical purposes-- So, if somebody's got a gentamicin-resistant E. coli, for example, in their feces, and our empirical guidance would be to use gentamicin, you would avoid the use of gentamicin, because you already know they're carrying an organism that's very resistant. So, we would also pick up Stenotrophomonas, Burkholderia, a lot of these organisms, because they're usually intrinsically resistant----

Q Right. Could I just repeat that back to you?

A I'm sorry.

Q We would-- Did you say, "We would not pick up Stenotrophomonas on a standard screening"?

A No, we would. We would. We would.

Q Right. As I say, you're giving us quite a lot of information, which I'm delighted to have, but I need to----

A Sure.

Q If I'm to make anything of it, I've got to essentially follow the headline points that you're wishing to make. Now, I think I've understood what you're saying about the potential genetic variations in particular pathogens, and we've been talking about Stenotrophomonas, my understanding being that you would expect evolution of these bacteria over time.

I think I understand the point that you make about a water system having the potential to provide sources for pathogens such as Stenotrophomonas. I'm not sure that I've got much further in my understanding of what I was hearing as quite an information-full explanation from you.

Our starting point was looking at, I think, two incidences of Stenotrophomonas or, perhaps, are we talking about three?

A So, this is the first case of Stenotrophomonas that I became aware of, and I'm highlighting the fact that information can become available years later that still pertain a relevance to that case. Yes, I'm saying a lot of things at the same time.

The epidemiology was also, I hesitate to use the word unusual, because usual's a context. It depends what patient cohort you're looking at, and also importance varies, but it was important that we were seeing Stenotrophomonas bacteraemia,

especially by the time you get to two because we've not seen any for 18 months. It's a serious, serious organism in the bloodstream in this patient cohort. So, there's a red flag going up in my head about this time.

I'm conflating that with the typing because that has become such a flashpoint for interpretation. My view is that it's not-- you never take even whole genome sequencing, which is the most detailed level of typing you can get. Even that has to be informed by the epidemiology. So the time, place, person and the clinical history of that particular patient. So, as a microbiologist, every single blood culture you get, you do, in effect, a root cause analysis. You're trying to say, "Where has this come from?"

If you'd already grown it in their stool, you knew they were colonised with Stenotrophomonas because they've maybe been in and out of hospital recently with a lot of antibiotics. You might then-- and it's a new line that's just been put in. You might then think it was translocation from the gut, which can happen, but if it's somebody who you've not grown Steno, we know it's not been around, they've had a long-term line in, and there's other cases in a timeous frame, you then start to think this is more likely, or is tipping you over towards thinking there's an environmental source. Let's check the taps, the water, these things.

So, you start off in any of these situations. The first step is there may be a problem, and then the next step is to try and work each through, with lots of pieces of information, of which typing is one.

MR CONNAL: If I understand what you go on to say, Dr Peters, what you've done is you've identified a result and then results years later, which you say were regarded as striking and a possible source-- and pending investigation, no one knows, but a possible source was a water source within the hospital environment. Is that correct?

A Yes.

Q The only way to do anything about that would be to carry out a much more extensive exercise involving that particular organism, Stenotrophomonas?

A Yes.

Q After the case note review, you say in your statement, typing of Stenotrophomonas was not encouraged, if I can put it like that. I've been asked to ask you another question about this question of typing being discouraged. Can we take it

from what you say about that, and I have a number here, Stenotrophomonas case in May '21, Aspergillus late '20, and HAI COVID were not typed because typing was discouraged. Can you help us on that? I know it's a long question, but----

A So, the Stenotrophomonas, we would-- well, I would in CF always type a new one, so that we understand the epidemiology in our patient cohort. We're always on the lookout for possible cross-transmission or a shared source. In haematology-oncology, we-- when I say "we", I don't know any of my colleagues that I've worked with in pediatrics, we would always, for the duration of my time of involvement with that set, get these typed and Kathleen would always have done that as well. That is that you can keep an eye on what's going on with what is, you know, a serious pathogen in this patient cohort.

When we were doing that, we were instructed that there was no reason to do it and that if we found things like a match, as Infection Control had not asked for it specifically, it was up to us to deal with it. So that's the Stenotrophomonas.

COVID typing is different. I don't say that it wasn't done. COVID became part of a national program of whole-genome sequencing. So, basically, there was a national research initiative that all the samples could be whole-genome sequenced and it informed a lot of government policy, and I was involved in one aspect of it, which was hospital-acquired COVID and, in our site, we were not allowed to include staff samples whereas other sites – like Sheffield, other places – did, and you get a lot more information because obviously there's a dynamic between staff and patients for COVID. So that was also an evolving picture.

So, at the beginning of COVID, you couldn't type; as whole-genome sequencing became rapidly shared out across the country, there's huge amounts of whole-genome sequencing data. So I was involved in the publication of that information, and even in COVID, even with a virus, the whole-genome sequencing in and of itself is not enough. You need the EpiData as well to tell you what-- to help you understand what's been going on, in terms transmission.

What was the other organism, sorry? Aspergillus is not really-- I mean, you can type but it's not-- it's more useful if you have a cluster or if--

Because there's so much Aspergillus in the environment, the chances of getting the environmental match with your patient is slim. If you do get the match, it's very meaningful, it is a, you know, very strong linking and there are publications with matches, but there are lots of publications where you have outbreaks and there's no match. You can't find the source because there's so much of it around and diverse.

Q Yes, because there's a lot of it in the air, as I understand it.

A Yes. So, typing is something that is a tool. It's not everything in and of itself.

Q Thank you. Well, let's move on to May. Now, the first item you deal with under May '17 is, I think, simply an example of an instance where you were asked to help out; you worked on ICD but you were happy to help out by offering your expertise as requested by Dr Inkster and that's covered in paragraph 87, and I don't think I need to read you through that. And then we get the unfortunate event in June, going on to 134 of the witness statement, that Dr Inkster is diagnosed with lymphoma and has to go on sick leave, which, I can imagine, given the things you've said about her expertise, must have caused a bit of a gap. It then appears that, whatever the criticisms of you, you were asked if you would take on the lead role. Who asked you?

A Brian Jones. So, we had a meeting, he was head of service, I met with Brian Jones and the clinical lead in the north, who is Mary McLeod – who's in the same role as I was in the south and she was in the north – to decide, because this was a huge issue for the service, and Brian Jones asked me and I explained that it was not something I could take on.

Q Thank you. In August, we come onto a slightly different issue where you have a slightly different role because you are the line manager for a colleague of yours who-- essentially, what is set out in paragraph 89 is that this colleague says that they are being pushed to sign off something that they don't feel they have the knowledge or expertise to do.

A Yes.

Q No doubt the kind of issue that you get when a very experienced ICD is not there for unfortunate reasons, but was the point that the person was being pushed to do something that they didn't feel they could do?

A Yes, it was a continuum of what we'd experienced and the reason why I wouldn't take on the lead

ICD role. I thought that the issues had not yet been dealt with and, importantly, just before Dr Inkster went off sick, she had been speaking to me about-- her experience had degenerated within that team as well, to the extent that she was very anxious about going to meetings with Tom Walsh and Sandra Devine. They would meet over at the Yorkhill site because that's where their offices were, they were not on site, and I had gone to Anne Cruickshank just to discuss because-- from a microbiology point of view, and because Dr Cruickshank had been so involved in the previous history, just for some advice on how to-- where to take this up and how to support Teresa, and then, unfortunately, Dr Inkster became very ill.

So I already knew that things were continuing in the same kind of culture and I didn't-- I'd already had issues with the team and I didn't think I was the right person to do that, even though-- well, it was suggested to me that I had the expertise and that I should take it on. I wasn't worried about my-- I mean, you're always learning your entire career, but it wasn't because I wasn't willing to take on responsibility. I didn't think it was safe, and I didn't think the organisation had dealt with those issues.

My colleague had been keen to carry on covering Dr Inkster's local sessions but not the lead sessions. So that colleague was very clear about their level of expertise, and it was agreed that Brian Jones would take on Teresa's lead role, which included managing the big issues like ventilation and water. So that was the agreement, as far as I understood it, and there were two other ICDs on site. There was Alison Balfour and Dr Pepe Valyraki. So there were three ICDs, so that was quite a good number, actually, on-site.

So, for Brian to cover those big issues and the local ICDs to cover the local issues, but this will seem to be a repeat of what we'd experienced back in 2015, where my colleague was asked to sign off on something that was happening on 4B that he did not understand, and I had done a handover in October highlighting that there had been issues and that he was very, very, very distressed, because Prof Jones had come in over the weekend when he was on call and said, "You have to do this, you need to step up," and this other person could speak to it better than me, but as his line manager, that was what was being told to me. So this was not good, after

what had happened already.

Q What I was going to ask you was, one of the criticisms that is made of you is, to be colloquial, that "you stick your nose in where you ought not to stick it", but, in this case, this individual, you were his line manager.

A Yes.

Q So, in a line management sense, you had a responsibility for him. Do I understand that?

A Yes, and I had been put on notice to give as much support as I could to my colleagues-- less experienced in infection control colleagues, to give them support. So, you know, I wasn't-- even though I wasn't willing to take on the lead role, there was, and I agreed, a sense of professional responsibility to support and give whatever knowledge I had to those members of the Infection Control team at a very difficult time, and they were very, very busy and also-- So, in their microbiology role, I was very careful to not double-hat them with the rota. In fact, I took that colleague off our microbiology rota altogether, so we covered the infection control doctor's microbiology sessions to free them up, if you like, to take on all this. So the net loss of Dr Inkster's sessions were felt by the microbiology service.

A So, what you tell us in your witness statement, at paragraph 89 on page 135 of the electronic version, is that, as his line manager, you wrote to Dr Armstrong – who was, in turn, the line manager for Professor Jones – explaining that there were difficulties again. And, in fact, we see from further in your statement that this particular colleague, and we know about this from other evidence, had also encountered difficulty in getting information that they wanted and ultimately came and said, "I really need to get out of this role again." I'm being slightly colloquial, but that's what you set out in your statement. Is that correct?

A Yes.

Q Thank you. I think we'll move on to another topic. This is what seems to be a particular incident where there were, as I understand it, "building works", to use a neutral term, building works being carried out in Ward 4B, but it turned out that there were patients from haematology who were said to be in that ward. Is that right?

A Yes, so this goes back to 4B. So there was work ongoing which, at that point, was not clear to any of us.

Q You weren't directly involved in planning or organising that work.

A No, none at all. It seemed to be different work from what my colleague had been asked to sign off, but Dr Valyraki had been asked to sign this off. When I say "sign off," I mean an HAI-SCRIBE. So, she asked me to assist her – I've got the emails – to go up with her because she didn't really have any experience of HAI-SCRIBE at that time, and I'm sure that's changed enormously, but at that time. So I went up physically to the ward with her and there was-- Given that there were high-risk patients-- they're not the highest, so the bone marrow transplant, the allergenics, were still back over at the Beatson but there were autologous transplants and acutely leukemic, other high-risk patients who had been moved into 4B, one half of it, and the plan-- there was work happening on the other half.

When you say "half", it's a long arm and it goes round, so there's rooms all round the outside, and so there was patients on one side, and the other side, there was work being done and there was a lot of dust in the air. There were sheeting, like, just plastic sheeting with zips that were flapping in the wind. The prep room where all the IVs are made up actually was within the space that was supposed to be a SCRIBE space, so the nurses would have to go in and out of the SCRIBE area to use the prep room, which isn't really-- well, that's not a good SCRIBE. So, yes, that was the situation that we walked into.

Q What you initially tried to do, you say in paragraph 93, is get some more information about the works, I think, from Mr Walsh.

A Yes.

Q You weren't satisfied that you had anything that helped you. Then, you record, in paragraph 94 on page 136 of the electronic document, that you were discussing with Professor Jones the, kind of, who should be doing what question again and he says, "Well, take it up with Dr Armstrong."

A Yes.

Q You then take it up with Dr Armstrong who says, "Well, Professor Jones is in charge of what's going on in 4B."

A Yes.

Q So, in other words, it's down to him. So you went in a circle.

A Yes, it was a circle and the base of it is there are high-risk patients on a ward where there was an inappropriate SCRIBE and, to do a

SCRIBE, you really need to know what the work is, what does it actually entail, otherwise, you can't possibly mitigate. And the other thing, we had an actual sit-down meeting about it and I think it was Ian Powrie that was there, although I'm not 100 per cent sure, but somebody from Estates was there and, at that point, they said that there was only one air handling unit for the ward, which meant-- Then, it turned out that what they were doing was leak testing at that particular moment, that particular piece of work, and that would involve having the ventilation off, because you have to push a whole lot of air in and suck a whole lot of air out and measure the difference, just in a brief explanation of it. So that would mean that all those high-risk patients would have no ACH, zero ACH, for that duration of the work, and this for me was a problem.

Also, the leak testing methodology which I'd read up a lot on right at the beginning because of the PPVL rooms, and it used to be that it was at 20 pascals you'd push air into the room and then at 20 pascals you pulled it out, but that had increased to 50 pascals due to BSRIA. So that's a huge amount of air, you know, sucking a lot of air from the surrounding corridor, and there was grilles in the ceiling that went nowhere other than into the ceiling space and, you know, five/six years of dust up there was being sucked out because the air, to go into the room for the leak testing, was now being pulled into the environment.

Add that to the fact that you don't have proper solid ceilings, which you should have-- And to be fair to Estates, you couldn't-- it would be very difficult to achieve negative pressure, so, you know, you'd go down a tick list on an HAI-SCRIBE and you maybe highlight, "You need a negative pressure." To achieve that in that setting would be very difficult. The best thing would be to move the patients out, the high-risk patients at least, but what I understood had happened was, and I think it was because they were trying to piece this service back together, who'd already waited for a long time, so they moved out whatever patients were there and moved the haematology patients back in.

So there were multiple levels, I thought, of risk that hadn't been managed, but, at that meeting, it was a very-- I couldn't get traction on what I was presenting as a risk, and that's where Brian Jones, at that meeting, said, "Look, if you've got concerns,

take them up with Jennifer Armstrong." So, yes, I went in a circle and I felt-- you know, there wasn't a way somehow to get acknowledgement and action to----

Q Yes, well, can I ask you a question which is not directly connected to dust and air testing, but I've been asked to ask you about it. Do you know whether there is a current SOP for the patient pathway of a BMT patient with an infectious disease? So the patients that you, I think, described earlier in your evidence----

A Mm.

Q -- as causing particular issues, are you aware whether there's an SOP for that?

A At that time, no. Currently, it would be in the patient placement policy, so that should include where those patients should go, and it should be a PPVL room, I think would be the best accommodation. In paediatrics, they do, apparently, have a negative lobbied room from the patient placement policy. That's how I know. So, from the patient placement policy, it says an NP. Also, that room in the Schiehallion setting would be the best place. If that's already full because you've got more than one patient, then you're going to have to risk stratify on what other accommodation you've got on a PPVL room would be the next best thing.

THE CHAIR: Again, that's quite a lot of information, and I think it may go beyond the question.

A Oh, sorry.

Q If we just----

MR CONNAL: Well----

THE CHAIR: -- start with the question again.

MR CONNAL: -- the question was whether there was, you know, a patient placement policy for----

A There was not at that time.

Q There wasn't at that time, but is there now? You think there is now?

A There is a patient placement policy in place now.

Q And do you know when that came into force or do you not?

A Yes, it was into 2020, because it was Marion Bain who ensured that that was a piece of work that was done.

Q Yes. Thank you.

THE CHAIR: Could I go back? It's just something I may not have picked up. You were being asked about the situation you discovered in August of 2017 with construction work

going on in close vicinity to where patients were in Ward 4B.

A Mm-hmm.

Q Now, I think you mentioned a meeting, but I first of all want to confirm, if I'm right that there was a meeting, could you just tell me when and with whom?

A It was-- As a result of there being work happening up there, there was no minutes, as far as I recall. There was Sandra Devine; there was Brian Jones; there was Estates people, who I just can't visualise who was there. I could dig out some emails around it to clarify.

Q Would that be about the end of August?

A It was in relation to these works starting up on 4B. So, yes, I can't say with the----

Q Right, okay.

A -- month at all.

Q And it's at that meeting you describe a difficulty in-- the way you put it was "getting traction"?

A Yes.

Q Now, what I'm interpreting, and tell me if I'm wrong about that, is that the other people at the meeting weren't really understanding that there was any issue?

A Yes.

Q I've got that?

A Yes.

Q Right, thank you. Sorry, Mr Connal.

MR CONNAL: I think we can probably move through some other paragraphs. On 137 of the electronic bundle, in paragraph 98, you describe a situation in which you were trying to organise a meeting; Professor Jones wanted to speak to your colleague; your colleague didn't want to speak to Professor Jones on his own. There was an email and then something of a shouting session which you recorded. So, obviously, unfortunate if that is how it happened, but, otherwise, simply an issue of behaviour rather than any other concern?

A Yes.

Q And your point that you make there is at the time you were all struggling in terms of staffing because Dr Inkster was off----

A Yes.

Q -- and there weren't enough people. Now, you go on to deal with the death of an individual patient, but you confirmed you didn't have any direct link to her care, so we can move on past that to 138. In September 2017, to some extent, you've told us about these issues; you've got a response from Dr

Armstrong to your email saying, "Professor Jones is leading on 4B," and you've had a number of communications from your colleague who was clearly struggling with the demands that were being placed on them as an ICD, which leads, I think, to 104, at the bottom of that page, where you probably elaborate on the point I just took from you a moment ago that Dr Inkster was off and then, at that point, Dr Valyraki, Pepe Valyraki, was also off, and your other colleague was having difficulty, so you were really toiling in----

A Yes.

Q -- that area of work. We can move on to 139. We hear there about bacteraemias in 2A in the Paediatric Intensive Care Unit and elsewhere, including gram-negatives, and you felt there were some quite striking issues emerging, whereas others thought somebody was setting the triggers for a notification at the wrong level. Is that correct?

A Yes, this was through my colleague who shared those trigger graphs with me, and they were having discussions with what we call the SMT, the Senior Management Team in Infection Control, and they were exercised that they were saying, "It's just that the trigger is too sensitive. This is normal."

Q Yes.

THE CHAIR: Just help me with that. This proposition, setting a trigger to be too sensitive, what exactly is meant by that?

A So, if you use-- this was meant to be SPC charts or run charts. So a run chart is just literally cases as they go along, and if you see a trigger is two cases within two weeks, a trigger means you're going to look at it, you're going to do something, you're going to have a look at it. It may not mean you progress to a PAG, but you may. It's just the very start point. So, you know, it has to start somewhere, and Teresa had already set the trigger points for these high-risk units.

For something like Stenotrophomonas, if you've got a long, long, long line of none and then one, you could argue the first one in itself may cause you to at least have a chat to the nurses, "Is there anything different that's going on?" or, "Is there something that you're worried about?" But that would be in a situation where you've got really lots of lows.

More often, you'll have the occasional one, you know, and that does happen, and then by the time you've got a second one within two weeks, that's an unusual-- that's back

to the unusual idea for our centre, our location, our population, with all their gut flora coming into our unit. This is different. So that's the trigger point. So there is a subjectivity about it, and there is our-- if you had one Ebola, clearly, that's a massive incident straight away because of its ramifications. If you have a new strain of Burkholderia, for the sake of argument, that has caused a very unusual sepsis and an overwhelming clinical scenario, then, again, there's something different about that and you've got to be alert.

It's not an exact science, that picking up when you think there's a problem, but this "too sensitive" means that they wanted to-- well, at this point, I think there was six cases within a few months, having had none for a long time. I think that was not too sensitive. I think that is something that needed to be looked at.

Q And this is in the context, specifically, of Stenotrophomonas?

A Yes, there was Pseudomonas and Acinetobacter as well. So they had charts for those; those are the ones that were being monitored, and Serratia, I think. So, each centre will maybe keep a closer eye on what matters to their population. So I wouldn't expect trigger runs for an ordinary ward in another hospital. You know, not everybody will have a run chart for Stenotrophomonas, usually it's not significant.

In this cohort, and because we'd already had issues with Serratia previously, our localised CT was keeping a very close eye under Teresa. Teresa had set up this local surveillance for our patient cohort.

Q Thank you.

MR CONNAL: Now, I'm going to jump ahead a little. You've picked up a number of points about ongoing problems but, arguably, nothing especially novel in them. So, could we move to paragraph 108 on 140 of the electronic bundle, where you point out that you were still concerned about a whole range of matters and you were also, in 110, discussing these with Dr Redding and also with your other colleague and it----

A Yes.

Q -- seemed that you were all in agreement that things weren't being done in the way you thought they should be done. Is that fair?

A Yes, and just-- there was no sign that the risk status was being fully acknowledged.

Q Yes, and Dr Redding's view-- and we've heard separately

from Dr Redding, but Dr Redding's view was, "Well, you should go to whistleblowing stage 1," and then, for practical reasons, you prepared an SBAR with input both from Dr Redding and from your other colleague and sent that off, and then there was a meeting fairly shortly thereafter.

A Yes.

Q Now, we do have minutes of the meeting, which we may or may not need to go to. I can see a reference to that, and we've also got your SBAR, but to some extent, it may duplicate if we also go to that.

A Sure.

Q So, if we just look at your witness statement on 141. Now, in paragraph 113, you turn up for a meeting and you discover there a real galaxy of individuals, and I think you----

A Yes.

Q -- were saying you were surprised to see so many senior people in a meeting to discuss your SBAR, including Dr Armstrong, Dr Loudon, Mrs Devine, and so on and so on. So, the meeting starts. You then record-- Are you sure that Dr Armstrong cuts you off and says, "You're head of nothing"?

A Yes. I was very taken aback.

Q Interesting way of starting a meeting. In any event, there's also a reference to some emails that you hadn't been given from another team----

A Yes.

Q -- and then you started to go through a number of the issues that you'd raised in your SBAR, and you deal with them, and I don't want to take you through all of them. But if we could go on to 142, paragraph 118 of your statement, you're back to this issue about PPVL rooms. Now, we've discussed the detail of the points about PPVL rooms in the course of yesterday. I won't take it from you again, but you're recording here that "we"-- and I'm assuming you're speaking for the three individuals effectively at that time, you said you're not sure what's been done, and infectious diseases consultants are still bothered about this. Is that right?

A Yes.

Q And it appears that here we are in-- what, in October 2017, moving patients to other hospitals was still happening?

A Yes.

Q So this was infectious diseases patients, because the consultants weren't happy with what you had. Is that right?

A Yes. Yes.

Q And it appears that Mr Loudon was upset by this suggestion of a problem. Is that right? You record in 119 he was angry.

A Yes.

Q Is that a correct way to describe how he approached it?

A Yes, he was sitting exactly opposite me at the meeting and just the body language and the tone was very clear. He said categorically that "these PPVL rooms are built to standard. They are built to standard."

THE CHAIR: Excuse me, Mr Connal. I'm right in thinking that there are rooms described-- at least described as PPVL rooms, both in 4B and in 2A?

A Not in 4B. 4C.

Q 4C?

A There's two and in ITU.

Q ITU?

A But in Critical Care, so HDU, ITU in the adult building, PICU in the paediatric building, in Schiehallion.

Q Maybe I should just take this at dictation speed. Right, so in the context of these paragraphs, we're talking about the----

A 4C. Two rooms in 4C.

Q So 4C, 2A?

A 2A.

Q Yes.

A Adult ITU, Adult HTU, Paediatric ICU, and I think it's on the third floor as well in Schiehallion.

Q All right.

A There's some there.

Q And these are rooms which you would anticipate would have the same specification or different, or-- Is----

A So they're all built to this PPVL specification. That's what they were delivered-- ostensibly delivered as.

Q Just give me that again, "to"----

A PPVL design standard. So the supplement SH-- Is it HBN? Oh, I can't at this minute remember the number, but it's a supplement one.

Q Right. Yes, the supplement in relation to intensive care rooms?

A 04-01, I think, yes. No, in relation to isolation rooms.

Q Isolation rooms? Right, so the discussion applies to all of these?

A All.

Q And I get the specification from the HPN, which I should know the number.

A It's an HPN, I think, for this one. HPN supplement 1, and it is

called “isolation suites.” And that’s-- the discussion I had yesterday pertains to all of them.

Q Right. Thank you.

MR CONNAL: Now, if we can move on to paragraph 120, I need to ask you something about that because, here, you’re recording what you say Mrs Devine says. So Mrs Devine says, “ID was a late amendment.” I think we know that, and she says that the issues were discussed with HBS at the time and they agreed to advise the Board of what standard these rooms would need to be, and they had a meeting on 2 October and more information was awaited.

Now, just a question of what Mrs Devine meant and what you knew about what she meant. Was she saying that HPS were involved in the original decision to move, or was this something else?

A It wasn’t clear to me and I didn’t know about it at that stage. I’ve subsequently seen some work by Ian Storrar, I think there’s a report, but, yes, the timeline of that was not clear to me, and then the fact that they’d suddenly got this meeting organised, I mean, it’s good, but it does seem like it’s associated with us asking questions and it’s a long gap,

particularly since it’s a big risk to be moving high-risk patients across that should-- turning up at our hospital site, and then punting them over to Monklands. That’s not an ideal situation, especially because we’ve got the ID unit-- the specialist ID unit in terms of staffing, so we have a really-- a reasonably staffed ID unit. So that’s a risk.

Q Am I right in thinking that you yourself don’t know who was involved in advising on the original----

A No.

Q -- circumstances and specification of the move of the ID unit? Because I think HPS say they weren’t involved at that time, but they had been brought in now to do some work?

A The only thing I know is that Craig Williams had mentioned discussions with ID and that it was all sorted right at 2015, early, before admission that that was sorted.

Q Yes, but that’s discussion with Infectious Disease, it’s not with----

A It was mentioned at the SMT and just a mention at the SMT, that’s all.

Q Yes, and your point is, “Well, the ID unit’s been there since we opened, even if it was a late decision to bring it in----

A Mm-hmm.

Q -- and was moving patients out for a year now, and it seems a bit odd that we're only now talking to HPS."

A Yes.

Q Am I picking that up correctly?

A Yes.

Q Thank you. And you go on to highlight the fact that people who may have infectious diseases were being seen in A&E where there wasn't an isolation facility, and then they were being taken somewhere else, which is the point I think you just made----

A Yes.

Q -- a minute or two ago. And then Anne Harkness comes in and says she's already raised these issues. I assume something to do with the ID issue with directors, and said, "Well, unless the existing rooms can be modified, we need to build an ID unit," which seems an interesting point to be dicussing it, but is that what she was saying?

A I think she was saying, "Yes, we already know this. So this is not news." My point wasn't that, well, I knew it wasn't news because I'd already escalated things and Anne Harkness knew right back in 2015. I don't think that was my point. My point was we continue to have this risk and nothing's happened to change it.

Q Right, okay.

A And also I knew, because we do work closely with ID, that this was bothering them also.

Q Thank you. Now, going on to 143 of the electronic document. In paragraph 123, you were making a point about "placement." Now, you've made this point on a number of occasions, placement of people with particular requirements.

A Yes.

Q And you saying, "Well, you really need risk assessed policies," and Dr Redding, you record, as mentioning high rates of infection and air quality being an issue since 2A opened----

A Yes.

Q -- which we know about from elsewhere, and you go back onto the public statement point. But the point that you make at the end there, did you seem to be getting any traction on your point about air quality?

A None at all. There was-- I think even at that meeting, there was a suggestion that there is no national standard for air sampling. So there's a lot of reference to national standards, but we're the only bone marrow transplant unit for paeds and adults in

Scotland, so there's highly unlikely to be. And even nationally, it's such a niche specialist situation that most centres evolve their own systems. We had a highly evolved system with both the old Schiehallion and the Beatson, both of which had very well-established air sampling regimes, which were excellent, and they even published in Schiehallion about its utility and how they reduced Aspergillus cases. Excuse me.

Q Well, we can just move on, I think.

THE CHAIR: Well, just before we move on, I think you've made reference to part of the response of those who you were speaking to was, "There are no national standards." Now, I have picked up in other material references to there being no national standards in relation to BMT isolation units. Now, have I-- is that what was being talked about, or was the suggestion more general that there's no national standards for BMT units?

A Yes, in general, but it comes back to the non-specificity of the term "an isolation room," because you could say every single room in Bone Marrow Transplant is an isolation room because it's protective isolation. So every single room there. But if you're using a PPVL room, what

should you expect in that different ventilation setup, in terms of air sampling, is not well-established. I know Great Ormond Street have those kind of rooms in their bone marrow transplant and are very happy with them and do a lot of sampling, but they have a different setup from us. So I have talked about it with my peers in other centres.

But the point being made here was if there's no national standard, you cannot make a claim about it. So we're saying there's problems are their quality, and the answer is, "How do you know that?" because there's no national standard.

Q Well, a possible response to that would be that there is a national standard for areas treating neutropenic patients. Now, would that be a good response or a bad response?

A No, because there isn't for air monitoring. So you're talking about agar plates, how many colonies of Aspergillus you're allowed.

Q Right, so we're talking about monitoring at this stage?

A Yes, so IAQ is now a big thing, Indoor Air Quality. There's a lot of attention to it now because of COVID, but we already had a lot of knowledge about that because of our

decades' experience in these settings. So there has been a publication of a paper that some of my colleagues have been involved in about air sampling, which didn't actually include people who had a lot of experience of this, particularly Teresa Inkster, and I think it missed the point about setting up in your specific context and being aware of fluctuations, something that's different.

You start to see trends and if you see any case, one case of Aspergillus, because it's so serious for that cohort, you have to look for potential leaks, and maybe there's building work going on nearby, very, very well-established risk for Aspergillosis, so much so that there's national guidance. I think it was the Irish first put out really good guidance on building work and Aspergillosis specifically, and it was adopted in Scotland. It's been-- I mean, I was aware of it back in Crosshouse days. It's just really established that this is a threat and that the premise behind air sampling is to give you the heads up before you get a case. So you want to monitor before a case, but there is-- strictly speaking, there is no national guidance.

Q Okay. Thank you. Sorry, Mr Connal.

MR CONNAL: I did want to take one point from you in relation to paragraph 124, because there's a reference there to Mrs Devine saying they were working on improvement. So, presumably, there's something to improve, but there was no benchmark, and then there's a discussion about the resource to do work on rates of line infection. The only point I want to ask you about is that Dr Armstrong says there's a focus piece of work being carried out, and it was suggested Iain Kennedy would take this forward. Now, Dr Kennedy says it wouldn't have been him and he knows nothing about it. Could you have misremembered what name was used?

A No, not at all. I'd have to check if it was in the minutes, but it was-- I remembered because he didn't seem like the right person to do it.

Q Thank you. We can move on-- As I say, I'm not going to take you to each one of your issues because that will probably take more time than we readily have, but if we go on to 144 of the electronic bundle, I see you made the suggestion of there being a-- in paragraph 127, we should have a patient placement policy to which the answer is, "Well, why don't you send us the ones you've seen

elsewhere?"

A Yes.

Q Okay. Then you were discussing, in 127, single room, air exchange is half of the recommended standard. So that's roughly three as against six chilled beams, which you picked up on, and David Loudon says, "Dumfries have got them." That's the answer.

Then, in 128, on page 145, discussion on infection rates and Mrs Devine says, "Well, there's been a survey, and our rates are fine." I'm paraphrasing a more complex answer. You said, "Well, that doesn't pick up what we're looking at."

A Yes, exactly.

Q Then, there's a point about cleaning and dishwashers where I think the point you were making was acknowledged in part at least.

A Yes.

Q Then, water quality----

THE CHAIR: Sorry, Mr Connal, I apologise for interrupting again. Perhaps, just briefly, Dr Peters, "The system in place was not designed to pick up the kind of infections we were seeing". Could you maybe just tease that out just a little?

A So, point prevalence is, it's supposed to be on one day but it can go over to two days where-- if-- depending on your resource. So, you have a team of people just going around all the wards and assessing if there are HAIs, hospital acquired infections, on the wards. That's a point prevalence, just one point in time, it's like a slice, whereas this kind of problem is a long problem and you get peaks. It will not pick up-- If you had an outbreak last week, it won't pick it up.

Q Right.

A So, for example, it's no good for norovirus if you do it in August because you have winter vomiting virus. So it's one way of slicing the onion, if you like. Just that way.

THE CHAIR: Thank you. Sorry, Mr Connal?

MR CONNAL: I'm obliged. I dealt with 129, and I was just touching briefly on 130, where one of the points, and we've heard about this elsewhere, was requests for information about water sampling not being responded to for whatever reason. Again, Mr Loudon seems to come in and say, "Well, we've got a policy for water sampling." You say that he made it clear, he thought you had no business querying anything to do with the water system.

A Yes.

Q Was that something said or something you inferred?

A I can't remember the wording of it. That's what I took from it, but I can't remember his specific words on it. The impression I was left with was, "This is an Estates issue. He's head of Estates. He's telling me there's no issues with water." Those weren't his words. I can't remember his precise words, but it was-- that's what I took from it. It's like, "Why is water even in this SBAR?"

Q Thank you. Can we go on to 146, which touches on a point I think we've possibly taken from you at least briefly earlier, where Mr Powrie then chips in and says, "Well, we do water testing. We report the failures to infection control." You hadn't seen the history, so you didn't know what the answer to that was, but, of course, this was in October 2017 and we know there was a Legionella test in 2015 that somebody, somewhere knew about originally. I think we know that at some point, in late 2017, DMA Canyon were back in the building doing work. There was no mention of these in this meeting at all.

A No. In retrospect, it is striking that we could be sat there talking with three consultant microbiologists, one of them very, very experienced in microbiology, Dr Redding, expressing concerns about water and the possible-- possible link with infections and for that information to be there in the background and not shared by this time in audits. There was a second lot of DMA. There could not be assurance on the water system now that we know what we know, but we were given absolute assurance.

Q Thank you. Now, you quite rightly say you raised a number of other issues and time was beginning to run out, and you just mention at the foot of that page talking about an unhealthy culture. Jonathan Best is who? He's the COO, yes.

A He was the COO by then. He'd taken over from Grant Archibald.

Q Right. So, the response, to you say-- sorry, Dr Redding saying that roles were unclear, and you say there's an unhealthy culture, is, he leans back and says, "That's just your opinion".

A Yes.

Q You say, "Well, it's not just mine. There are others."

Can I just ask you a couple of things about the SBAR that I've been asked to put to you? In the SBAR, one of the sections deals with water quality and water testing, and it has a date--

an initial date line of 2015. Who prepared that bit of the SBAR? Do you know?

A I did. I prepared the whole of it, really, and then we sat down and checked. I checked with the others. So, because there was such a timeline and I was tasked with it, I authored it and then made sure that somebody else, my colleague-- the water testing in relation to 2017 and which really was the trigger for us going to this whistleblowing step one, was the third colleague at that meeting who had been asking for water testing and was very frustrated that it wasn't being done.

Q The question that's being raised is in that section, and I don't think we need bother digging it out, there's a mention of a number of risk organisms, Legionella, Pseudomonas and Mycobacteria. Who picked these?

A Me.

Q That was you?

A Out of, just, knowledge of water systems.

Q Yes. Was there any particular reason for picking these, or were they just ones that had cropped up?

A I think just-- No. Just-- They're the big ones. I was conscious of Mycobacterium because of the

abscessus situation with CF. So I knew that that was a possibility. So that was probably why Mycobacterium was in my mind.

Q Yes. Thank you. Now, after that meeting ended, we see from page 147 of the electronic paragraph, 135, that your colleague said, basically, "I want out of this infection control role." There was a meeting to discuss, and then you sent another SBAR off, explaining a number of the issues. In the next section, you had ongoing infection concerns. So, presumably, everything hadn't resolved itself. Is that right?

A Definitely not.

Q You were meeting with Susie Dodd?

A Yes.

Q Now, I have some questions to ask you here. You say, on 13 October, you grew Mycobacterium chelonae from a showerhead.

A Yes.

Q Well, can I just ask you, what were you doing sampling a showerhead in 7D?

A I was looking for Mycobacterium abscessus. So this was carrying on with this investigation to assure ourselves that we weren't getting cross-transmission. So, what--

that situation had evolved and I had managed to get agreement that we would get all the abscessus isolates that we had whole-genome sequenced in St Andrews University by Prof Stephen Gillespie's group, who are expert in mycobacterial genomics, because I thought that was really going to help us ascertain both the history and the current status of M abscessus. We're not the only centre to have had issues with cystic fibrosis. There are a number of other centres, and there was an uncertainty about how it was being transmitted, whether it was airborne from person to person or whether it was actually waterborne, or if it was decontamination of shared equipment.

So, others had already in other centres-- I know Papworth had looked and had struggled to grow it from taps and-- but the ecology of the organism is that it is likely in water type situations. So I thought I would give it a go. I'd spoken to Newcastle, who are the experts in, I think it's the PERI group, they designed agar plates so that you can grow it instead of using the laboratory methods for growing TB. It's very specific to the NTMs, that's the Non-Tuberculous Mycobacterium. So I had agreed to have a look in our current setting because we'd moved from the old setting, Gartnavel, Yorkhill. So they weren't going to be an ongoing risk if that was the original problem but what I couldn't assure myself of was, "Are we sure we don't have it here in in RCF ward?"

So it was just an attempt, and I grew M chelonae, which I was not looking for and we didn't have cases of M chelonae in CF. As far as I was aware, we didn't have M chelonae cases.

Q Well, I want to ask you about that. Because you grow this unexpected organism, I take it it's an organism of concern?

A In certain circumstances. So, yes, in high-risk areas it is. So, which is why I escalated it to Brian Jones because he was still lead ICD.

Q So, Professor Jones, Jackie Barmanroy, and there's Joannidis.

A Pamela, yes, because she sat on the water group.

Q You copied in the cystic fibrosis consultants, so they were aware.

A Yes.

Q And Professor Jones says he and the ICNs will take it on.

A Yes.

Q Left to you, what would you have done about finding M

chelonae on the ward? Was there some obvious action that should have been taken?

A Yes, I think-- So, it does grow-- Like in the laboratory, if you-- you can grow it from taps in-- lots of places. It's all about context. So, I think it would be, "How wide an issue is this? Is there a problem with our showers not being maintained?" There's lots of routes that you would go down. I would have said is, A, "Do we have any cases?" So, do a look back. I had a look back in CF and couldn't see any cases but, in terms of other cases, I think there should have been a look back.

There could also have been checks on the water group. "Do we have everything in place?" It's just an opportunity to do another check through all the things that ought to be in place in a proper risk-mitigating strategy. Then also, "Where else could this be that might matter?"

If you knew the history of the water system, you would more rapidly take it further. So I think if that's all you knew, it may take you a bit longer to get there, but instantly it would be about that ward, how widespread is it, is there a problem with showers, is there a problem with taps, where else could it be? It is a clue to there maybe being something around the water system not being right. I think if I'd known what I know now, it was more of a red flag.

Q Well, I've been asked to ask you a little bit more about Mycobacterium chelonae.

A Sure.

Q Some of which takes a little bit out of order, but it's probably easier to just do it in a block at the moment. At that point, were you aware of a 2016 case in Ward 2A of the same organism?

A 2016?

Q Yes.

A No. I am now.

Q You are now, but you weren't at that time.

A Now, but not then, no.

Q And are you now aware that there was then a case in June 2018 of Mycobacterium chelonae?

A Yes, I knew about that case. I was involved in that case.

Q You were involved in that case. Am I right in thinking that it's a difficult organism to treat in a patient?

A Yes, it is. It's slow-growing and resistant, very resistant, and you really need your immune system to be intact to deal with it. So you kind of have to wait for your immune system to regenerate to be

able to clear it with the cells. So you need cellular immunity to clear it.

A Does it require possibly more than one antibiotic, or is it----

A Toxic, very toxic. Antibiotics. It's similar to, I mean, abscessus. This group of organisms are generally very difficult to treat. You need long-term treatment, you need very-- toxic antibiotics that can cause big problems. So I've experience of treating Mycobacterium abscessus in paediatrics and adults now and it's a hard journey for the patients. They cause a lot of nausea, a lot of allergies, renal problems. It really isn't a good organism.

Q Is there any particular reason why this organism is such an issue to treat, or is it just----

A Just the biology of it. Yes, its cell wall and-- It has a very thick cell wall, my God, its cell wall, so it is intrinsically-- It gets established in little microabscesses and then the antibiotics can't necessarily penetrate right in, so there's a couple of issues as to why it's difficult, and, also, we haven't found the right antibiotics, I guess, yet.

Q Are you aware that there was a case of the same organism in 2019?

A Yes.

Q Were you aware of it being found in bedrooms-- told in bedrooms at Ward 2A when the ward was empty?

A No.

Q I suppose the general question I've been asked to raise with you is, given what you now know about this organism and what you know about the difficulties of treating a patient if they contract a problem with it, is there any issue about how you think this organism was treated in the Queen Elizabeth Hospital?

A I think, at that stage, there should have been more interest shown in the high-risk settings to whether it was there or not. Unfortunately, in the literature, there's mainly outbreaks described. So Edinburgh had an outbreak, but it was associated, I think, with a tattoo parlour, so you have one central source and lots of people get a very similar organism. That's very different from other settings where you've got potentially lungs being infected over time, again, from this diverse environmental source.

It also does exist in other places outside the hospital. So it's back to that idea of, just because an organism can be found outside a hospital doesn't mean you should ignore it in a

hospital, because a hospital setting is so specific. You get high bioburden in vicinity-- in close proximity with very immunocompromised patients with breaches in their skin. So, yes, I think it should have triggered actions.

My understanding was that it was taken and discussed at the water group. I don't have emails to that effect, but my understanding-- Because I followed it up, and, again, unusually for me, it wasn't in writing. My understanding was it was taken up at the water group.

So, yes, in retrospect, more could have been made, at that point, of it and if there had been a previous case, that could have been typed with the ones that I'd got. Even though there's a big, long gap, you would maybe start to understand what's going on.

That original case-- and I had looked back into that case, it was picked up by the microbiology team. In our Telepath system, I don't have visibility on any Infection Control input. I think Alison Balfour had authorised the result, so that's as much as I know, but we were, at that point, separate teams so that-- I don't recall any discussion, like a morning handover or anything because there wouldn't have been. So it's an example of lost knowledge that may have made a difference.

Q Thank you. I think I can probably just finish a sort of section of your statement because, after the Mycobacterium chelonae find that we've discussed at some length, you talk about becoming aware of an issue about air quality in the Teenage Cancer Trust Ward with people not being very sure whether anything's being done about it, and you go on, in 139, to talk about the fact that you were trying to cope with the issue that no one was prepared to pick up the baton of being ICD. Right?

A Yes, so we had three ICDs, as I mentioned, and they all wrote a letter of-- we say resignation, but it's, you know, "We don't want to do this anymore," all three of them, which left me in a position where we still didn't have Teresa Inkster. We were low in consultants and low in trainee numbers, very low, and I have a number of communications with Brian Jones as my lead, you know, "What can we do here?" You can't just drop an Infection Control service, I'm very aware of that. So we agreed that, for the short term-- Because, once again, I took the opportunity to say, "There are such big problems here. This isn't-- It's not normal for all these ICDs, over time, to be refusing to do

it," and some-- you know, some of them have a very big interest in infection control.

So, what we agreed for a short term was-- and I spoke to my colleagues, and it took some work because we were all-- flat out, we were covering extra weekends and everything, but to say, "Look, until this is properly sorted by senior management, can we all agree to take a turn to man the rota?" So, I would have microbiology-- I just added an extra column to our rota, because I did the rotas, and we'd have, you know, blood cultures, ITU, paediatrics, and I added a fourth column, Infection Control, and I would ensure that there would be nobody double-hatting on the same day, to allow you to have the whole day.

It was tricky because-- and I know I've been criticised about this situation, but we all had different days that people worked. So, some people are off Monday, Tuesdays. By this time, I'd given up being off on a Thursday, Friday; I just was working my off days because we were so short. We had-- For example, Alison Balfour did one session a week for Infection Control. So then she had to agree to do maybe two because she was only half time, and so there wasn't the

ability within the staffing to say, "Right, we'll have somebody on for a week," which would have been ideal – or two weeks or a month, you know – just for continuity. We couldn't do that, and then there was annual leave and there was sick leave on top of it.

So, some days, it literally was, "Who's turned up today and how can we re-man Infection Control and give it priority?" And because we were getting no-- there was so little input from the SMT in Infection Control, I wanted to ensure that everybody knew what was going on. I set up an email box, so that if you were on for the day, you could have access to everything that's been said so there's nothing hidden, the whole team have access to what's coming in and what's going out.

I did an SBAR of a risk assessment of this setup because it was acknowledged by everybody, "This is not great," and I pointed out what the risks were. I tried to mitigate the risks within the confines of what we had. Also, almost immediately, the ICNs did say that it was difficult because they didn't know who was on for the day and I think, sometimes, some people were better at picking up the emails than others perhaps, but then what we did with that was share with them our rota so that they could

see who was supposed to be on. That sometimes changed because of sick leave. As I say, some people had other health issues at the time.

So, it really was a sticking plaster situation and there was a lot going on. If you see the handovers, there was an awful lot going on at the time. Sometimes I would try and make a run, so rather than one day, one day, one day, I would say, "Maybe I'll do three days," and then somebody else will do it, and I think people said I'd taken over Infection Control which is absolutely not true, but I was very aware that some people really struggled to do it and really did not like doing it. So I would sometimes pick up somebody else's session and then I would usually go through the handover and try and make sure none of the balls were dropped. So we'd go through lists of handovers, 10, 11, 12 issues, and say, "Right, where are we at with this?"

So it was inefficient, but it was trying to be as safe as possible, so that nothing got missed, and checking that people knew which meetings they had to go to and all of that. So, yes.

Q Thank you. I wonder if I might just take one more matter, my Lord, just before we have a break. Can we go on to 148? I'm going to

ask you about paragraph 140, the "piece of string" comment I just want to get to. Can we have bundle 14, volume 1, 746, please? I'm just trying to-- We'll need to scroll down to see where the email chain starts, if we could.

Right, yes. What seems to have happened, in this instance, as I understand it, is that you were the microbiologist covering paediatrics, and Professor Gibson, who we've heard from, says, "Well, we're going to introduce antifungal prophylaxis following a recommendation from Brian Jones," and you say, "Well, I don't know anything about that, but I'll try and find out," and you ask him about it and he says, "Well, it's to do with the situation." What did you understand him to mean by that?

A The air quality, Aspergillus being grown, a beginning of a realisation that there were still ventilation issues there. I don't know, I assume-- I was surprised that he had had that input because he didn't have a paediatric remit. He was the microbiologist for the bone marrow transplants, Scotland-wide. So I think it was in that role that Prof Gibson had approached him, but I hadn't been involved----

Q Can we go back to 746

on the email to see if we can find-- We see, near the foot of that page, you're saying to Brian Jones:

> "Thanks. That's helpful. Would I be right in anticipating the length of prophylaxis would be around five weeks?"

There were, no doubt, various issues about continual prescribing of any prophylactic drug, and then the answer comes from him is, "How long is a piece of string? Hard to be prescriptive," and then he says, "Having HEPA-filtered rooms under positive pressure would help," and I've made that point, and your reply is, "Yes, we've been making that for a while."

A Yes.

Q In fact, for more than a while, I think, by that time.

A Yes, two and a half years, almost.

Q Two and a half years. Thank you. I think that might be an appropriate point, my Lord, to stop, if that's all right.

THE CHAIR: Yes. We'll take our coffee break, Dr. Peters, and if I could ask you to be back for twelve.

THE WITNESS: Yes. Thank you.

(Short break)

THE CHAIR: Mr Connal.

MR CONNAL: Now, Dr Peters, can we bring back your witness statement at, yes, 148. In paragraph 142, which starts there and runs onto 149, you're telling us about some mould issues in 2A, but the underlying point that you're making, I think, there is that here we are in 2017 and you still really don't know anything about the ventilation spec for specialist ward.

A I think we didn't know the specific-- we didn't have a solid, secure, evidenced understanding of what the baselines were. So there was great confusion as to-- Even though the sampling was being done, what did it mean? So this was two years-- over two years since the unit opened and you could argue, day one, this should have been a very straightforward exercise. So, yes, I've used the word "farcical", which seems strong, but it really, at that point, was. Because there's a lot of experience in the hospital, more so than any other setting in Scotland, around air sampling, and we didn't seem to be able to pull together a rational way of dealing with it and a systematised SOP, agreed courses of actions, even though all of that was just routine

previously.

Q I'm going to move on, if I may. Go on to 149, please. In paragraph 144, you're dealing with the fact that-- yes, the chronology, that was a point at which you got an update, at least, on your whistleblowing, which was a response about communications. I think to some extent I asked you about this particular issue about communications earlier in your evidence, so I'm not going to go back----

A Yes.

Q -- to that now. So, if we go to 145, which is on page 150 of the electronic version. So, here, we have a different individual featured, not the colleague that we've been talking about previously, not Dr Redding, but now Pepe Valyraki.

A Valyraki.

Q Valyraki.

A I'm sorry, I've conflated-- I thought this was the situation we were talking about earlier with the flapping----

Q Right.

A -- and the leak testing. So this is what this paragraph is about.

Q Yes.

A And the earlier one in August must have been an earlier situation that the other ICD at the time had raised concerns about, and that was to do with something different, that was to do with sealing the ceiling tiles. Because that makes sense because it was predated, and that was the occasion that I talked-- that we had a meeting with Brian Jones. I'm sorry, I jumped to this case because it was in my mind.

So, there's two situations back in August. There was trying to seal the ceiling tiles and that was the other colleague who had concerns about it and the HAI-SCRIBE and that was when I escalated to Jennifer Armstrong after Brian Jones had asked me to. This is the same ward, and it's the follow-on piece of work because once the ceiling tiles are sealed, you need to do a leak test. So that narrative I gave earlier actually fits in with this. I'm sorry, I got the timing muddled up.

Q Well, I think we'll find the narrative in your witness statement----

A Yes, I think it's right in the statement----

Q -- I think we should be able to move----

A -- I think I jumped ahead.

Q -- conveniently through it, but Dr Valyraki is another of the ICDs. Is that right?

A Yes.

Q And is this the same issue again that someone doesn't feel happy being asked to sign off?

A Yes.

Q I mean, you say she was very upset?

A She was.

Q So, Professor Leanord's already signed off----

A Mm-hmm.

Q -- a few things, and Professor Jones, according to this, is asking Dr Valyraki to sign off. Why isn't Professor Jones signing it off?

A I don't know.

Q Anyway----

A I think that's why she-- because that's why she copied me into the emails, because she felt he should do it, but he was tasking her and as her line manager, she was looking for support.

Q Yes. This is the bit that I think you described to us earlier----

A Yes.

Q -- where you said, "Well, we'll just go up and have a look," basically----

A Yes. Yes.

Q -- and then what you describe is getting to the ward and discovering that----

A Yes.

Q -- there was dust, and I think you explained to us that one of the issues at the time was that pressure testing-- sorry, leak testing, I think----

A Yes.

Q -- was being done by the use of quite significant air pressures; hence, dust was blowing, and was the concern, simply, other patients within reach of all this dust that were blowing around?

A Exactly.

Q Yes. So what Dr Valyraki had been asked to sign off, as you say in 148, was actually leak testing, and there was no debate about it, you say she had a coughing fit in the middle of it.

A Yes, yes.

Q So, you were the line manager, your member of staff has come very upset. So you've offered to help, you've gone up, and you then try to get information, I think, to assist you in signing off. Is that right?

A Yes.

Q I think at the foot of 148, you talk about trying to get something from Sandra Devine and not having much success?

A Yes.

Q So is that a similar tale to the one you've told us previously?

A Yes, because inherent in

signing off a piece of work like that is understanding what the purpose of the piece of work is. So I think that there could be a view that somebody signed off the overarching project and this is just a small part of it, and so what's the big deal? Just sign it off. My view is, to do a competent job, you need to understand where in the process it is, what's the point of it, have you adequately addressed the issues for this part of the project, and how does it relate to the bigger project? So it's a matter of informed, competent decision-making and risk mitigation in the context of patients on site.

I think it was with verbal conversations between Brian and Dr Valyraki that, you know, "She should just get it done with my help." She, at that stage, I don't think signed off SCRIBEs, so there was an element of me showing her the SCRIBE, you know, what I would probably do with it. So it was the same. It was the same root cause.

Q And what you did was you set up a meeting to discuss it.

A Yes, because on this occasion, there were, as I said earlier, actual immunocompromised patients in the same ward, where there was potentially going in-- the treatment room was in the middle of the SCRIBE area. So, in any other setting-- in any time I've had to stop a SCRIBE-- So, you can say, "Stop, this is not safe," to whoever's doing the work, and then you obviously need to speak to the clinicians, you need to pull together Estates, you need to pull together the appropriate people. I've had experience of having to do exactly that in Crosshouse and also at the Queen Elizabeth in another setting, and that's what you need to do. You need to do this safely. There isn't a route out of doing work in a hospital unsafely. That's just not a deal.

So, unfortunately, I didn't get any support in trying to get this meeting together, and I did it with Dr Valyraki, and normally you'd just say to the team, Infection Control team, "We would like to organise this meeting," and the secretarial support for the Infection Control team would contact the key people. It's very routine, it's what the team does, book a room, get minutes taken, all of that sort of thing, but there was no support for that, it was just flat out, "We don't think this is necessary."

So I just went ahead and booked a room and pulled together people. I had informed Rachel Green by this stage, because it was after our meeting with Jennifer Armstrong, was

obviously taking a large interest in how Infection Control was working. So she said she would come along to the meeting, because I informed her of it and she came along to the meeting.

We got clinicians who I thought were the right clinicians, but they apparently weren't the right clinicians, but that was part and parcel of just not having the support to pull together the correct people. I thought I had the correct people around the table. We went through what I thought was a really standard approach to a HAI-SCRIBE, in which you find that there are problems in a high-risk unit but it was a very, very difficult meeting.

Q One of the issues that you highlight in paragraph 150, which we get on 151 of the electronic bundle, is that one of the-- I think the nurses there says, "Oh, the doctors say there's not a problem," and you'd been told, well, there was a problem because people were having to be put on a prophylaxis because of the works.

A Yes.

Q There seemed to be a question about whether you were causing a delay to works when people were very keen to get this job finished.

A And, I mean, it's understandable. They'd been off-site for a long time, and they've been promised deadline after deadline but my position is always, well, you can't do a piece of work properly and safely if you don't follow the well-established HAI-SCRIBE process. So, yes, it's unfortunate that there is a delay, but you don't weigh up one risk against the other. What you say is you do the SCRIBE properly and that will actually ensure that you get there faster. So there was no buy-in, I felt, around the table that this was actually an issue. I think there was a, "What's a bit of dust in the air?" type feeling.

Q The one thing I just wanted to ask you about, remind us who Dr Green is.

A She was chief of medicine for diagnostics.

Q Because you record here being told not to contact Health Protection Scotland.

A Yes.

Q Were you told why you were not to contact them?

A No. It's not the first time in Glasgow I'd been told not to go outside the organisation or to-- got in trouble for speaking to-- So, one time I spoke to Prof-- to Mr Hoffman and I got in trouble for that, which is-- you know, consultant colleagues across the country, if you have something you don't know much about, you just

phone around to people that you think-- obviously, you're not giving patient details, but you're asking for expertise, a bit of peer support. There's a feeling that, in Glasgow, you keep everything tight inside and there are only certain approved routes of anything going outside. So it's a very controlled environment.

And for somebody like me, just to pick up the phone to HPS was absolutely unacceptable, but I had been told that HPS had signed off-- again, the word "signed off." HPS would never do a HAI-SCRIBE 4 for a specific setting or a SCRIBE 3, so that seemed odd to me.

Q And it turned out they didn't know anything about it.

A No, because I went ahead and emailed them.

Q Yes. Thank you. Well, can we move into 2018? I'm conscious that at certain parts of your statement, you're narrating material which comes significantly from Dr Inkster or from discussions with Dr Inkster.

A Yes.

Q And, of course, we'll hear from Dr Inkster.

A Sure.

Q So we may be able to move past some of these. But can we go on to 152? So we're in January '18 – Dr Inkster comes back from sick leave and then resigns and you're not very happy with that, and apparently that you understand Dr Inkster shares some of your concerns, but somehow she stays on at that point. Is that right?

A Yes. Yes.

Q Now, you then narrate some information about the Cupriavidus case. Dr Inkster had dealt with that, and there was a question about what the link was. I don't think we need to delay you on that one.

A Sure.

Q We see in 155, which is on page 153 electronically, that you were asked by her to attend a meeting that had been organised with Estates and so on to discuss PPVL rooms, which you've been talking about on and off since the start of your evidence. Perhaps the interest in that meeting is the appearance of Mr Thomas, who I think you explained to us earlier was the "inventor", or whatever the right word is, of the clever PPVL room concept, and you raised certain issues with him about how you had to put all the bits together to make it match what his design was. Is that right?

A Yes.

Q I think this is covered in 156 in your witness statement where you're basically saying, "Well, if you don't put the extract in the right place, does that kind of invalidate what you trying to do?" and he says, "Yes." And then you note that he says to you verbally, "What you've got here doesn't match my design," but you understand that's being taken forward by him with Mr Powrie. Is that right?

A Yes.

Q Thank you.

A And Mr Powrie was of the same view, I think, from the beginning with me, and we'd done a bit of work with smoke and looking at pressures within a suite. So we were both very much in agreement on this.

Q That was that the PPVL rooms as built did not meet the intended design?

A Yes.

Q Thank you. I'm not going to ask you about the next couple of paragraphs. 159, which is on page 154 of the electronic bundle, we're in March, you're asked to test some taps and showerheads, take some samples, you take somebody with you and you found some gram-negatives. Is that right?

A Yes, a number-- a lot of different gram-negatives, actually. We were initially looking just for Cupriavidus and this is the difference between just following guidance and having a bit more thinking around a process. So while the initial setting and the task I was given by Dr Inkster was to look for Cupriavidus, when I looked at the plates, I could see that there were other organisms. Cupriavidus was growing kind of slightly blue on the plates, so you could actually see them.

And there were a number of other organisms, and there was lots of Sphingomonas, some Pseudomonas, and a number of other organisms. So if this had just been guidance-driven or an SOP, you maybe just would have reported Cupriavidus, but because I had an awareness that these organisms in this patient cohort could actually also be a big problem, I identified them and reported them. I noted things like Delftia, that there had actually been cases with that, and there were- these are things I hadn't seen in my career before. They're not undescribed.

So, most organisms, if you go to the literature, you'll find somebody somewhere has seen it. So you're not talking about undescribed things. You're talking about unusual for you, and I did this with a trainee, this work

on the taps and showerheads. I wrote a report. I think I must have put it in. Yes.

Q But you weren't further involved in the issue of taps? That wasn't something you were involved in?

A No, I was just given those taps and showers, and I wrote up my methodology, wrote up what I did, and sent it into the IMT, and that was the end of that.

Q Before we move to June 2018, which is your next heading-- Just so we've got that clear, go to 155. So before we go to June '18, I want to ask you about a document that comes into existence just before that, which relates to your whistleblowing case. Now, I don't want to ask you great detail about this because we know a lot of the issues that you've raised but can we have bundle 27, volume 3, 472, please? This, as we can find out if we ultimately scroll to the end, has been produced by Linda de Caestecker in May 2018 and is a report on a stage of your whistleblowing process.

A Yes.

Q And we can forget the introductory and background material, because that would be repetitive of what we already have but if we can go on to 473, perhaps the interesting thing is the people she says she interviewed. Because we find she interviewed Dr Kennedy, Dr Jones, Mr Walsh, Sandra Devine, Dr Green, Dr Inkster, and Mary Anne Kane.

A Yes.

Q Doesn't seem to have interviewed other ICDs, for instance.

A No.

Q And then she sets out findings and issues, and we can all see what they say but that they-- Some quite interesting discussions here. If you look on to 474, she says she "discusses with the lead infection control doctor, 3 versus 6 air changes," so that's presumably the ordinary room. "Building note recommends 6 air changes," so that'll be SHTM 03-01.

A Yes.

Q

"However, the infection control team consider that the additional risk to patients in standard accommodation is negligible as 3 air changes brings contamination down to 5% and it is single accommodation."

Were you aware of any such discussion with the Infection Control team?

A Definitely not. That's not-- It doesn't make sense. That 3

air changes brings contamination down to 5 per cent doesn't even sound right from the graphs. And, also, 5 per cent of-- For example, if you had somebody coughing up lots of XDR-TB, or because they may have to be housed in 5C before they get moved across to the other place, it's significant. So a) it's not right and b) there is no risk assessment I am aware of that came to that conclusion.

Q The next paragraph says that:

> "Ms Kane has confirmed that an expert is being recruited on a part-time fixed-term basis to specifically look at ventilation in the QEUH and RHC and to make any recommendations..."

Were you aware of that?

A No, not aware at all. And just going back to the 6 versus 3, I think it's also important to note that the importance of 6 air changes is not just, say, a single contamination issue, like you have one cough. The 3 versus 6 is the longevity of it. So the steady state, if you like, is much, much higher with 3 versus 6. So it's not just about the time it takes to clear, and that becomes very important in COVID.

So there's a problem with that, and, no, I did not know that anybody

was being asked to-- I now know there was a Jim Leiper report, but no.

Q Well, I just need to put to you a couple of things before I leave this. We've seen who was interviewed and at the foot of the page we're looking at, at the moment, which is I think the third page of the report, about 474 on the electronic documents, there's a note saying:

> "Doctors Redding and Peters raised concerns that they were not being updated ... I discussed these concerns with everyone interviewed."

So presumably the people who we've identified. And then the report back from these people is that you find it difficult to accept balance of risk. You don't accept being part of a team listening to views of others. You don't accept Infection Control as a nurse-led service. You sent frequent requests for updates which are not relevant, and you've caused great anxiety to colleagues. Now, do you accept these criticisms?

A No. I mean, I sent a lot of emails, as you can see, and as far as I'm concerned, every single one was a necessary part of my job. They related to real situations, real patients, real risks, and in the absence of any

other route or methodology for communicating those things, then that was really the way to do it.

Q Can we go on to 475? There's a discussion at the top about issues of ventilation being on a risk register. Then there's a reference to chilled beams on the risk register, and a statement attributed to Ms Kane saying that infection control doctors were very much part of this process, which presumably must be something to do with the selection of chilled beams. That information that you had?

A No.

Q The only other thing I wanted to put to you, which might, in the context of the evidence you've been giving us, be slightly surprising is that Dr Inkster seems to criticise you according to this report because she says-- or she's said to have said in paragraph 2 on that page:

> "Agreed that the whistleblowers were right to alert the concerns and their diligence and insights should be acknowledged and respected. [Then she says] Dr Peter's behaviour is a problem in needing to know too much detail on issues not within her remit."

Is that something you'd heard from Teresa Inkster?

A Yes, so there was a period when Dr Inkster, mainly through the IMT process, felt that I was asking too much of communication. We discussed it and there were certain things-- the feedback I got from her about some of the emails I'd sent. Things like I'd put responses in red type and that came across as aggressive. So I took on board these comments and didn't do that again and, also, we resolved differences.

I think she had found the IMT, the water process, really-- well, obviously, it was a massive deal. I had written to ask, I think one of the particular situations with regard to that was the use of prophylaxis, and one of my colleagues had been asked about it when they were on call for microbiology and they had not had any communication, and a similar thing happened with another colleague on call. They had brought it to me as clinical lead, so I had written and asked for-- you know, basically suggested that the communication had not been adequate. I now understand that actually there had been an email sent to one member of the team which hadn't been shared with everybody.

So there was, I think, some basis

to this. It was unfortunate. It was not intentional on either of our parts, and we were able, as professionals, to sit down and discuss it and take on board what had happened with that.

I had also written, at the time, a list of reasons-- So, for me, as the microbiology-- one of the microbiologists going and looking after the-- giving microbiology antibiotic advice on 2A, I needed to know who was on cipro and why, because it's not-- you can't just do a blanket, "Everybody's on ciprofloxacin." It needs to be individually tailored to that particular patient, in terms of where they are in their treatment, what their risk profile is, what other antibiotics-- I've got a whole summary of the things that I-- our colleagues and I had-- In recognising this was now happening even though we hadn't been informed, these were the things we had to keep track of.

So, I think you'd have to ask Dr Inkster specifically what she said at that meeting and what she had-- what importance she lay by that and I would say that there was-- yeah, at that time there had been difficulties between us which we were able to overcome.

Q Can we just move very briefly to the last thing I want to ask you about, which is paragraph 5,

conclusion, where it records:

"Whistleblowing concerns about ventilation and patient safety were real, but had already been dealt with in the main with action plans for the rest."

First of all, would you agree with that statement?

A No.

Q I don't need you to go into the details.

A No, I don't.

Q I just want to know if you agree with that?

Q And then there's a reference to the point we've just discussed and then there's a slightly general statement, "Timescale for some of the improvements required are not sufficiently clear." I'm not sure what that means, and then there's a statement:

> "There is now agreed policy that any changes from building regulations or original specifications must be signed off by infection control."

Do you know where that came from?

A I think Dr Inkster had written the role of infection control in the built environment, but I think that had predated 2017. I would need to check on that, but there was-- it wasn't

new. I mean, this is-- you know, this should be in place since 2002, but I think given all that had been experienced, she had felt the need to put together that paper.

Q Thank you very much. I don't need to look at that any further, unless your Lordship wishes to take anything more from it. No?

THE CHAIR: No.

MR CONNAL: If we can then move on, we're about to go back-- if we go back to your witness statement, just to take that as a guide. We're going into June '18. You've got some more information from Dr Inkster, this time about drains in 2A and, in paragraph 164, I think what you're explaining there is that someone had said there might be a problem with overprescribing of a particular antibiotic, and you went and did an analysis to try and work out whether there was any truth on that assertion, checking everybody and it turned out that, in fact, there wasn't. Is that correct?

A Yes, and it's a fear-- you know, you do have to look at your antimicrobial prescribing in any context that involves bacteria and their trends. So, I was asked-- I think Dr Balfour had also done a piece of work around meropenem use in the unit and had also concluded similar, but what I did for this was not a broad use, but looked at the 17 cases, I think it was, that the IMT had included in their case definition. I went through each and every one of them to see if their use of meropenem was justified, I guess, by our protocols and according to what had already been grown or if they were allergic to other antibiotics.

So there are lots of reasons why you might end up using meropenem. It's a very, very useful drug, but there are difficulties associated with it and it can select out, for example, for Stenotrophomonas and others, but I didn't find that that theory explained these cases and I wrote that up and also made a bit of a recommendation to my colleagues that, as I'd gone through it, we need to keep our documentation tight.

Q Thank you. If we move on to 156, Professor Gibson wanted a meeting with microbiology and Dermot Murphy, I think, was one of the other consultants because of concerns about increasing infections, and what you did-- and I think you did a presentation, I think, with Ms Harvey Wood. Is that right?

A Correct, yes.

Q Which is a sort of PowerPoint presentation. I'm not

going to ask us to put it up on the screen, but you felt it demonstrated, I think, your words are, “a striking epidemiology of gram-negative organisms.”

A Yes.

Q You think that’s an accurate description?

A Yes.

Q And you set out in the rest of paragraph 166 why you say that was, and then you touch on the use of antibiotics, and you pick up the fact that the advice that was given was subsequently approved of by a case note review. So I’m not going to go through that with you.

At 157, please, this is where you’re told about BMT patients moving out of 2A-- sorry, patients moving out of 2A and 2B by Dr Inkster, and you sort of keep in touch, is what you said. I need to ask you one thing about October 18, Dr Kennedy’s report. You weren’t very excited by that report and we see your comments on it. Now, Dr Kennedy would say, “Well, I don’t remember Dr Peters setting these comments out to me,” and he says that the conclusion of the report was there was a clear increase in gram-negative infections, and further work was needed to understand why. Is that not a sensible conclusion?

A I think it failed to pick up on not just the gram-negatives as a whole, but the nature of the gram negatives and what that would be directing your attention to, in terms of what a probable focus would be. It also looked at quite a large-- from memory, I don’t have it right in front of me, but the denominator data.

There are debates around the denominator data. It depends what you’re trying to do and depends what you’re trying to look at. The easiest denominator data I had looked at was the number of blood patients with blood cultures as a close proxy for the number of patients because basically very few patients come in, in that cohort and don’t get a blood culture. So, it was-- that’s what I used as a proxy for the number of individuals coming through and being exposed to our unit.

There are pros and cons to every denominator you use, but I didn’t think it went far enough in delineating what the problem and the interesting bit of the epidemiology was. I did have conversations with them, because I remember we decided that I would give my-- because our figures didn’t always match, and so-- because our gathers-- it was Kathleen Harvey Wood’s data, really, she was very

particular about keeping her datasets up to date and she would do a gather in our Telepath system that was based on consultants rather than location, because often these patients could be scattered about the hospital, including PICU. So she had a very granular view and she would know each patient by name and exactly what had happened to them, what their clinical-- so she had a very, very close-up view and her data was excellent.

So I was using-- I was kind of piggybacking on to her excellence and Iain Kennedy was using a different approach. So there was a view-- Teresa felt-- I think I sent it to Teresa-- had had the discussions with Teresa and there was an idea that, "Right, let's nail this. Why do we have discrepancies? What kinds are we actually talking about? Who are we talking about?" And any data depends on what question you're asking of the data as to what you pull out, so, yes, he maybe has a fair point with the conclusion but I think it was going further, that was what my concern was.

Q Thank you. Can we go on to 158, please, and we're going to move into-- apart from a general statement about negative pressure rooms still not being ready, which

you've quite properly recorded there, we're going to come in to just touch at least briefly on Cryptococcus. We've heard from a number of witnesses that Cryptococcus in a healthcare setting is unusual, to put it no higher. Would you agree with that?

A Yes.

Q And had you come across it before in a healthcare setting?

A In terms of treating patients, yes, but not with any question of it having been acquired in hospital. So, I had already-- I'd treated-- or been involved in the treatment of a case-- two cases, maybe three with slightly less involvement in my-- the course of my career before these cases occurred. So I had a good knowledge base of the organism, its link to pigeon guano, and also its general epidemiology in the HIV setting, because that's really where most of the information has come to light with that organism globally.

Q Yes. What we then come to, I think, is a narrative discussion of a number of patients where you had occasion to look at what had happened to them in the context of potential Cryptococcus. I think the first one starts in paragraph 172, and this is somebody who had

been treated on Ward C, and I take it this is you checking the records to see what is available about this particular individual.

A Yeah, so we had-- I was copied into this email, so I was clinical lead still. One of our trainees had picked up the organism and was emailing Prof Jones in his role as the microbiologist for the bone transplant unit. So I discussed it with the trainee, and I had not seen it in that patient cohort before. I had not got a lot of experience in BMT, but I do in haemato-oncology outwith the BMT setting and, also, Teresa has a lot of BMT experience. So this was, yes, an unusual case.

So I would have gone through the case and, also, second case, my other colleague-- we, by this time, had managed to recruit another microbiologist who left after six months for a lot of the reasons and concerns that we had been raising, but he mentioned-- because we try and have coffee, you know, most days to just touch base on what's going on and he mentioned a pediatric case.

I-- The way I was able to pick up that there were two was I was aware of this first case, and it was striking to me that these two should occur so closely together and I said, "You have to tell

Teresa," who's the infection control doctor.

Q So, just moving through your witness statement, having looked at various factors in relation to its individual patient, you've reached the conclusion in 174 that the illness was compatible with Cryptococcus consistent with an HAI.

A Yes.

Q That's the view that you formed.

A Yes.

Q And then if we go on to the next page, 159 in the electronic-- paragraph 175, you're then told there's a pediatric case and that, I think, raises alarm bells with you and say, "We've got to go and tell Dr Inkster," and I think you say here, "Must be pigeons somewhere."

A Yes.

Q Because of the well-known link, and you were asked in particular to help with the plantroom inspections and we've heard quite a lot about plantroom inspections already in the Inquiry, and you're also asked to contact Mr Hoffman, seems to be the default position is phone Peter Hoffman.

A He's very accessible or he was before he retired.

Q So, by "accessible" you

mean he's quite happy to speak to people on the phone, I take it, rather than insisting you send him a request or form or something.

A Yes, and I've met him before. We actually went to India to do an infection control workshop and series of lectures, so we'd-- you know, to enable me to phone and talk sensibly about the kind of issues that we were needing to know about.

Q I think I can move past some of this reasonably quickly because we've already heard a fair amount of evidence about it. If we go to January 2019, you've been asked to contact Mr Hoffman. You go to plantrooms with Mr Powrie and Mr Conner to see what can be found, and you explain that there was some sign of "pigeon guano", the latest word we're using for it.

So, 160, it turned out that Mr Conner had access to other pictures, and we've discussed that with him, and we see, in paragraph 181, you're talking to Colin Purdon about how the pigeons get in and whether there's a gap in cladding and so on, which I don't think we need to delay on. But you say, "Well, there's all this pigeon infestation. There must be a risk that some of it's getting to the patients."

A Yes.

Q Now, 182, you say that Estates and public health teams continually challenged any view that the plantrooms and the like were the possible source. I think Dr Kennedy denies mocking your views at all.

A It wasn't my views, it was Teresa's at an IMT, so this was reported to me. So the-- direct to me was the Estates personnel. So, when I did the plantroom visit, there was a lot of emphasis by Mr Conner-- Darryl on, "There's hardly any pigeon excretia here, there's just small amounts, there's always not that much." So that was the tone of a lot of discussions with Estates, there wasn't that much of it. So, really, how big a risk can it be?

Whereas this was-- Teresa reported to me that at the IMT-- well, this is second-hand, I admit that. So it's maybe best to ask her that, but we were comparing notes about how we felt nobody was listening to us, and we certainly expressed the view, and we're not the only ICDs to feel that there is a very strong flavour of sexism throughout this, that we were females talking about engineering issues and, in general, not being treated with the same level of respect as our male colleagues. So I think that's what that is, but I agree that that is not to me by Iain Kennedy and it is second-hand.

Q Well, if Dr Kennedy and you are not directly involved----

A No, no.

Q -- we will take that up elsewhere, and then you have a discussion about the Board's statement and, in fact, you continue to do something about looking at pigeons on and off because of the issue about mucor, which you said is a similar arrangement. Am I right in thinking that you have information indicating there have been more recent cases of Cryptococcus?

A Yes. There's an interesting emerging epidemiology, I would say, in Glasgow that there have been four-- I'm aware of, I don't know, because I'm not monitoring them, but I'm just aware through my practice of there having been four cases in the last 18 months or so, within that time frame, which, according to the data in reports that we've seen in Glasgow, your sort of expected rate would be one or less than one a year. So that is still--

What's striking with it is, as it was with all the cases in 2018, is that they all have a link to our hospital premises. In and of itself, that is not conclusive, but it is something worth exploring and keeping an eye on, because if you've got immunocompromised patients in a setting where you have less than standard ventilation, even in settings where there's only the three air changes, that is increasing by a significant degree the amount of air being breathed in that could be contaminated and if, on top of that, you have, within the vicinity of the building, a lot of the source material, put that together, you really need to be following up the epidemiology within those immunocompromised patient groups who may have had a link. Oh, no, not who may have, who have had a link to the hospital.

There are, of course, pigeons in other places. The case I'd originally seen in my-- was somebody looked after pigeons, they had pet pigeons. So, there are other explanations, but it's enough of an epidemiology with a link to a particular floor in the building that I would expect ARHAI to be after this incident. Whether anybody agrees with a solid conclusion about the link--

Sometimes problems emerge over years, and because the incubation period of Cryptococcus can be so long, into years, or you can get reactivation many, many years later, the exposure could either be historic and, therefore, things may not emerge for years or there could be ongoing pigeon problems. I have no data to tell

me which of those is, but somebody somewhere, I hope, is monitoring it.

Q Thank you. Can we move on to 161? We can skip past 184. 185 was the point I was making about mucor, was something you were asked to look at, and you had a bit of an issue with Mrs Devine on wording. Then, in 186, which we'll find mainly on page 162 of the electronic bundle, you describe a visit from the HSE, and I don't want to ask about that, other than the end of 186, this is 162, to you record something here:

> "Tom Steele stated he had commissioned a review from concept to build and commissioning to explore why the hospital had not been built to specification."

Is that something that you'd been told about during any of your exchanges about the hospital environment?

A No, this was the first time, which seemed like a good idea actually, but this was-- Yeah. So, he was a new director of Estates and he'd commissioned this review. That-- He mentioned that when we had the sit-around meeting with HSC and I had-- I was invited to that meeting by Teresa and I had said the history of the ventilation concerns. They were there because of the Cryptococcal cases and Tom Steele's response to that was that he had commissioned this review, which seemed very good.

Q In paragraph 188, you narrate an incident involving Professor Jones and yourself. We can see what you've said about it, and I don't need to go through that. I only have one question about it. Can you tell me, in very short compass, why the exchange was taking place? What-- People tend not to walk in and start shouting at people without some reason. What was the issue?

A So, I had had a text late at night from Prof Jones to ask me if there was anything for the head of service. They had a head of service meeting once a month and I would not hear from Prof Jones the whole month, and then I would be asked, "Is there anything for the head of service?" So, I wrote-- texted back, as I would, all the issues that were going on, particularly staffing, and there was a response-- I mean, I don't know if you-- the details don't matter, it was not a nice response.

Then, the next day, we had a real staffing crisis. We had a deanery visit, to visit our trainees and we had HSC visits and we had only two other

consultants. We were so low in numbers that we were all sat in one room, in the duty room, trying to man the duty room and also covering the laboratory, and we normally had a column for ITU as well. Teresa was completely taken up with the Cryptococcal IMTs and very, very busy in infection control, so I was really down to skeletal staffing.

I said, "We're going to have to phone over to ITU rather than do a physical visit." Now, bear in mind that some ITUs across the city only got a phone call anyway and at weekends, we would just do a phone call. So this, I felt, was the best use of our time, was to focus on getting the laboratory results out, dealing with clinical calls as they came in, and also I had to try and get to the deanery visit. And then he came into the department and just said, "I've got an email from Anne Harkness. You're going to be responsible for not giving an ITU ward round and that's unacceptable," and just started-- and that's what triggered it.

I said, "Well, all the support I've had is you emailing, texting last night and you said this," the thing that was said, and then that just was the trigger for a very rageful incident.

Q Well, let's just move on, if we can, Dr Peters. There's some parts I think I can move past quickly, others I'll need to pause on a little bit for other reasons. In the next section of your statement, you talk about meeting Jeane Freeman, the Cabinet Secretary for Health and you narrate in paragraph 190, on electronic 163, what happened about that meeting and we can see what you've said in 190 and 191.

Now, I'd asked you earlier in your evidence about the DMA Canyon report when you got it, and we see now in your chronological narrative, you explain that you were shown it while you were off ill by Teresa Inkster. So that would date it to the 2019 date----

A Yes.

Q -- that you told us earlier, and I think you suggest in paragraph 192 that it's very odd that no one had shown you it before----

A Yes.

Q -- to put it no higher. I need to ask you a little bit about 193, which is on page 164 of the electronic version, because there's a very short paragraph about an interim report from HPS. I'm not sure whether you can remember what report that was now, because I think the point I've been asked to put to you, in essence, is if it

was an interim report, was it simply a report that explained that it didn't-- it hadn't had all the information, and there were going to be further reports to come and, therefore, it's a little difficult to criticise it for being limited?

A Sometimes interim reports are just waiting for, you know, sign-offs from other people. So it was what was standing at the time, and the way I took it was, "This is our view just now from HPS. This is what we've-- This is the data." It was clear about what data they'd looked at, it was clear about what their conclusions were at that point in time, and as more problems emerged, I guess, they would carry on. And, yeah, to a degree it's fair that was interim, but I don't think it's fair to say it didn't warrant some level of scrutiny.

Q Thank you. I needn't ask you about the Health and Sport Committee but we noted-- we note now from May 2019, you're returning to work, and in June 2019, if we go to 165, we'll find that the topic of chilled beams about which the Inquiry has had a good deal from a number of people emerges, and I don't need to ask you the detail of it, but, as I understand it, this was the incident where it turned out that it wasn't condensation, it was a leak from a joint----

A Yes.

Q -- because there had been a problem with the boiler and things had contracted and there was a leak. And you were called in, made the appropriate investigations, took some photographs and made an appropriate report. The question that's arisen in the context of another witness is the fact that the chilled beams operate on a sealed----

A Mm-hmm.

Q -- system which is not purified water.

A Yes.

Q So, it was that that was dripping out. Is that correct?

A Yes, and that's precisely why it's a problem.

Q Yes, because you then took swabs and certain things were grown from these swabs, suggesting----

A Yeah.

Q -- an element of contamination.

A Yeah. So, we actually published on the experience of chilled beams and I think it's been referenced in the new HTMs, and other places have referenced it as a learning of the fact that we've got them throughout our hospital. So the infection risks are

pretty clear. And this was, I think, a pretty major realisation that there was a water-- an extensive water system accessing patients' rooms that wasn't part of your normal water safety planning.

Q Right. If we can just move on momentarily, please, to 166. So, we're getting to July '19. Dr Inkster is going on leave, and she tells you about various things that are going on. You're trying to clarify ventilation in the PICU and NICU, and we're talking about the same things you were talking about before, which is the need to be clear as to what rooms have what properties, I assume.

A Yes.

Q So, going on to 167, about halfway down that page you're highlighting to Mrs Devine that some HAI-SCRIBE work purported to have been signed off by Dr Inkster, but that actually wasn't something she'd signed off.

A That's right.

Q Because she hadn't been there to sign it off.

A Yes.

Q And I think we've heard from other witnesses about the 4B----

A Mm-hmm.

Q -- circumstances, and then 206 is perhaps symptomatic, rather than central, in that there was an incident of somebody being essentially in the wrong room.

A Yes.

Q Is that a fair summary of what you're saying there?

A Yes, that's all-- It's just an example of the reason why it's important to get it right.

Q Yes. So, if we go on just to finish this section to 168, you send an SBAR about PICU ventilation, which is something you've obviously looked at repeatedly. And then you make the point in paragraph 208 that five years-- you're now five years on from being there, and your view is that things still hadn't been assessed properly. Is that right?

A Yes. Yeah, and I was asked to do this-- It is odd, because Teresa was dealing with it, but there was an urgency when she was on annual leave to get this signed off quickly. There was a degree-- And, also, at the same time, there was the ICE theaters, which are the new built-- finally, the new neuro theaters were being built, and Teresa was dealing with those. There was quite a tussle around, I would have to sign them off, which isn't ideal. Those sort of projects are best handled by the ICD.

So this goes back to me being

pulled in, rather than me jumping in and wanting to do things that aren't in my remit, actually being tasked with things. I felt uncomfortable that this was-- I suspected-- Well, the feeling that both Teresa and I had was that she was maybe questioning it, and this was an opportunity to get it signed off by somebody else. But, in essence, it gets very repetitive by this stage, but unless you change something, you're going to keep coming up with the same problems. It struck me that nothing had changed in the approach to the infection control risks of the built environment.

Q My Lord, I'm conscious time. I think this might be an appropriate----

THE CHAIR: All right.

MR CONNAL: -- time to take a lunch break.

THE CHAIR: We'll take our lunch break, and if I could ask you to be back for two o'clock.

THE WITNESS: Sure.

THE CHAIR: Thank you.

THE WITNESS: Thank you.

(Adjourned for a short time)

THE CHAIR: Good afternoon, Dr Peters.

THE WITNESS: Good afternoon.

THE CHAIR: Now, Mr Connal.

MR CONNAL: All right, my Lord. I'm going to continue to move slightly rapidly through some of the material, Dr Peters, because it's now clear that you've indicated a lot of your areas of concern and I'm concerned not to simply repeat things that we've been through already. We've come to August 2019, so if we could return to the witness statement, we're at-- yes, that's right, page 168.

I just want to deal, hopefully quite briefly, with a meeting that you start to deal with on 14 August 2019, where you and Kathleen Harvey-Wood attended at the request of Dr Inkster. The meeting was chaired by Dr Inkster, and you say it got off to a bad start because Mr Steele said that Jane Grant, i.e. the chief exec, wanted the minutes corrected to say that the decision to move from 2A to 6A was Teresa Inkster's, not hers.

Now, we've had some evidence from other witnesses suggesting that a decision to move a ward into another ward, which has consequences for the people in that ward and may or may not involve other hospitals taking patients, is not normally a decision for an IMT chair. What's your view on that?

A Yes, it's not possible for

a chair of the IMT. It was usually-- like overwhelmingly, usually, the ICD managing the outbreak within Glasgow, to be able to orchestrate such a move. They can make the decision that, "This is the best thing here, we recommend this," but the operational green flag, making it happen and agreeing to making it happen, there may be other reasons that that couldn't happen. You could imagine, if there had been a flood or fire in a unit-- you know, there may be extenuating circumstances that the IMT chair is unaware of, whereas senior management would be aware of. So, in my experience, anything to do with moving a service, especially a high-risk service like that with the accompanying highly skilled specialists involved in their care, would not be something that could just happen because of the chair, if the IMT decided.

Q Thank you. If we can go on to 169 in the electronic bundle, I think you suggest that, at least in impression terms, no doubt, there seemed to have been a pre-meeting or pre-discussion because there was something coordinated about what was being said. Now, I don't know whether you can help us. Dr Kennedy says if there was a pre-meeting, it didn't involve him and he only came in at the end. Can you remember whether that's right or not?

A Yes, he did come in at the end, but it was the reference that Mr Deighan made to having discussed the epidemiology with Iain Kennedy and the questions and the approach taken by Mrs Devine and Tom Steele that gave me that impression. So he did come late, that is true.

Q You say that the general tone of the meeting was "aggressive"?

A Yes.

Q There was a suggestion that, "We were overreacting," presumably you and Teresa Inkster and, no doubt, Mrs Harvey-Wood as well, were "overreacting". First of all, do you agree with the suggestion that you were overreacting to anything?

A No, I don't think there was any question of overreacting. It was imparting our assessment of the situation and all of us have appropriate expertise and visibility of the microbiology results. So it was at least worth considering what we had to say, so I don't think it was overreacting. I would say, in relation to this specifically, Kathleen Harvey-Wood, who is, you know, one of the most respected clinical scientists and a key member of every clinical team in the

paediatric hospital, was spoken to in very derogatory terms by Chris Deighan about not understanding epidemiology.

Q Thank you. Now, I just want to ask you about another incident, just so we're absolutely clear about your evidence on this. I remember from taking you very swiftly through a passage in your witness statement about chilled beams that you were called, there was a leak, it was due to a joint, you took some pictures, you made a report, and then we see in 214, you're saying, "Well, I've seen this," and you record Tom Steele saying, "So you say." Now, is that something that actually happened?

A Yes, otherwise, I wouldn't have said it. Yes, that's exactly what happened. He was sitting a few people down for me, and that was the reason Teresa wanted me there, so that she had said that we'd seen leaking chilled beams and that had been challenged by Mr Steele. That is what has been reported to me, although obviously I can't first-person say that because I wasn't at that meeting, but I was there expressly to discuss the chilled beams, and so I started off with saying the chilled beam had leaked and he said, "So you say."

Q Yes, and then, presumably, you said, "Well, I've got the photographs to prove it and I was there."

A That's precisely what I said, yes.

Q One of his team was there as well?

A Yes, and I'd sent-- As is my practice usually, to immediately send some sort of summary of what's happened, so that people can correct you if you've picked up something wrong, and nobody came back and said, "No, that is absolutely not what happened."

Q As I understand it, it then came out that actually they were going around fixing these joints following that incident.

A Yes, which seemed confusing to think there was no leak, and then to admit that you're actually changing the "push/pop" fit to something more robust. I couldn't understand it. It didn't make sense.

Q Now, subsequent to this meeting, I think Dr Inkster resigned and I think we should hear from her directly about her reasons for doing that, although you record in 217, which appears on 170 of the electronic bundle, that she copied you into the email that she sent, and I'm not going

to pause on 218. In 219 and 220, you're talking about an action plan that was being put together, following concerns that had been raised by yourself and Dr Redding and so on, and you weren't very happy with it and I suspect we probably don't need to go into the detail of it.

Going onto the next page, we've got to September 2019. As I said this morning, it seems a long time since 2014 where we started the journey and, at that point, you had a meeting in St Andrew's House and you've narrated who was there and the kind of reception that you received. I'm not going to ask you to read through all of that.

Then, in 225, we find you have a meeting about your whistleblow and your main challenge I think, in 226, is there's too much emphasis on personality and nobody actually dealing with the complaints you're making about the built environment. Is that correct?

A This was a separate whistleblow about that IMT, and they're linked but not precisely the same. So, it was more to do with the building issues, yes, but also-- and the Infection Control risks arising from that, but more specifically in this regard, the senior people in the

hospital dealing with it there, how they were responding to Teresa as chair, trying to deal with these issues. So, from what I'd witnessed myself-- in fact, I phoned Laura immediately after that meeting, I was so-- and I've been a doctor for a long time and been in an awful lot of meetings, even difficult meetings. You don't expect everybody to be sweetness and light all the time. This was a different level of abnormality.

So that was what I had phoned Laura Imrie about, was Teresa's inability to move things forward and progress because of the surrounding management attitude to the building problems. It seems a subtle difference, but that's what it was about but that was not what seemed to focus on, the ability to, "Let's get this sorted from an infection and risk point of view in patient safety," because always that's what it tracks back to but, you know, some people didn't behave very nicely.

Q Thank you for that. I just want to move briefly onto another topic which follows on from that, because, again, in the narrative that you've given us, we're back at a position where people don't want to take on ICD jobs after Teresa Inkster resigns, and you narrate in 227 and 228 a

meeting chaired by Robert Gardiner.

A Yes.

Q Now, who was he?

A At the time, he was general manager for diagnostics, I think.

Q Thank you, and you say, in 228, that:

> "There was unanimous Consultant Microbiology opinion that there were real risks posed by the built environment to patients."

So, this is not just your view.

A No, it was literally unanimous with the team at that point in time.

Q

> "...and the working culture was so unacceptable, no one felt able to act as Infection Control doctor."

I think notes were taken----

A Yes.

Q -- but I'd just like to look briefly at these, if we may. Bundle 27, 35-- sorry, volume 4, 354. I'm not going to delay long on these, it was just to give some context to the comment, in case somebody says, "So you say," in relation to that statement, the meeting is chaired by Mr Gardiner, who, as you say, is general manager at diagnostics.

A Yes.

Q And we see Jonathan Best, who we've come across before, yourself, and then a series of people who I assume are all the consultants, Kam Khalsa-- and apologies if I'm not pronouncing these names correctly, Alison Balfour, Teresa Inkster, Nitish Khanna----

A Yes.

Q -- Pepe Valyraki, and then there's a name been redacted, it's another colleague who was also a consultant, and various others are there.

A Yes.

Q So I just want to touch briefly on what this minute shows us, and everybody's been identified by initials----

A Yes.

Q -- and we can all work that out in due course, but we see, under the heading on that minute, "All in different positions." First of all, CP, which is you?

A Yes.

Q "Not willing to go back." KK, which is Kam Khalsa----

A Mm-hmm.

Q -- saying, "Feel unsupported"----

A Yes.

Q -- "in the role." AB, Alison Balfour, who'd been around for some time, obviously, from her experience that she mentions there, and she says at the end of her note:

> "Undue pressure to sign these off at HAI-SCRIBEs. Nonsense in terms of patient safety. System is broken."

A Mm-hmm.

Q Yes. TI we know, Teresa Inkster, and we can get evidence from her. NK----

A Nitish.

Q -- is Nitish Khanna, saying:

> "Shocked. No confidence in the IC system; no wish to work in IC because of those issues."

PV, that's Pepe Valyraki, we've already heard about to some extent, "Impossible for her to continue." Then we have the colleague whose name has been redacted, saying that there was pressure to sign off, and the environment was not supported. There does seem to be a string of comments which, at least on the face of it, match your summary of them. I wonder if we could look at 357, just to complete this narrative. See at the top of 357, NK:

> "I think the role is a complete nightmare, because I have no confidence in any information that anyone is giving to me."

Which is a theme we've been discussing throughout your evidence. He says, "How can you work in that situation?" and she goes on, a couple of paragraphs later talking about-- he's absolutely appalled at the way people have been treated, and then another colleague chips in and says:

> "Well, I was told that TI had been happy with a design that she wasn't, and the only way I find out is via Christine Peters."

And, interestingly, Mr Gardiner chips in, about halfway down the page, that, "Coercion to sign documents is a problem I've heard before," and we don't know where from, but obviously something that he said at the time. So, whatever the rights and wrongs of it, it does appear that there was a consensus about these issues. Is that correct?

A Yes, very much so.

Q Thank you.

THE CHAIR: Do we know who took the note?

A Nitish.

Q Sorry?

A Nitish Khanna took a

note at the time.

MR CONNAL: I'm obliged, my Lord. It isn't written as a formal minute, but it's obviously an attempt to capture----

A Nobody else minuted it, and we decided as a group we would record it----

Q Yes. Thank you.

A -- in note form.

Q Well, we can leave that document now, thank you, and go back to the witness statement. So, we've just dealt with what's covered in 227 and 228. So if we go on to electronic 173, and we see here some discussion about a leaking tap. So this is another example of an issue which you respond to, and then October 2019, you're still thinking that communications aren't good and, again, something that you take up.

So, if we go on to the next electronic page, to go to 233, Theresa Inkster and you to Jeane Freeman and I'm not going to go into that letter because, obviously, it's recording a lot of the concerns that we've----

A Yes.

Q -- dealt with today, and then in 236, there's another meeting with Ms McQueen and I think some others, during which somebody made a suggestion about paying people off that you didn't take very kindly to, but I don't think I need to ask you about that, and that's also covered in 237.

So, we come to December 2019. Again, this is a theme. You saw some material on a website for the Board that you weren't happy with, so you recorded your concerns about it, and I'm not going to ask you to repeat them, and what we'll then see in these pages is a number of occasions where you send notes restating your concerns or re-emphasising your concerns to various people, and I'm simply not going to ask you to go through all of these.

A Okay.

Q They are available to us. We have the references to them in the Inquiry bundles, but I think to read them would be repetitive. We also come up with the issue about whether something is healthcare required or not, and obviously a difference of opinion of these.

So, if we can come onto the next electronic page, 176, we've reached 2020, where you explain that you get a response from Ms Shepherd, who's one of the people that you'd been speaking to, as it were, outwith the Board structures.

I just wanted to take up something in 241. This is a situation

where the suggestion had been made that a particular infection had been healthcare acquired.

A Yes.

Q I'm using that without worrying too much about the definitions of----

A Mm-hmm.

Q -- healthcare acquired. Now, what's happening is that Ms Shepherd is replying, having been to the Board, and the Board is saying, "No, no, this wasn't healthcare acquired because the child had already had chest x-ray changes," which I presume is an indicator that the infection is already there. I understand from what you say here that, well, Dr Inkster went and checked that.

A Mm-hmm.

Q And did it turn out to be correct?

A No. It was incorrect, and I think when we're giving microbiology advice into acting with the clinical teams, you're always alert to the idea that particularly Pseudomonas and other related organisms can cause hospital-acquired pneumonias, and that alters what antibiotics you're going to want to use in the patient. So you're doing a diagnostic thought process for each and every result in these

patients, and you're figuring out, you know, if it was a pneumonia, was this one acquired in the community? Sometimes that's treated, they get better, and then they get a secondary infection in hospital.

So it's just part and parcel of the clinical microbiology job. So if a clinical microbiologist has been involved in a case and has a pretty solid view that this is hospital-acquired pneumonia, you have to have pretty good evidence to-- you know, not saying you're absolutely right all the time, but it's a pretty strong situation to be in.

There were a number of cases like this. I think I just picked on this particular issue, this one, because, by that point, the Board was on special measures and we had been advised – and this is very early on in that – that our point of contact would be Lesley Shepherd, if we continue to have concerns. So there was a recognition that there were issues in Glasgow and that not all the information was always shared in a timely manner at that time, and so that was my route. So, rather than whistleblowing, if you like, this is your formal route to alert the oversight of this board----

Q And so, in any event, the point, as I understand it, was someone

had said----

A Yes.

Q -- "No, no, no, there were changes on x-ray on admission."

A And Teresa checked and there wasn't.

Q So Teresa checked and that simply wasn't correct?

A Yes.

THE CHAIR: Just for my note, Ms Shepherd, that's Lesley Shepherd?

A Yes.

Q And is she a member of the Oversight Board?

A She was the HAI policy group lead ICN and they were-- with Fiona McQueen were leading the oversight. Whether they were formal members-- I don't actually understand the governance of the Oversight Board, like what that actually was, because although we were given to understand Teresa and I would have some sort of role in it, we didn't, we never went to it. I don't really know----

Q You were given Ms Shepherd's name as a----

A Point of contact.

Q -- point of contact? Right.

A Because that's her area. She's a very experienced ICN, and she would understand if we went to her with specific----

Q Right. Thank you.

MR CONNAL: We know from your witness statement that you met with Marion Bain as well, who is another player in this exercise, not an infection control expert but with other areas of expertise. Is that correct?

A Yes, I think she's a public health doctor.

Q Thank you. I'm not going to ask you about the meeting with her because I think, again, it would produce a----

A Yes.

Q -- a revisiting of issues we've already done. Can I just jump to 247, which will be on – yes, thank you – 178 of the electronic bundle. I take it that paragraph 247 is simply an indication of where you see a potential issue that you think might be important, so you ask about it and you're basically told, "Don't get involved."

A Yes.

Q That's the issue there. Interestingly, we find at 249, which we get on the next electronic page, that we're back to patient placement, which we've talked about on several occasions and at several points during your evidence, mid-January 2020, "ID consultants raising concerns about where patients should be safely placed."

A Yes.

Q So, even then, whatever the issue was, or apparent issue, it hadn't been resolved.

A Correct.

Q Thank you, and you say, in fact, in 250, that concerns of patient placement persisted and you're still having this issue of identifying people who might not be in the right location. Is that correct?

A Yes.

Q And 251, Professor Leanord circulates a patient placement policy, presumably, an event which you were very pleased to see taking place?

A Definitely, yes.

Q Were you happy with it when you saw it?

A No. It wasn't accurate, but I think it was pretty well based on something Teresa had been working on previously, but, at any rate, it was a start.

Q An interesting footnote there is that you continue to be concerned about the ventilation properties of particular individual rooms because that----

A Yes.

Q -- may be significant for which patients can be put there or which rooms could be second best if other rooms are full and the other issues you've told about earlier, and you ask if something called the AECOM report could be used to help you about that and were told no. How did you know such a thing existed?

A I had been told about it by Jeane Freeman and Lesley Shepherd but was not told the contents of it. So there is a report I knew had been done because when I was saying, "Oh, there's not been any action," I suppose, actually, there had been action and there had been what I understand to be a thorough head-to-toe assessment of the building, at least with regard to ventilation. I'm not sure if water is included in that. I understand it was for the purpose of litigation with Multiplex, the contractor.

My point was that surely the information contained therein is relevant immediately to our patient cohorts, and things that I didn't know for sure at that stage would be, I would have guessed – and I don't know, because I've not seen it – and I couldn't understand why a study of that sort paid by the public purse was not being utilised for patients in real time.

Q Thank you. Now, if we can move on to electronic 180, there are a couple of paragraphs there about

environmental screening results and other concerns about rooms, but, essentially, this is still about communication. It's whether things have been passed on to you, which you think should have been passed on to you. In relation to isolation rooms on 4B, which is dealt with in 253, do you happen to know which rooms these were that were causing the problems?

A In 6E?

Q No, in paragraph 253----

A Oh, 253, I beg your pardon.

Q -- there were concerns with isolation rooms on 4B. The question I've been asked to raise is----

A Okay.

Q -- do we know which rooms these were and did they get fixed?

A I would-- I can't remember any numbers of rooms off the top of my head, but I would need-- I can certainly go back and check if I have that information in email form.

Q On the next electronic page, we lose-- we lose the heading but, not to worry, the heading is "Instigation of the case note review," which the Inquiry is aware took place and has seen. At paragraph 255, you say you were asked by Shona Cairns at HPS to provide a list of patients to be reviewed and you had some exchanges and you identified something over 100 cases. Now, the question that has been raised is whether you gave 100 cases to HPS or whether they gave 100 cases to you?

A I gave them 100 cases. So this was an-- There was at this point a recognition that this needed to be explored externally and that GGC could present the cases they considered to be important and I could present the cases I considered from my database to be important. I went through essentially Kathleen's very well-curated databases and selected out all the patients who I felt could possibly, so not definitely, but I thought these should be looked at by external, neutral eyes. I didn't just include gram-negatives, because we did have some gram-positives, like a Gordonia, which is a gram-positive you get in the environment. I included Mycobacterium chelonae, although there was one case from which it was a tissue sample, not a bacteraemia. So this was predicated on bacteraemias or fungemias, which will just restrict your cases. You will maybe not capture all infections that may have come from the environment.

For example, Mycobacterium chelonae would cause a skin infection. So it's only the bacteraemias. I included fungus as well, such as there's a yeast called Rotatoria, which isn't really part of your normal flora. It's not what you would call----

Q Hang on, I think we need to get a note of what that fungus was.

A I'm rattling, sorry.

THE CHAIR: We may need to get a note of a bit more than that, because this is a part of evidence which is highlighted in your written statement, but you're giving a lot of detail here, which I'm afraid you've just overtaken my note-taking capacity.

A Sure.

Q So can I take this a little more slowly? You provided a list of 100 cases.

A Over a hundred, yes.

Q Over a hundred?

A Maybe 104, something like that.

Q Right.

MR CONNAL: Can I intervene by asking, who did you provide these to? Can you remember?

A Shona Cairns, who was the epidemiologist at HPS, who was tasked with putting together the list, the final list. So they were getting information from different sources so

that they could----

THE CHAIR: Dr Peters, I'm really interested in this detail.

A Sorry, I'll take a drink.

MR CONNAL: So go back again. Who did you say you gave this to?

A Shona Cairns.

Q Shona Cairns. Presumably, you sent it by email or something like that.

A Yes.

Q And she was the person who was tasked, I think you were saying, with pulling together the final list, and she was getting information from different sources of which you were one.

A Yes.

Q And you, I think, said that you included not only gram-negatives but also some gram-positives.

A Yes.

Q Were there particular reasons for including gram-positives?

A Yes, because this particular species, Gordonia, is not----

Q Gordonia?

A Gordonia.

Q It's not what?

A It's not an endogenous species. It's also an environmental organism that you see in soil. But it happens to be-- There are lots of

gram-positives in the environment. So we had-- "gram-negative" was a shorthand because that's the majority of what we saw, the vast majority, but it's not the defining feature of an environmental organism.

Q So you included gram-positives, literally Gordonia; fungi, did you say, as well?

A Yes.

Q And mycobacteria, you say, in your statement.

A Yes.

Q And you got that in large measure, as I understand it, from a database kept by Kathleen Harvey-Wood.

A Yes.

Q And you included some PICU cases because you thought that might be helpful.

A I included-- They were all haemato-oncology patients who had been on PICU when the result came through. So you could miss a case. Say they had been on 6A or 2A and became ill, and then the sample was taken in PICU because they're ill, it wouldn't necessarily be linked back. So----

THE CHAIR: Right, can I take, at dictation speed, the criteria, criterion or criteria that you applied in selecting your and-- Well, I should ask you a preliminary question: did you decide on the criteria for this group of cases?

A Yes, but with discussion with Shona Cairns. So there's loads of emails between us saying----

Q Right, discussion with----

A -- with Shona Cairns, the epidemiologist. So she's tasked to get the cases that they want looked at by the case note review. So I wasn't with them. I was interacting with her to say, "This is what I've got, this is what I suggest. Is this what we want?" So there is to and fro. So I'm happy to share those emails. So I then made it very clear I was looking, based on this consultant list, rather than a sample that came from the patient when they're in 2A.

Q Right. I don't know if you want to take this on, Mr Connal. I'm-- Insofar as it's possible, what I'm interested in at this moment is to understand what the criteria are.

A Yes.

Q And understand who contributed to providing the criteria.

A Myself and Shona Cairns provided the criteria together, and the criteria were haemato-oncology patients.

Q Right. Yes?

A Irrespective of location, with blood culture results with

environmental organisms.

Q Now, does determining what an environmental organism is require an exercise of judgment?

A Yes.

Q About which two well-qualified people might disagree?

A With some organisms, yes, because they are-- For example, E. coli. It's in your gut. Every single person will have it in their gut, but it's also in the environment. For example, in water, that's why we test for E. coli in water. For example, in soil, anywhere. It's a very widespread organism. It causes travellers' diarrhoea, that sort of thing. So the species in that case doesn't actually determine where it's come from, whereas something like Mycobacterium chelonae will not be in your body, normally. So just by token of its species, you can say that's come from outside that person's body.

Q Right. Now, I interrupted you in going through your criteria. We've got haemato-oncology patients, irrespective of location, blood culture results, environmental organism, which is a matter of----

A Which I would say including gram-positives, fungi and mycobacterium.

Q Right, now that gives us

the criteria.

A Plus the timeframe, which is from opening of the hospital.

Q Right, so these criteria are developed in conversation between you and-- is it Miss Cairns, or----

A Yes.

Q Now, you provided, you think, 104 cases.

A Thereabouts, yes.

Q The case note review looked at 84.

A Yes.

Q Now, can I clarify this? Were all the 84 cases within the 104 cases that you had proposed?

A I do not know.

Q Right. So it is possible that the 84 cases included some of your cases, but may have included cases from where else?

A HPS's own other data streams, and that's why it was-- they were looking for as wide a net, and I'm not privy to the other conversations regarding what-- the final list of CHI numbers, or the final list of specific patients. My role was to provide what I thought was in conversation what they were looking for. So I don't-- I've never done a cross-check of CHIs; I didn't have the other CHIs.

Q Now, a CHI number is

the unique identifying number for a patient within NHS Scotland?

A Yes.

Q Right. Sorry, Mr Connal.

MR CONNAL: I only have a couple of points, just so we're absolutely clear about this. I've been given information suggesting that the Cabinet Secretary had said that the scope was to cover paediatric haemato-oncology. Now, there's also a suggestion that that means that any sample taken from PICU is outwith that group.

A No, because it's the patient group that are at risk, not-- and they are often in PICU. That was the big point Kathleen and I were making all along, is that we were including the patient group, because that's the biggest risk factor, is the combination of that type of patient with the environment.

Q But, ultimately, you submitted some material, you had some discussions about it, and you made suggestions as to what should be included along the lines you've indicated. I take it you accept that, ultimately, it was for the case note review to decide which ones to look at?

A Yes.

Q Thank you. Now we can move on. You've commented at the foot of 181, in paragraph 257, about your relationship with the Oversight Board and I think you mentioned that actually in answer to a question earlier. So I won't delay there. Can we go to 259, please, which is on page 182 electronically? I simply ask you about this, because in all of people's names who've cropped up, many of them have become familiar but, all of a sudden, in comes somebody called Keith Morris.

A Yes.

Q And he sort of comes in from what you might describe as left field, not from any of the other lists of actors that we've had, but he seems to have been asked to write some kind of report about organisation of Infection Control. Is that right?

A Yes, so he was the Infection Control doctor, microbiologist from Fife, who, at that time, was in the HAI Policy Group. So, for many years, Professor Alistair Leanord had that role in the HAI Policy Group at government, and at this point in time, it was Dr Keith Morris. And because this was a time of oversight of the Board with regard to Infection Control, I think we asked to have a chance to discuss with him because we'd met Lesley, who's an excellent ICN, and she was

the main point of contact. But because there were so many discussions around microbiology and the interactions between Microbiology and Infection Control, we wanted him to-- I think he was already being tasked by Tom Walsh at some point to look at it as well. So this was just a meeting to see if this is what we think. And he came out with a document, which we never heard any follow-up about since.

Q You've quoted a couple of sections from it, I won't bother unearthing it, including a reference to the toxic nature of microbiology in GGC, which we can see in your statement.

So, if we then move on, we've got to February 2020. We can move on to the next electronic page, please. Ms Bain makes a number of recommendations, which you see. You have some correspondence about that. I won't go into that.

There are various other exchanges about interim placement policies and PICU. PICU is obviously a recurring theme throughout your statement. It's obviously something that's concerned you at various stages and I think the point you're making, I read it in 264, is that hospitals had been open for five years and you're still talking about issues in Paediatric Intensive Care Unit. You're not very happy that that's still being done at that stage.

A I think this particular check on ventilation was triggered by the situation in Edinburgh, so-- because that's a children's hospital, so theirs is a PICU. It was found that there was less than the required amount of air changes and there was a message that went out, I think to all the PICUs, that, "You better check your ventilation." From what I understand, this was the first time it had actually been checked in PICU.

Q Well, can we move on please to 270? So, we'll be on-- yes, on electronic 184, and we see the heading, "Coronavirus", a topic. Unfortunately, this inquiry is not investigating the pandemic in the same way that some others are. You were hopeful, I think, that with single rooms, the Queen Elizabeth Hospital could be particularly good at containing things better than perhaps an open ward might be. Is that fair?

A Yes.

Q That's the kind of message at that point. Now, we're going to depart from our normal practice of redacting names because we have permission from Louise Slorance to mention both her name

and her late husband, Andrew. I understand that he is the patient mentioned in paragraph 270 as someone who, from your information, is likely to have caught coronavirus while an inpatient and subsequently unfortunately died.

A Yes.

Q You make a comment about screening and I think this is-- in 271, this is something that we picked up probably out of order earlier in the evidence that an infectious diseases consultant was asking questions about Estates which struck you as being very similar to questions you'd been asking for a long time and you offered to help and were told by Ms Bain that, "No, thank you," GGC didn't want you involved.

A Yes.

Q So, if we just move on, March 2020. Obviously, we're not investigating the pandemic, so we don't need all of the detail here, but you'd started to receive Coronavirus patients and you also narrate later in that section the appointment of a psychologist to work to see what could be done, which is your point about concentrating on relationships rather than building problems. In any event, you had discussions, I think, and you tried to find out what had been

reported back as a result of these discussions and were told it was all deleted, but you would get some individual feedback.

A Yes.

Q The only point I want to take from 275, which is on the next electronic page, if I can get this right. Yes. In the middle of 275, we instead had individual feedback and a major finding was that colleagues considered whistleblowing to be unprofessional. That's what this inquirer had found out. Is that right?

A Yes, that was the feedback I got from Jenny.

Q So, you weren't getting any feedback on building problems, but you were getting feedback on whether whistleblowing was a good thing to do.

A Yes.

Q Thank you. Now, we can probably move on again onto the next electronic page 187, because I'm jumping past a little number of individual items which may not be central. What's a "weekly buzz meeting" then, that appears in 280?

A So, this was a meeting that Jenny set up after we'd had discussions with Angela Wallace and by this time, Marion Bain had left and Angela Wallace was now taking on the

task of trying to recuperate the infection control system in GGC. It was really, I think, a suggestion from Teresa that we should have regular meetings, so that that would be facilitated, at least in the beginning, because the challenge that we felt was that our views were immediately discarded and we weren't being understood or taken seriously, just generally as a rule. So, to try and get around that, find a healthy way to have open discussion and a place where you could actually bring issues without it being deemed to be threatening, this was-- Jenny, as a psychologist, thought this was a good idea.

THE CHAIR: Just to help me, what makes a meeting a buzz meeting?

A I think it's a buzzword. It's just-- A buzz meeting, I think, means short, fast updates. Everybody who needs to know, round the table, what's going on. Just quite rapid, and things that are of the moment, I think, a buzz meeting.

Q Thank you.

A It was a kind of operational way to-- I think lots of departments had them. It had various names as meeting, but it ended up being called a buzz meeting.

MR CONNAL: You clearly didn't find these a pleasant experience?

A I found them very, very difficult to-- right from the start and at the beginning Jenny was there and she would give feedback afterwards, and she was actually very supportive. She did say to me that I turned up, I was present, I was partaking, I was trying to do what was being asked of me, and she said that actually she felt that there was others in the group who weren't.

Q You record in the middle of 280, I just wanted to ask you, about Professor Leonord laughing at you when you spoke?

A That was common, yes.

Q Is that something-- Again, is that something that actually happened?

A Yes, a lot. At one stage, Jenny actually pulled him up in the meeting for it.

Q We'll leave the buzz meetings, I think, because, clearly, they weren't helpful to you.

If we move on electronically to 188. Again, 282, you've been asked for a summary of current issues and you've sent a summary off into the latest inquirer. 283, you report Dr Redding going onto a different stage of the whistleblow. These-- Ms Wallace, I think, who's taken over from Ms Bain.

Is that right?

A Yes, yes.

Q Just so we get the individuals correct. What was her background?

A She's a nurse. She'd been, I think, nurse director in Forth Valley. She'd previously worked with Jane Grant in Forth Valley, as I believe Tom Steele had before as well at some point, and she was brought in. She'd also worked before with Jenny who's a psychologist, so I think this was thought to be fresh outside views. Yes. So, she was brought in to try and rebuild.

Q So, in a number of points in your statement we find you sending information on to her about something that you think is unsatisfactory at the hospital.

A That was the conduit we were meant to be using. I think there was a recognition that this isn't-- this isn't working in normal practice but we were in a state of working towards something that would be more normal and, in order to keep things safe, that would be our conduit.

Q If we could move on to the next electronic page, please, which is 189. We're now at paragraph 286. You'd picked up an inaccuracy and, in 287, you're commenting on the

independent review and some of your concerns, including who the independent review had or hadn't spoken to, and you've already said that you weren't involved to the extent that you had hoped to be.

A Yes.

Q But I'd like to move on to another clinical issue in August 2020, paragraph 289, there we are, on electronic 190. Now, we've already discussed Cryptococcus briefly. So we're back again at Cryptococcus and the discussion here is about a paediatric patient with Cryptococcus, and the issue here seems to be almost between Professor Leanord and Dr Sastry as much as anything else because Professor Leanord says it's not Cryptococcus and Dr Sastry says, "Well, it looks like Cryptococcus to me and I'm going to treat it like that."

A Yes, but, unfortunately, Dr Sastry was off on holiday for a few days in the middle of us discovering or getting the positive results. So there had actually been a meeting chaired by Alan Mathers, which was a bit odd. It was the second time in my entire career where the meeting-- an IMT-type meeting is chaired by a manager rather than the Infection Control team. The first one was Ann Harkness actually chaired a meeting, a number

of years before, due to Aspergillus and this was the second time and it was chaired by Alan Mathers. The discussion basically centered around whether this was a true positive or a false positive result.

Q I think later in your statement, just to be fair, you say that Cryptococcus can be difficult to identify with certainty.

A I think that's about-- So, it doesn't always grow on the plate. So Cryptococcosis is the disease. Cryptococcus is the bug. So, if you grew the Cryptococcus on a plate, you can identify it as a species of Cryptococcus.

The problem is not everybody will have an actual growth of the organism from their body either sputum or blood, but you can pick it up through an antigen test and that picks up a part of the bug and that's what this CrAg test is all about. That CrAg test spans a number of species, or subspecies really. So, it's a very sensitive-- and it's a very good-- it's one of the best types of tests like that, an antigen test. It's kind of-- It's very like a COVID test where you have exactly like-- two lines like that. So the test manufacturers state that any line, if you see a line, that's a positive, but this was a very faint line to begin with. So we got it in

the lab, in our lab, as positive.

Because it's such an unusual finding, because we'd only ever had one case, which was also usual, Cryptococcus, we sent the same sample plus new sample to Bristol to double-check.

Q That's the reference lab for cases of Cryptococcus.

A That's the reference lab, and they confirmed our positive and, in the other sample, they also found positive. So there were numerous positives. There were more than that. Four or five positives in the end.

For it to be a false positive, you would really have to have another explanation for that patient's symptoms and signs and, also, you would not expect response to treatment. So, you can make a sound diagnosis on the basis of positive CrAgs, particularly if it goes away after treatment, particularly if the patient responds to treatment. So, the initial stages of diagnosis, there's often a bit of uncertainty and you have to put together-- and that's Dr Sastry's role. It's his patient. He's the guy who understands the patient. On discussion with us around the uncertainties in the test, the person was treated.

So, he was being treated as a

positive case and those samples were not false positives at any stage. They were positive in the lab. Whether that equates to an actual cause of Cryptococcosis is a more detailed thought process, but they were not false positives.

Q What seems to have happened here, according to paragraph 290, is that Dr Sastry, who, as you say, is the person who has clinical charge of the patient and what to do with the patient, has apparently been told to tell a patient that it's not Cryptococcus----

A Yes.

Q -- and he says, "I'm not doing that. I'm going to tell them it is Cryptococcus and I'm going to treat him for Cryptococcus," and that's what he did.

A Yes.

Q Did that work?

A Yes.

Q So, whatever it was responded to the treatment being given for Cryptococcus?

A Yes.

Q Thank you. Now, we move on. We're now in September 2020, there's some discussion about a buzz meeting that I won't trouble you with. 292, I think is on the next page, which is electronic 191, which is

dealing with probably the Dr Sastry situation, and then there's some other discussion about Facebook, but the point you're making, presumably in 294, was that now you've had two cases of Cryptococcus, and this was unusual.

A Yes. So, having not described in paediatric cases, not even paediatric haemo cases, which you would-- or the most vulnerable group, I guess, or renal patients, it's not been described in Scotland to our knowledge and, certainly between us, we'd-- you know, I've been 20 years hanging around in microbiology, as have other people, even longer, it's a rare diagnosis to make by any standard, even globally, children-- So, there are-- Obviously, in the literature, kids do get it. Usually, it's in high endemic areas where there's lots of HIV as well, so Cryptococcosis in Sub-Saharan Africa in children is well described, China likewise, so there are parts of the world, but not Scotland, so our epidemiology is different.

So, the second case, okay, they are a couple years apart or a year and a half apart, is notable. It's not conclusive without further information, but it's notable.

Q I think you go on in 295 to explain that, when you actually sat

down in a group to discuss this issue, you were able to identify some other cases with at least a possible epidemiology link to the hospital.

A Yes.

Q Thank you. Again, I'm not going to go back into the areas that might be repetitive because the next few paragraphs are talking about individual issues or getting back in touch with the people you were trying to keep in touch with and keep them in touch with the problems that you were finding repeating themselves in the hospital----

A Yes.

Q -- but can I turn to 303, so that we deal with this. Now, the heading which has been redacted from that is actually "Andrew Slorance."

A Okay.

Q Of course, when you wrote your statement, you were using the names and I think, in fact, you told us earlier in your evidence, you were involved in a case----

A Yes.

Q -- and this is the case you were involved in. Is that right?

A Yes, just as part of my normal-- So, we have a rota for doing ICU. So I would be picking up-- I would just do the ICU ward round, other colleagues had been involved

and the sad day of his passing, I was on the ward and I heard the discussion with the procurator fiscal about the case.

Q So, the position there is that we're now dealing with Aspergillus and aspergillosis, which is the disease arising from the bug, Aspergillus, and in 304, Telepath is presumably your recording system?

A Telepath is our LIMS system. It's the system that keeps all the laboratory results but there's a functionality in it which we call "the notepad". So we record every piece of advice we give in that. So rather than the medical notes which we don't have access to, we would record all laboratory and clinical advice. So this is our practice in microbiology, yes.

Q What you found in Telepath was a consistent view from a number of microbiologists that they were treating a probable aspergillosis infection?

A Yes.

Q Then there was a COVID complication as well.

A Yes.

Q Of course, you note correctly, unfortunately, Mr Slorance died in December 2020 and you said you heard the conversation about it having to be reported to the fiscal, and

I think you say something-- well, you were worried about this also being a case of hospital-acquired COVID.

A That was my-- At that point, that was my main concern because we'd already been discussing the case at the morning handovers. So, you know, by that stage in the pandemic – it was the second wave, really – the height of that time period when we had more awareness of how the virus spreads – airborne, there's asymptomatic spread, the risks to the higher risk patients – and also, there's-- in the literature, there's-- COVID, in itself, can cause a higher risk of aspergillosis. So not only was there the risk of being a bone marrow transplant patient, there's also the additional risk of having COVID in making the risk for aspergillosis.

So, it was the COVID aspect of it that I reported back to Pepe Valyraki because of the conversation we had about what-- this was likely a hospital-acquired case or a probable-- by the definitions nationally, it would be a probable case because it's purely based on a cut-off of days after admission.

Q You say in 306 that at least-- if we go on to the next electronic page, at least in your view, although the national definitions would

label this as "probable" acquisition in hospital, your view was it was pretty likely.

A Mainly because, actually, the definitions were set to be specific rather than sensitive, in the sense that if it happened after 14 days, it's absolutely, definitely because that's the outside of the incubation period, whereas, actually, most people's incubation period is shorter. It's kind of like three days to four days depending on the subtype. I think this was the Delta wave. The majority will have got it long before eight days, but some-- a smaller percentage, maybe 25 per cent, I can't remember the exact figures. So, on a balance of probabilities, which is different from surveillance definitions, which is what this is based on, and that's been an issue right throughout is, "Are you going for a definition that's specific or sensitive?" and if you go too sensitive, like two days after admission, you're going to pick a lot of cases that were actually pre-admission.

So, there is a playoff but, for this particular case, I think being at eight days positive-- and also, in addition, there was a negative sample on admission which also just pushes it more to the direction of-- It's not definitive because, of course, some

people can get it later. It's just suggestive on a balance of probabilities.

Q In 307 and 308, you discuss in the first paragraph the possibility of acquisition from an asymptomatic member of staff in the hospital, and then you make the point in 308, which you've just made, that this is the view you're taking but it's possible that the acquisition was somewhere else.

A And it was-- I'm sure the COVID Inquiry will be covering it, but this was nationally-- You know, GGC weren't out-of-step with national guidance and not wearing FFP3s but, in my, view the national guidance was wrong, so it didn't actually present the protection that would be required from COVID because it's an airborne infection. I know that's not part of this Inquiry, but there's just that overlap in the science.

Q So, if we go to 309, we're moving away from COVID, back to aspergillosis, and what you record there was that he was treated for aspergillosis based on various factors, and you say that was agreed by several microbiologists, critical care consultants and haematology consultants, and he was a high-risk patient so that, when you see he was being treated for probable invasive aspergillosis, that would appear to match what you found?

A Yes.

Q I think you have something else to say about the case a little later on in your chronological narrative, but we'll just stick to the chronology for the moment----

A Right, okay.

Q -- because that brings us into January 2021, if we go on to the next electronic page, and you have some discussion about further cases and getting in touch with people at the Oversight Board and the case note review, which I don't think we need to go into.

So, if we come back to November 2021, which will be further on, it will be in-- yes, page 197, electronically, we're now back, because there'll apparently be some press queries about Andrew Slorance's case and you're approached by Dr Alex Marek. Now, that's not a name I don't think we've come across before, but the ICD lead for----

A Environment, the built environment. Yes, so that was a role she took on I think about 2020, '21, about then, but she's an ICD in the north.

Q She came to you

because she remembered you discussing the matter and you gave her some information to assist, and then you provided also some further information to Angela Wallace as lead for IPC on the same case, which you mentioned in 318. Is that right?

A That was to assist with their press inquiry. She remembered Anna had raised it at buzz meetings as a relevant-- I think mainly because of the issue of staff and being a high-risk group and wearing masks. So that's why in that buzz meeting-- because that was my portal to the Infection Control team, and so I just pulled out my emails that I had had at the time and forwarded them.

Q The point you make in 318, I think, at the end of it is that, in your email to Angela Wallace, you mentioned the details of a child who'd acquired Aspergillus on 4B and mentioned that specifically, and I think something that you'd read in Mrs Slorance's statement and were surprised to hear that she'd been told there wasn't any such other case.

A Yes, because it's in my emails. To the extent that we'd written on behalf of-- I mean, I would be trying to represent the view of the group, because I was still a clinical lead at that point, that there was

concerns that there were more Aspergillus cases again, and just keeping track of them, and that it was felt to be notable that there was a child and an adult and, of course, normally, you wouldn't expect them to be co-located on a ward. So you maybe do surveillance of one group and the other group in different places, but we were able to see that, actually, this is the same place, 4B.

So, at the time, way long before the inquiries or any of this, we'd clocked there was a child case and that as far as we were concerned, that it had been considered significant enough to go on the death certificate at the time. That's why I was really surprised that Mrs Slorance had been given the information that there never was such a case. There was such a case but when I went back to check the death certificate, in case I'd misinformed Angela Wallace at the time or the team when we'd raised the case, the death certificate, I couldn't find it. So I'm sure at that point in time that I wrote the email to Angela Wallace that there was a case and to Dr Pepe Valyraki around the Aspergillus rates, that that was the information I had available to me at that time.

Q I think, subsequently,

there was an HIS inspection, and I'll come back to ask you a question about that a little later because that followed the assurances being given that the inspectors were sent in to carry out some form of assessment. In fact, if we go now to 323, which will be on the next-- page 198 electronically. Actually, the foot, so we go on to 199. You'd been involved in Mr Slorance's case and then you discover, as it were, from conversation that someone external had been reviewing it?

A Yes.

Q And you found that someone called Laura Cottom from another team had given a view that said it wasn't Aspergillus.

A Yes.

Q The point you make there, I think, is that wasn't discussed with the team who'd been advising in the Queen Elizabeth as far as you know.

A Yes, it wasn't discussed. It wasn't discussed, and it's perfectly reasonable to have a second opinion and to review somebody else's work. That's normal practice in medicine, but the expectation is that the team involved in being reviewed, it would be visible to them, both the process, the input and the lessons learned and that did not happen.

Q Now, if we come to 325-- we're going to hear from Mrs Slorance later in the Inquiry, so I probably don't need much of the detail here, but the question, I think, is where Mr Slorance was located during his time in the Queen Elizabeth Hospital, because there was the unfortunate combination that he was there for bone marrow treatment and he had an infectious disease in the face of COVID. So this is, to some extent, touching on a point you've raised earlier.

A Yes, so I don't know from the time. What I knew was he'd been in 4B and then ITU, because those are the two locations that we had him put in. I think reading through the statements, that he was possibly moved to 4C, in which case, when I was saying about the PPVL rooms being quite a reasonable playoff with the conflicting needs of that kind of patient, I would have thought one of those rooms may have been thought to be suitable, a PPVL room, for him. I do not know, though. I don't know for sure----

Q That's not directly within your knowledge.

A -- but that's my thought.

Q I won't ask you any more about that, but I will take you to 331, which is on electronic page 201, just to

try and complete this narrative, that you actually got an email from Mrs Slorance asking if you could meet and you quite properly felt that had to go through the Board, and you understand it ultimately didn't prove possible to reach arrangements for you to meet her, which you were keen to do. Is that correct?

A Yes, I think there was obviously a lot of questions outstanding for Mrs Slorance and, primarily, if ever I've had to speak to families, which I have done throughout my career, in a microbiology role, you would always do it with the clinical team involved as well, because you are a team. So I thought it was best approach to go with the clinical team to just have a frank, open discussion about whatever I knew, whatever she wanted to ask about what I knew, and if there was something I didn't know the answer to, I could go away and find it out from a microbiology perspective because that was my input.

She'd obviously been told quite conflicting things, but there was agreement in the team from the clinicians involved that it would be a good idea for us together, openly to--

You know, it's a very difficult thing when things go in a sad direction

and, you know, it's the right of the family to have questions answered, openly, transparently, explaining uncertainty. There is uncertainty, there's-- It has to be done sensitively and, you know, the ITU and the Bone Marrow Transplant teams are-- that's their normal job. It's not really part of my normal job to have interactions like that, though it has happened when there's specific questions, and I am always-- and my colleagues also would say, we're always willing if there's a microbiology input, because it is a niche subject and not everybody understands diagnostics and infection control and all that. I would not be there from an infection control point of view because that was not my input into his care, but I would be, certainly, happy to discuss the microbiology side of it and we had agreed to do that.

Then the next thing I heard about it was that there had been a complaint put in by Mrs Slorance. I asked, because I've never been the subject-- I've never been involved in a complaint. I'm not saying it was against me in particular, but for microbiology and as clinical lead, I would take responsibility for dealing with any complaints with microbiology in our department. So I contacted the complaints officer just to say, you

know, “What’s this about? Can you give me a heads-up, so I can discuss and find out what’s going on?” I was given no information, but I did agree with them that, in the context of a complaint, it wouldn’t be appropriate for me to go and meet her alone.

So that’s where it’s been, and as I expressed, I think it’s deeply unfortunate. It’s obviously created an awful lot of suffering, and I think it should-- it could have been handled better overall. There needs to be complete transparency with bereaved families, I believe.

Q Yes. Can we go on to the next page electronically, please, into paragraph 335? Just really, perhaps, to paraphrase what you’ve just said rather more fully, in 335, you say that you deeply regret not being able to meet Mrs Slorance to answer her questions, “I think she deserves answers,” and then you make the point you’ve made earlier that there is room for differing opinions on this matter, but the point is to discuss them.

A Yes, yes, to discuss them openly and not behind closed doors in different places.

Q The only other question I have, you were aware that there was an HIS review in 2022, which followed some of these events in relation to the late Andrew Slorance. So, was that the sort of full scale, independent, conclusive review that somebody might think it should be?

A Not to my eyes, it wasn’t. It just had a lot of holes in it. First of all, they were not experts in assessing this in the first place, so it wasn’t a fair ask of HIS. HIS were not the appropriate people with the appropriate expertise.

Secondly, there was no transparency around how data was collected, what time span, what places. It seemed to be a bit of a chat, or looking at AICC and BICC minutes, which is not how surveillance is done. It didn’t-- It looked to me like an attempt at assurance, but if you knew anything about the building and the subject, there was no cause for assurance there.

Q So you weren’t happy with it anyway?

A No.

Q Thank you. Well, I want to move now to a couple of sort of concluding areas----

A Okay.

Q -- if I can. The first one is just sort of where we are----

A Yes.

Q -- now. One of the questions that’s been suggested might

be useful to put to you is that as of now, as of today, have you had evidence to confirm that the ventilation system at the hospital, including the PPVL rooms that we've been discussing, is of an appropriate standard and being maintained as such?

A No.

Q Now, in your statement at paragraph 340, you set out some concerns, but I'm not, for obvious reasons, going to ask you to reiterate all of them, because we've actually----

A Sure.

Q -- dealt with a lot of these, but I did want to ask you about paragraph 345, which comes a little later after the list, as we now see on electronic page 205, and you say there's a problem with faults with the building. Well, that's what we've been discussing.

A Yes.

Q But you say you think the culture is even more serious.

A I do, because I think that's the root cause of not responding to the problems that emerge in an effective way, because, you know, through life, there will be problems. It's how you respond to them, and that, to me, unites a lot of problems. It isn't just GGC, but, obviously, my most

experience is within GGC, that the prevailing culture is the threat to patient safety because of the way it prevents appropriate management of whatever risks they are, be they overcrowded A&Es, be they buildings with burst pipes, whatever it is, or any individual's concerns about practices.

You need to have a culture that allows the ground level staff to openly raise their concerns, without it becoming a whistleblow. We shouldn't ever need whistleblows, because we should be able to deal with sincere, hardworking, expert people who run our hospitals day in, day out. They are the eyes and ears on the ground, and if they have something they want to raise, management and others should listen, and that should be the first response and, you know, it's been a long journey. It's like nine years now since the opening, and others, not just to do with infection control.

So my issues are not with clinical staff or their teams. I'm not in a position to judge other clinical teams' practices. As far as I'm concerned, we've got excellent clinical teams. We've got, you know, really fantastic treatment modalities, and it's a great hospital in general; I have relatives who've been treated there. My concern is with a culture that is a root

cause of multiple problems, and it will continue to be so. If it's not Infection Control today, it'll be A&E tomorrow. So that is my diagnosis, if you like, or just reflection on where we are.

Q You also deal, in your statement, with the implementation of the case note review recommendations. That, for the record, it starts on 350, which will be electronic page 206 and, basically, the introductory paragraph says, well, you really haven't been told officially what's been done. You understand it had been accepted but you haven't been told. Is that right?

A Yes.

Q I just wanted to raise a couple of points with you, just so we understand that, because I don't want to go through all the comments you make on the----

A Sure.

Q -- case note review. In 351, which is on the next electronic page, 207, we find you discussing this and, I suppose, the question is, when somebody says to you that these are "historic" matters, does that concern you?

A Yes, for two reasons, because they've been historic for a long time, as in, like, that's a phrase that is used-- it was used in 2017,

2018, 2019, 2020, and so it goes on. So "historic" has never really applied because the problems-- well, particularly with the ventilation, haven't been fully resolved. I think that's borne by the expert reports, but even if they were historic, there's an awful lot of learning. I mean, we've been through a lot-- patients, staff have been through a lot. There's been an awful lot of money spent on independent review, case note review, now, the public inquiry, and other investigations, the Oversight Board. We have to have the lessons learned and embedded and respected, and the end of a review process is not a tick box of the recommendations or try and prove that you've done the recommendations. The end point is a systematic, embedded learning that can carry forward to enable you to do better next time, and I don't see that.

Q I just want to ask one more detailed question, and that's about a typing results database.

A Yes.

Q Because I understand that your clinical colleague-- clinical scientist colleague, Kathleen Harvey-Wood, who was a very organised person, apparently----

A Mm-hmm.

Q -- kept a very well-

ordered database of typing results, which was kept constantly up to date.

A Yes.

Q Do you know whether that's been continued?

A No, it has not.

Q Thank you. Now, at the end of your statement, you pick up a number of criticisms that you perceive have been made and you set out your responses to them, and I've asked you----

A Mm-hmm.

Q -- during the course of your evidence, about excessive emails, not listening to the opinions of others, and one or two other questions. I just want to put to you some of the things that may run contrary to your evidence, which the Board has said about whistleblowers.

A Mm.

Q And they assert that there's a history of excessive and unnecessary demand made of Estates and Facilities. Now, do you recognize something as that, that you've done?

A No, but it's not been put to me, so I think, in order to be fair, I would like to see what examples there are. From my point of view, I think I've just acted as-- within my training and as any competent microbiologist would do. So I don't recognise that at all.

Q And what about "making unnecessary demands of members of IMTs"?

A Again, I don't recognise that at all, but if somebody has evidence about that specific to me, I'd have expected at this stage for that to have been presented to me.

Q Another accusation is of, "Engaging in conduct designed to undermine or intimidate professional colleagues." Are you aware of having done that?

A No. I think it maybe-- Is undermining disagreeing? And I have disagreed. I mean, you'll see throughout my entire process, I'm disagreeing to some degree. That could be felt as undermining. But it was certain-- I have never, ever intentionally undermined, for the sake of undermining, another colleague whatever their-- whatever their multidisciplinary background is. So, yes, I have disagreed, but I do not recognise that at all.

Q What about, "Failing to apply or accept recognised scientific principles in the testing of hypotheses about potential sources of infection"?

A I would go so far as to say that that is probably a projection. I feel that I am very up to speed with considering hypotheses and putting

evidence into it, but the experience I've had is that that is not the case from the overarching process around these infections within GGC.

Q What about, "Providing inaccurate information to patients and families about infection and links to the environment"? Is that something you're conscious of having done?

A No, and I think that's an exceedingly serious accusation to-- and has never been put to me specifically ever before. I think, you know, as a GMC-registered person, you are duty-bound to tell the truth to your patients and families. You're duty-bound to be accurate as you possibly can and also to explain when there is uncertainty. So I would think that's a serious GMC matter.

Q What about, "Making false allegations against colleagues in relation to their professional conduct"? Are you aware of having done that?

A No. And, again, that's a very serious accusation that has not been brought up at my appraisal process, or revalidation, or even in, you know, discussions with managers.

Q Now, there is an accusation of not following proper processes and I think to some extent we probably touched on that in a way. What about, "Making false accusations about the accuracy of Board public statements"?

A Again, we've probably discussed those specific situations where I have challenged the accuracy, and I believe with evidence, to the right people. I would just note that the Vale of Leven Inquiry was critical of staff members who didn't pick up on public statements that were not accurate. So it's embedded in our practice that if you see the public being told something that is, to your best knowledge, inaccurate, then we have a duty to point that out as well. I would not accept that.

Q Now, I have no further questions, but I would like to just take you to the very last paragraph of your witness statement and just ask you to read us through that, because that's obviously the point at which when you wrote this, you decided you should conclude-- It's 365, which will be on electronic 208, maybe 209. Now, there we are, 365, and it will run over the page. Can you just take us through what you say in 365, please, because that's obviously your decision as to what you should put as your concluding words?

A Yes, so I think I'm summing up that despite all these processes, today, as we stand, I don't

have a level of reasonable certainty that these matters have been dealt with. A big factor in that is that the position taken in this Inquiry by GGC is that there never has been an increased risk "beyond that which is expected," it's very carefully phrased. If that is your foundation on the basis of everything that has happened, that's evidence-based in the last 10 years, then that is a dangerous place to start off going forward.

So, there are incidents. I have-- You know, it's exhausting keeping-- going over and over, going back and saying that but you have to, because it's not-- Every day, new patients come into the building. Every day, the staff are working really hard for the best of their patients. We would have expected improvements. If we're spending £800 million on a brand new facility that's meant to be world-leading, we expect better. We expect better rates of infection, particularly because we've got nearly all single rooms. That has not been realised and that's not fair on the staff who are doing everything else to improve outcomes.

So, I think that there is no acknowledgment and to get learning, you need acknowledgment. This is absolutely not about blame. It's about,

this has happened, these have been the consequences. There are some grey areas around that, but this has happened, and we need to keep those lessons in mind going forward. If you have an Infection Control team that have to maintain a position that there never has been an increased risk beyond that which is expected, then that is not going to carry us forward into places of better practice. That's what really, I think, is so-- It's just-- It's mind-blowing how backward that is.

Q My Lord, I have no further questions for this witness. I have been given, in the course of the run-up, and indeed during the last two days, issues about suggested questions from a number of other parties, which I've done my best to put often in paraphrased ways but, at the moment, I have no further indications.

THE CHAIR: Well, we'll follow the usual practice of taking a 10-minute break just to check if there's any questions that anyone in the room, or anyone following this remotely would wish Mr Connal to put. So, Dr Peters, if I could ask you to go back to the witness room for maybe no more than 10 minutes.

THE WITNESS: Sure.

(Short break)

THE CHAIR: Mr Connal?

MR CONNAL: My Lord, there were no further questions for this witness.

THE CHAIR: Very well. Could you ask Dr Peters to come in? Dr Peters, I understand there's no more questions that you're required to answer and, therefore, you're free to go.

But, before going, can I thank you for your attendance today and yesterday. I mean, simply the business of giving oral evidence is a fairly challenging activity in itself but behind that evidence, there evidently is a great deal of work on your behalf in preparing the written statement, which is also part of your evidence. So can I recognise that and thank you both for your attendance and for the preparation that has gone into your evidence, both written and oral. Thank you for that but, as I say, you're now free to go.

THE WITNESS: Thank you very much.

THE CHAIR: Now, my understanding, Mr Connal, is that Mr Mackintosh will be leading Mr Walsh tomorrow.

MR CONNAL: That is correct, my Lord.

THE CHAIR: We will be sitting in the morning, but not in the afternoon?

MR CONNAL: Well, I understand that the objective is to sit in the morning and not in the afternoon. I'm not sure it's been guaranteed yet, but that's what I understand. I understand the reasons for my Lord asking that.

THE CHAIR: Very well. Enjoy the rest of the afternoon and we'll see each other tomorrow.

(Session ends)

15:46