SCOTTISH HOSPITALS INQUIRY

Hearings Commencing
12 June 2023

Day 1
Monday, 12 June 2023
Brenda Gibson

C O N T E N T S

10:00

THE CHAIR: Good morning, everyone. In saying that, I am addressing both those who are present in the hearing room in Edinburgh and those who are following our proceedings on the livestream. This is the beginning of the fourth session of hearings held by the Scottish Hospitals Inquiry. Two of these sessions related to the Royal Hospital for Children and Young people in Edinburgh. This is the second session relating to the Queen Elizabeth University Hospital in Glasgow.

Can I begin by introducing some members of the Inquiry team who are present in the hearing room? On my right, there is the lead counsel for the Inquiry, Alastair Duncan KC, and he is immediately assisted by Victoria Arnott, Advocate, also Counsel to the Inquiry, and instructed by Kim Milligan, Assistant Solicitor to the Inquiry. On my left, helping me, is Lesley Browne, again, an assistant solicitor to the Inquiry.

At the first session of the oral hearings in the Inquiry which related to the Glasgow Hospital, we heard from patients and families as to their perspective and their experience. The oral evidence at this session will largely be from frontline clinical staff mainly, but not only from the Schiehallion Unit and from two managers who were closely involved in the events described by the parents and families. The purpose of this hearing was explained in counsel's list of topics for the hearing and, in part, that purpose is to obtain the perspective of staff on the concerns previously identified; in part, it is to highlight areas for future inquiry hearings.

Now, witness statements and bundles of documents have been circulated to the core participants and, where appropriate, they are to be found on the Inquiry's website. As soon as possible, written transcripts of the evidence that we hear in this session will be posted on the Inquiry's website.

Other than with my permission, questioning will be by Mr Duncan. Now, legal representatives will be very familiar with the formal procedure under the Inquiry Rules, and in particular under Rule 9. I am not aware of any formal Rule 9 applications having been lodged in respect of this hearing. However, there is the possibility that, in the course of Mr Duncan's questioning, he raises matters or asks questions which legal representatives would not

reasonably have anticipated being asked. Accordingly, at the end of each witness' evidence, I would propose that we take a brief break, first of all to allow legal representatives to take instructions if that is necessary and, secondly, to raise with Mr Duncan any matters which legal representatives would wish him further to pursue or alternatively to indicate-- it will be-- eventually to me if legal representatives themselves wish to put questions. So there will be an opportunity to explore it first of all with Mr Duncan and then, if necessary, more formally with me in the event of unanticipated lines of evidence having been opened up.

Finally, can I remind everyone – particularly in the room – that, as I have previously said, these proceedings are live streamed and recorded for the purposes of sharing with the wider public. That inevitably means that there is the possibility that anyone in the room will be recorded and seen on the livestream.

Now, there is nothing that occurs to me that I need to raise this morning and, accordingly, we will hand over to Mr Duncan, who may simply wish to lead his first witness.

MR DUNCAN: Thank you, my Lord. That is indeed what I intend to

do, and the first witness will be Professor Brenda Gibson.

THE CHAIR: Thank you. Please sit down, Professor. Good morning, Professor. As you appreciate, you are about to be asked questions by Mr Duncan, Counsel to the Inquiry but, as a first step, I understand you are prepared to take the oath.

Professor Brenda Gibson
Sworn

THE CHAIR: Thank you very much, Professor. Can I just say that I would propose that we will take a break during the course of the morning, perhaps around about 11.30. It just depends where we find a natural break, but if at any time or for any reason you wish to just take a break in your evidence, simply indicate that to me and we will take a break. The other thing is-- I am very conscious of this because I am hard of hearing. I do not know if you can see, but I wear hearing aids. They are excellent, but they are not perfect. So, not necessarily easy to do this, but could I ask you maybe to speak a little more loudly than you would in normal conversation. The microphone should help, but if you could just bear in mind that I certainly need all the help that I

can.

A Right.

Q Mr Duncan.

Questioned by Mr Duncan KC

Q Thank you, my Lord. Good morning again, Professor. What I will do in asking questions of you this morning is, first of all, I am going to ask you some questions about who you are, and then I am going to ask you some questions about who your patients are, and then we will start to talk about the issues with the hospital. So, if we can just take things in that order. Could you just begin by perhaps giving us your full name?

A Brenda Elizabeth Simpson Gibson.

Q Thank you. Now, in line with what his Lordship has just said, I wonder if we could maybe have you a wee bit nearer the microphone. Do you want to just slide it-- I have the same problem, and I do not know whether actually at the minute I am perhaps deafening everybody in the room. I am getting shakes of heads, so we will proceed in that way. Are you-- Am I right in thinking you are a consultant pediatric hematologist? Is that right?

A I am, yes.

Q Yes, and where are you based?

A The Royal Hospital for Children in Glasgow.

Q Thank you. What positions do you hold currently with Greater Glasgow and Clyde Health Board, or indeed elsewhere?

A Well, with Greater Glasgow Health Board, I am a consultant pediatric hematologist, an NHS employee, and I have an honorary professorship from the University of Glasgow.

Q Are you the lead clinician----

A I am the lead clinician.

Q -- of hematology and oncology? Is that right?

A I am the lead clinician within the department, and I am the director of the bone marrow transplant programme.

Q Yes. So, are you in charge, effectively, of the provision of the West of Scotland pediatric leukemia service? Is that right?

A Mainly, yes.

Q Yes, and departmental lead for systematic administration of chemotherapy? Have I got that right?

A Yes.

Q And director of the national-- is it allogenic----

A Allogenic bone marrow transplant program.

Q And I am probably going to mangle this one as well. Is that a form of hematopoietic stem cell transplantation?

A It is hematopoietic stem cell transplant, yes.

Q It is? It is not a form of it? It is it?

A It is it.

Q Yes. Is the other form of----

A Stem cell transplantation and bone marrow transplantation are anonymous (sic). They're the same, yes.

Q Thank you. Now, you have set out, very helpfully, in your statement a no doubt potted history of your CV, and we will look at that carefully. Indeed, we have already. I have got one question for you. Why hematology?

A For me, why hematology and why pediatric hematology? Well, it is a specialty-- Well, there's several things. Certainly, when I trained, it was a mixed laboratory and clinical specialty. I found it attractive that you could make the diagnosis yourself without being dependent on a pathologist or a radiologist or a surgeon or anybody else. So, I think

that is an attraction but, primarily, these are families that are children and their parents – so the families – that we will meet. We will know them for-- if this is leukemia, we may treat them for three years. We have very good relationships generally with the families, and I personally get a lot out of those relationships.

Q Now, it is obvious from the evidence we heard in the autumn of 2021 that some of those experiences will be very hard and upsetting, but are you indicating that there are also rewards from all of that as well?

A Sorry?

Q Are there rewards for----

A There are enormous rewards. It's a huge reward. I've done it so many years now that the children that started off with me are now adults with their own children, and it's a great reward to see that coming back. I look around my department, I treated some of the nurses in the department, some of the play specialists, there's a few consultants within the hospital that I've had as patients. So it is a very rewarding specialty.

Q Thank you. Now, at some point in your career, I think we detect from your statement that you began to focus upon malignant

conditions rather than benign. Is that right?

A Yes.

Q But are we right in understanding the department also does look after children with benign conditions?

A So the department will look after any cancer and any hematology, any blood, problem. So, we look after all the solid tumors, we look after all the leukemiacs, we'll do the transplants for Scotland, we'll look after the children with an increasing number with sickle cell anemia, clotting problems like hemophilia and all the benign anemias and thrombocytopenias and all the other things.

Q Thank you. Now, that really neatly takes us towards having you tell us a bit about your patients, which I said I would ask you to do next, but before you do that, I wonder if you could maybe just explain something further about your role, your professional role, relative to the questions that this Inquiry has to determine. Now, let me just explain what I mean by that. The Inquiry is tasked with finding out whether the hospital building at which you work provides a suitable environment for the delivery of safe, effective, person-

centered care. I guess I would be interested in understanding what, if any, responsibility the clinicians have to the provision of the building.

A I think I can be very clear about that. It's something that's been talked about many times in our department by myself and my colleagues. Our view is that we, as clinicians, are responsible for providing chemotherapy or any other form of care within national or international protocols or guidelines, and to do that with a well-trained workforce within a holistic manner. The responsibility of providing a safe environment for that treatment to be delivered lies, in our view, with the Health Board led by the chief executive. The responsibility for deciding is a place safe or not safe, lies with control of infection.

Q Thank you. So, if we move on then from there, Professor Gibson. As I indicated, I would like to just find out a little bit more, from the clinician's perspective, about the patients that you look after. You touched on some of it already. Let us begin, then, with thinking about the range of patients. You have mentioned there is a range of conditions treated in the unit. If we take the malignant conditions, what would the range be? What sort of

conditions would you see?

A Well, within the unit, we would see all kinds of malignant disease. I mean, if they live in the west of Scotland, they come to us. We are their tertiary referral center. So I think for me, as you've already said, I have specialised or I have contracted down what I do to leukemia and transplant. So, if you look at children with cancer, which is not the bulk-- we're increasingly seeing lots of sickle cell disease in the West of Scotland because of migration issues. But, for me, if you look at cancers, you can kind of divide them into: a third are leukemias/lymphomas, a third are brain tumors, and a third are a mismatch of other things like neuroblastoma, rhabdomyosarcoma. But, for me, the bulk that I look after has been the leukemiacs and the transplants.

Q Thank you. At any one time, how many inpatients would there be on the unit, do you think?

A Gosh. We just changed this when we moved back. I think we have 23 beds, yes.

Q And it may or may not be possible to even give an approximation to this sort of question, but to what extent would those beds usually be completely filled?

A They're usually filled.

Q Yes, and as far as the split between those having chemotherapy and those who are in for bone marrow transplant, what would be the split there?

A We would see-- For leukemia – I think I can probably answer best for leukemia – we would see 20, 25 new cases a year. We are commissioned by NSD, the National Services Division, to transplant about 15, 18, up to 20 transplants a year.

Q Yes.

A However, as well as numbers, intensity matters. Of course, the intensity of transplanting somebody is significantly greater than the intensity of just delivering chemotherapy.

Q Indeed. I am going to ask you in a moment a bit about treatment including transplanting but at any one time, very roughly, how many transplant patients would there be on the ward?

A There's three in at the moment.

Q And would that be typical?

A Yes. Sometimes there might be five or six.

Q Again – and I am only interested in approximations – what

would the size, roughly, of the cohort of outpatients be at any one time?

A Large. So, several hundred is the answer to that. We will treat leukemia to begin with until they go into remission within the ward. They'll then only be seen as outpatients. It's not really outpatients. Some come to the outpatient clinic, a lot come to the daycare unit. So, the daycare unit might see 20/25 children a day.

Q I mean, you say the Daycare Unit, are you speaking about---

A 2B, yes.

Q -- 2B? I want to move on then and just perhaps ask you some questions about the treatment of the conditions that you look after. Very broadly, what are the stages of chemotherapy?

A Well, that depends what disease you've got.

Q If we maybe then just focus it on, say, leukemia.

A Okay. So, the stages of chemotherapy for leukemia, the first thing you have to do is achieve a remission. So, if you look at leukemia, 85 per cent of them will have what you call childhood leukemia, acute lymphoblastic leukemia, which is the predominant type in children. Eighty-five per cent will have that, 15 per cent will have acute myeloid leukemia which is the leukemia you more often see in adults. Sometimes they're called childhood leukemia in adult leukemia because of the age predominance or distribution.

So, the first thing, whatever you do, whatever kind of leukemia you've got, you have to achieve remission, so you have to clear disease. So if we take acute lymphoblastic leukemia, which is the commonest cancer we see, then they have four weeks of chemotherapy to achieve remission. They will then go on and have a number of blocks of chemotherapy which can be delivered in the daycare unit or as an outpatient or varying intensity dependent on the response to the first four weeks. Once they've completed those, which will take four to six months, they will then be treated on what's called maintenance treatment, which is all outpatient based and they're almost back to normal life by then. That has always been two years for girls. It used to be three years for boys. It has just now reduced to two years for boys on the current national trial.

Q Thank you. Now, what about bone marrow transplant? Are you able to give us an indication of

what the stages of that look like?

A Well, in terms of a lot of things that might come up in the Inquiry, somebody with leukemia presents to your emergency department or via their GP if it's an emergency admission, and they have to be treated within-- well, dependent on a number of factors, either that day or within 48 hours/72 hours. There's a lot of planning goes into transplantation. First of all, you have to-- dependent on what you're being transplanted for, and we don't just transplant children with malignant disease, we transplant children with benign disease as well. So, there will be criteria they will have to fulfill to be eligible, and there is our UK-wide BSBMT guideline on who should and who should not be transplanted. That's very important because transplantation carries a significant mortality. So you should be very clear in your mind that there's no alternative option which would give you equal or better results then that is the best.

So, first of all, a lot of planning goes on. You confirm or agree that-- We would do that within a multidisciplinary team; no one individual would take that decision. We do that within a meeting, and we'd all agree this is the best way forward.

If there was any question or not, we would take it to a UK-wide monthly transplant MDT where we discuss it with our colleagues up and down the country.

Once we've decided, then you have to identify a donor. Now, that can be very difficult to-- not very difficult, I shouldn't have said that. But that's quite complicated. Your chance of having a brother or a sister, assuming you have the same father, is one in four, so the vast majority of children do not have a sibling donor. So, we're looking for donors on national panels, and for the UK, we work through the Anthony Nolan Panel, who then interacts with the equivalent in the States, the equivalent in Germany, the equivalent in other countries.

So, you have to identify a donor and that can take quite a long time because we will have the tissue type of the patient. That will be sent to the registries. It will then all have to be confirmed. Once you've identified the donor, you then have to set a date that the donor is willing to donate on, which gives you an idea of when you can plan that transplant. So, to go to transplant you have to give them what is referred to as conditioning chemotherapy – or radiotherapy,

dependent on their disease – where you wipe out the bone marrow and any disease with it, so there is something for the donor cells to then engraft in. Now, that can take 10 days to give that conditioning chemotherapy. You then sit and wait for the marrow to graft. Now, that can depend on the donor source. That can take a variable length of time, but you're talking on average three to four weeks. Then, you have to cope with the complications of what you've done, and that can take several months or a number of months.

Q Do those complications include the potential of a reaction between the graft and the host, as it were?

A Well, infection is the first complication, which is why there is guidelines on where and how you nurse these. There are many complications of transplant, which is why we give great thought to who goes ahead and who does not go ahead, and to try and predict a mortality rate so that people can fairly and informedly consent, but I don't know if anybody can ever consent to something like that, if we're really honest. It does require a lot of understanding. So, yes, so the complications are infection, graft-

versus-host disease, which is what you're seeing react. You can get organ damage. You can have all the complications of the conditioning drugs, but I suppose infection and graft-versus-host disease are the biggest complications we see.

Q Yes. In terms of planning a bone marrow transplant, do I take from what you said a moment ago that what that looks like very much depends on the individual patient case and indeed the situation as regards the availability of a donor. Is that right?

A Well, in Scotland we have a weekly MDT through Teams. So, it's a multidisciplinary team meeting where we meet our colleagues from Edinburgh, and Aberdeen, and Dundee, and Inverness on a weekly basis. They will alert us to any patient who they think may require a transplant. It's not that simple because whether they do, or don't may depend on how they respond to frontline chemotherapy. So, it can be a bit of a waiting game to know what's going to happen, but as soon as we think it's likely, then we'll start looking for a donor.

Q Can the requirement for a transplant be something that arises quite suddenly?

A Yes. There are some

children that are born with problems that have to be transplanted quickly. Yes.

Q Yes. An indication that we have had from one of the statements provided by one of your colleagues suggests that there can be quite a narrow window to get to a bone marrow transplant for some patients. Would that be right?

A Yes. If you're transplanting somebody with a relapse disease, for example, relapsed leukaemia, and it has been difficult to achieve a second remission, then you're time limited to get to transplant whilst you can maintain that remission.

Q Yes. Thank you. Now, you mentioned infection and I am going to ask you in a moment some questions about the risk of infection for patients going through chemotherapy and transplant, but before I do that, I wonder if it might be worth just having you offer your own reflections on some of what the patients and families said about just the treatment of cancer and leukaemia and the like. They described treatment as something that could be gruelling, unpredictable, have terrifying side effects. Are these descriptions that you would recognise?

A Well, when you get the diagnosis of cancer in your child, it

changes your life. Your life's never going to be the same. It's never going to be the same for you, the child, the siblings, or any of your relatives. It doesn't really matter. Well, it does matter. Of course it matters, but I think the fear that children will relapse or not respond to treatment never leaves families.

It doesn't matter how much-- We as clinicians can say this is very good, the relapse rate is very low, and once you get to a certain stage post treatment, almost nobody in trials has ever relapsed. You can say that, but it's okay to say that. To be receiving that, I don't think the fear ever, ever leaves families, whatever. So, I think they live with that fear, and that is quite gruelling. It is very difficult to watch your child----

They all have central lines put in. We understand the benefit of them, but it isn't-- for parents, particularly of a young child, of any child, it is hard to watch them go to theatre for lines, for bone marrows, for lumbar punctures. It's hard to see them change as children. They often say that they're not the child they were before or they're back to themselves because it's hard to see them not eat. It's hard to see them lose their hair. Yes, it is. It is gruelling.

Q Now, let's maybe move on and, as I indicated, perhaps have you offer some observations in relation to infection. Now, there is quite a bit in your statement already about this, but I think it would be worth having you provide some evidence today about it too. To what extent are your patients susceptible to a risk of infection?

A They're very susceptible to risk of infection. So what stops you and I from getting the kind of infections they get is several-- well, three things basically.

Our bone marrow makes three cells. It makes red cells that if you don't have enough, you're anaemic. It makes healthy white cells called neutrophils, and the job of a neutrophil is to protect you against bacterial and fungal infections, and these are the infections that we are really concerned with here. It makes little cells called platelets that stop you bruising or bleeding. So, your main defence against infection is having a normal or at least an adequate neutrophil count to deal with infections.

The second thing that matters is having integrity of your epithelium. So, if you ulcerate your mouth or ulcerate your gut – we are all colonised with bugs – and if you reach that epithelium, then there is the risk of the

bugs from yourself going into your bloodstream and making you unwell.

I suppose the third thing that makes you susceptible is you've got a bit of plastic in you. You've got an in-dwelling central line that bugs can sit on. So, if we look at the children coming through our unit – and this was very reflected in the case review study – the deeper your neutropoenia-- So, we'll call anybody with a count of 1 times 10 to 9 per litre neutropenic. If you've got none, which is absolute neutropoenia, or you're less than 0.5, the more profound the fall in your neutrophil count. The longer it stays low, the greater your risk of infection. That's also compounded if you have drugs that suppress your immunity, and perhaps the most suppressing of the drugs that we use commonly is steroids in leukaemia.

Q So, you have anticipated my next question which was going to be whether there is a range of susceptibility, and I take you to suggest that there is and would it be those who are profoundly neutropenic who would be at the most susceptible end?

A The most susceptible are the transplants because you've given them much more intensive chemotherapy than you'd give

anybody else. So, you've broken down their mucosal lining and you've allowed bugs to get in. They will be profoundly-- They will have an absolute neutropenia – so no cells at all – maybe for three to four weeks. You've also given them a very, very impressive immunosuppression to prevent graft-versus-host disease. So you've given them cyclosporine or MMF or Tacroli or something that suppresses their immune system.

Then, if they get graft-versus-host disease, graft-versus-host disease in itself is immunosuppressive. So, they are the most vulnerable, followed by relapsed leukaemia. The reason they're the next most vulnerable is they've already been hit by one lot of chemotherapy and that's taken its toll, and relapse treatment is always more intensive than non-relapse treatment because you've already failed the lighter treatment, followed then upfront acute myeloid leukaemia, then followed by ALL, but there are patients within those that would be particularly susceptible. There's a much higher incidence of leukaemia in children with Down's Syndrome. They have already got immune deficiency as part of their Down's Syndrome, so they're particularly susceptible, and babies are particularly susceptible.

Q Thank you.

A Then the solid tumours, which I shouldn't really probably talk about, but if their bone marrow is affected, they're in the same position, but for a lot of them, that's stage four disease. They don't have involvement with the bone marrow, and they will tolerate chemotherapy much better because they have just intermittent periods of neutropoenia.

Q Thank you. So, thinking about what you have just said, from your perspective, would you see the work of this Inquiry as being around the incidence of infection other than what might be anticipated as a result of the issues that you have just described?

A Yes. I would say so. I know we're going to talk about prophylaxis at some point but wherever we can, we treat children on national or international trials. That gives you a prediction of what the risk of infection – or the risk of toxicity – is. I mean, I know we do use some terrible terms that are awful when you see them out loud, but we do talk about treatment-related mortality, which means your chances of something awful happening during chemotherapy, and we will have that for most diseases, from previous

experience of what's happened with children similarly.

Now, the best is the leukaemia data, probably, and before coming to this, I did check with the chief investigator of our last trial. The induction death rate from infection was 0.7 per cent. The death rate later on was 1.3 per cent, so the death rate in total was 2 per cent. I can say I've gone back over the last 10 years of our data for leukaemia, and we didn't have a single death from infection of children treated with chemotherapy alone. I'm not talking about transplant patients.

Q Thank you. Now, some of this you have already touched on, but I wondered if it might be helpful just to have an understanding of the pathogens that might cause infection. It might make the remainder of your evidence easier for us to understand. There is a difference I think you have touched on already between endogenous and exogenous. Is that right?

A Yes.

Q When you were speaking earlier about infection coming from inside the body, that would be endogenous.

A Endogenous, yes.

Q Yes. You have, I think, already answered this question too. I was going to ask you to classify the pathogens that are of particular concern to you, and you would say it was bacterial and fungal would be the main ones.

A Yes.

Q Yes. As far as bacterial is concerned, are we to understand that those can be divided into gram-negative and gram-positive?

A Yes.

Q Yes. Are we right in understanding that the latter, gram-positive are often associated with line care issues?

A Yes. I mean, they often come off the skin. They're Staphs off the skin and they're often line care issues, and we would-- not all of them. I mean, Staph is not-- We wouldn't worry about a Coagulase-negative Staph, but some Strepts can make you quite ill, but it's gram-negatives that we direct our empirical treatment against.

Q What is empirical treatment?

A So if you have no neutrophils and you come-- All our parents are taught very well before they go home that if their child has a temperature of over 38 or twice of 38.5 that they contact us and they come back. So, if we have a child who has a

temperature and who is neutropenic, we don't wait for the blood cultures. We treat them empirically. So, we choose the antibiotics to make sure they cover the organisms that are most serious and would make them most ill. So, we have an empirical antibiotic regime.

Q Is it gram-negative infections?

A They are aimed at gram-negatives. They will have some gram-positive cover, but they're not particularly directed at the kind of things that go in through a line. It's more the gram positive's that go in through a line.

Q Yes. I am sorry. Is it gram negatives that have the potential to be a particular danger to your patients?

A Yes, particularly those that can form a biofilm.

Q Now, you also anticipated something else I was going to ask you about, which was getting us towards the question of communication. I wonder, given what you just said, whether you would be heartened to hear that, I think almost all the patient and family witnesses said that one of the things they understood right from the start was the biggest threat to their children was infection.

A Yes. I can say that, for example, I can give you an example of why they will understand that. If I take acute lymphoblastic leukaemia, which is what I always take, the chance of a child going into remission-- and that's what the families want to know. You're saying to them, we're giving you four weeks of treatment to clear disease, and that's called a remission. Then, the rest of the treatment you'll get is going to be to get rid of rogue cells that are left behind that we can't see. So, if they say to me, "What's the chances of that?" I will say, "It's 95/96 per cent." Then, if you turn that around and say, "What happens to the other 4 per cent?" Well, half of them will have unresponsive disease and they will tend to be the teenagers with bad cytogenetics, and the other 2 per cent, I've told you, will die from infection. So, that is drummed into them from the very beginning, so it's understandable how scary infection is for them.

Before they will go home, they are taught how to take a temperature. They're told when they contact us, and they don't quite sit an exam, but we do have what we call a discharge protocol, that where there's significance, and it's made very clear to them, they don't ignore

temperatures.

Q You also anticipate my next question about another thing that they emphasised was how scary infection could be, and we heard some very upsetting descriptions of episodes of infection. Would that be your experience too, that it is something that can happen very suddenly?

A Oh, it can happen very suddenly. That's why we use empirical antibiotics. We have a policy of how fast those antibiotics have to go in, and you have to see it in the light of the context. If you are a good responder, and at least half the children will be good responders with ALL, the relapse rate sitting nationally-- around the world, the last trial, it was 3.7 per cent. It's sitting at 4 per cent around the world. So, of those who do relapse, half of them will be salvaged, so the overall survival is 98 per cent. So, that is equivalent to your chances of getting an untreatable infection.

So it's not that the numbers are necessarily high, but relatively speaking, the outcome of having an infection or a fatal infection like that is very significant when you put it into the context of a disease with that kind of survival rate.

Q Yes. One of the things that many of them described in the context of infection episodes was something I am still not clear how we pronounce it, whether it's Rigor or Rigor.

A Rigor.

Q Could you tell us a bit about that, please?

A Well, I don't know if you've ever had the flu or if you got COVID, but when you rigor is when you shake, and that's really when your blood pressure-- If you get bacteria going into your bloodstream, it will put your heart rate up. It will drop your blood pressure and you feel shivery, and so they're really describing what it's like having the flu.

Q Their descriptions of it, I think, were of something more dramatic than that.

A Well, no. You're right. They are more dramatic, but that's what a rigor to you or I is when we have that. They can have very significant rigors, yes. They are right.

Q Okay. In terms of other impacts from infection, I think this is all in your statement, so we will take this fairly quickly if we may. Additional surgery would be one possibility, if a line needed to be replaced. Does that sound right?

A Yes. We will always discuss with microbiology: does the

line come out? Does the line stay in? If it's an organism that's known to cause a biofilm, the line will definitely come out. Nowadays, we will discuss with Control of Infection every gram-negative and decide: does the line-- what is the likely source? Is this likely to have been endogenous or exogenous, and then take the decision: is the line removed or not?

Q Delay or cancellation of treatment, would that be another possibility?

A Well, you have to get over the infection. You can't give somebody chemotherapy who's still infected. So, you have to clear the infection and you have to get the line back in.

Q Now, just moving towards the conclusion of this discussion about infection. Again, just thinking back to this question of what you would see your role as a witness in this inquiry as being. Can you say whether it would be your view that expert analysis of infection patterns would be for treating clinicians, or it would be for microbiologists and epidemiologists?

A I think it's for microbiologists and epidemiologists, and indeed statisticians, perhaps.

Q I wonder if, as treating clinicians, your experience does at least permit an informed view of whether at least infection patterns are or are not what you would normally anticipate?

A Well, as treating clinicians, we may feel that we're seeing more infections than we usually see. We did, on this occasion, feel that they were unusual infections. If there were spikes, they weren't spikes across the board, but it is for us to say to the Control of Infection, "Is this okay, or is this not okay?" It is for them to decide. We're not experts in that field, and we often have concerns that are not founded.

Q Thank you. Now, something that you raised a moment ago also was the question of prophylaxis. Again, you have dealt with this quite extensively in your witness statement, so if we may, I might try and take this fairly quickly. Are we right to understand that the provision of prophylaxis to patients is something that happens as a matter of course?

A It is something that happens as a matter of course for some patients. So, we recognise the risk of induction in ALL with high dose steroids. We'll prophylax against fungus for that. We recognise that

children with Down's Syndrome are at particular risk. We recognise infants are. So, there are criteria that within national trials, where there is a guideline as to what you do, and we would always follow that guideline.

Q Yes. What would the conventional approach be to communicating with patients around the provision of prophylaxis?

A Well, if they were a newly presenting patient, we would go over that the same way we would go over the chemotherapy with them. They're all prophylaxed against pneumocystis, with Septrin for the entirety. The parents know that, and they will know what prophylaxis they're having at any one time and why they're having it, but to be honest, when you first come with your child leukaemia, that's not your main concern.

Q No. Now, another thing that the patients and families spoke about and which you speak about in your statement is the bond of trust between the clinician and the family. How important do you see that?

A I think it's incredibly important. Families have to trust you. I mean, there has to be-- We often say that the families are part of the team. There's only one side in a team, and there has to be trust within that

team or else you can't really move forward. We have to also accept that we are in 2023. The days of thinking that doctors always know best are over and done with. You have to earn trust as you have to earn reputation, and it's right and proper that they ask if they have queries or they have doubts, but trust is immensely important.

Q How important is effective and open communication to the development and maintenance of trust?

A I think it's very important to it. I mean, I actually do think we communicate well with families. We spend a lot of time doing it, and it's not just the doctors who do it. The nurses are going in-- We're going in on a ward round and speaking-- Well, you're meeting them at the beginning, but you're going in every day on a ward round and meeting them, and if they're having chemotherapy, there's nurses going in and out all day that they're asking questions of. They're then going to day care and they're asking, and they're having the same advice or the same opportunity to ask questions, go over that.

It's not a one-off thing, communicating with them about what the problem is or what might happen, and we have lots of very, very senior

nurses. We have advanced nurse practitioners within most specialties – so, within most divisions – and they will phone them all the time. We have a triage phone that they can phone for any advice at any time. It's not a one-stop. Communication is ongoing and it doesn't stop.

Q Moving on then to start to think about the hospital then. You set out in your statement briefly the history of the Schiehallion Unit. I wonder if you could just give us, as it were, a thumbnail sketch of how the Schiehallion Unit came about.

A Do you mean how we got the name?

Q Yes.

A Oh, God. Right, okay. So we opened the Schiehallion Unit in 1996. It had been the Department of Child and Family Psychiatry, so it was a large area. It was a very good floorplan for us, and previous to that, we had shared a ward with general paediatrics, and it's a bit of deja vu for me because general paediatrics would admit – we didn't have cubicles at that time in that ward; it was open plan – children with infections, which would then spread to our children.

So, we had a very good campaign to get the hospital to allow us to move to a stand-alone unit, and

the stand-alone unit was Schiehallion. Lots of things were different in those days and, to be honest, I can't remember most of them, but I'd worked for a long time with the ward sister, and I think we drew the plans up ourselves. I think the advantage of it was, or the aim of it was, that it was very inclusive towards the team. So, it wasn't just about patient accommodation. The parents had a suite on the ward. They, I think had, if I remember rightly, three bedrooms, a kitchen, and a shared toilet, so it wasn't luxury. It wasn't the Hilton, but it was very functional and it did mean that if their child was unwell they had somewhere they could go and sleep for a few hours, without being awake all night with people coming in and checking temperatures and reading drip stands and things like that, but on the other hand, they didn't have to leave the hospital. So, they could come back in a hurry if they wanted to or even if there was nothing wrong, but they just needed that reassurance in their own minds.

So, we had parent accommodation. We had good accommodation for the children. We brought down our transplant cubicles from the ward. We had office accommodation, and that office

accommodation was for medical staff. We had social work. We had our outreach nurses. We had our data management. We had everything that you need to run an effective unit, and it was all very close by. It was very easy for families to just come along if you hadn't gone home at night and knock on your door and sit down and talk about something. They could access social work very easily.

We had a staff room, so communication wasn't the difficulty it is now because we actually spoke to each other in a staff room. We had a seminar room that we could hold all our meetings in. So we had a very compact unit which I think allowed the delivery of holistic care. We would have outgrown it. I'm not saying we wouldn't have outgrown it because as staff increases, you always outgrow, but it offered us everything we needed at that time.

Q Thank you. Now, I am going to move on then and think about the move from Yorkhill to the new hospital. I am going to ask you some questions about the involvement of clinicians in the planning of that and indeed in relation to the construction of the hospital. Now, these are probably more questions that we will look at in another hearing, but I think it would be useful to hear your evidence on these matters now. You summarise it to some extent in your statement, but I am just going to ask you a few questions about that. First of all, to what extent were you and clinical colleagues consulted with as regards relocation of the hospital or as regards the layout of the new hospital?

A Well, the relocation of the hospital we weren't consulted at all. I don't know if we had any right to be consulted in fairness. My understanding, which may or may not be correct, is that we moved because for much of my time on the Yorkhill site there was the Queen Mother's Hospital, which was a maternity hospital.

It did not meet national standards-- I mean, I don't know if that's the right term, but you're meant to have an intensive care unit on the site of a maternity hospital in case of acute bleeds or bad postpartum or antepartum haemorrhages. Our mothers had to move to-- had to be stabilised and taken to the Intensive Care Unit at Gartnavel site or maybe the Western. I can't remember, but certainly offsite. So, there was an option appraisal done to see which of the maternity sites would remain. We had at that time what was called

Rottenrow, the one at the Royal, the one on the Southern General site, and the Queen Mothers, and it was decided-- and so they moved the Queen Mothers to the Southern General site, where there was an Adult Intensive Care Unit. That was, in some ways, the reason for moving the-- as I understand it – never involved in it – the children's hospital, so that the neonates, the babies, would be in a paediatric setting.

Q Thank you. As far as-- After that decision is taken, as far as what the layout of the new Schiehallion Unit would look like, to what extent was there consultation with clinicians around that?

A Well, my recollection is there was very limited consultation. I do remember going to a number of meetings with my consultant colleagues and some of the senior nurses within the unit. All that I remember we had as choices was there was a floor plan, and that was to be our space and we were not to have any more space than that. We could do anything we liked with that space, but if it didn't meet our needs, it couldn't be extended. So, we just had to make the most of that space and we opted to maximise the number of patient cubicles because we quite

frequently boarded patients out, and I think you heard from the families how much they hated getting sent to another ward. So we wanted to do everything we could to avoid that situation.

So, we had to just accept that we sacrificed much of what we'd had in the old Schiehallion Unit. So things like we lost-- we lost all office-- with the exception of the nurses who work on the ward. I mean, I think people sometimes get confused about who actually works on the ward. Doctors do ward-- consultants, they go to clinics, they go-- you know. So, they're not permanently on the ward the way a nurse is permanently on the ward. So, in some ways, the distribution of space, or the allocation, we left to the nurses, but we lost office accommodation, we lost the patient-parent accommodation, we lost our staff room, we lost our seminar room, our pharmacy accommodation. I have always said in my statements, and repeatedly say, it was grossly inadequate, and pharmacists are enormously important in a unit such as ours. This is not an adult where you give 500 milligrams four times a day. Everything is calculated on weight, and lots of-- going into lots of fluid that have to be very carefully calculated,

particularly for small children. So they're enormously important. So we lost a lot.

In terms of where everybody went or how the space that we were being allowed was used, we left really to the nurses. I mean, they were in a far better position to say where the sluice needed to be, or the preparation room needed to be compared to the patient cubicles, because they were the people using it.

I, as the lead, was asked to sign off the plan, and I didn't do it. Well, I didn't do it to the best of my knowledge. I certainly held out for a very long time. At this Inquiry, I always feel that I'm going to get shown a bit of paper with a signature, but I'm certain I didn't do it. I held out for a very-- and I think it was signed off by a senior nurse, a managerial nurse. That's my understanding. I didn't do it because, particularly, there was no parent accommodation, which I thought was-- Well, I say no parent accommodation. There was a bed in the child's room, but there was nowhere to go make a cup of coffee. There was no coffee room. There was nowhere the parents could sit down together, and they do get a lot of support from each other. I thought pharmacy was inadequate. I thought it didn't-- We had been

promised a like-for-like unit in a flagship hospital, and it certainly wasn't a like-for-like unit.

Now, if you're asking me were we involved in the ventilation or the water or the anything like that, no. We had no involvement in that. Our involvement was purely in deciding how we would allocate the space.

Q Thank you. Now, just one further question around that. In your statement, you describe the process of consultation with clinicians around that as "extremely unpleasant." What did you mean by that?

A Well, we did try to argue our case, as you can imagine. We did, and it did get rather heated, but we didn't win. It was a very firm line taken. What we did do was-- I did manage after – well, no, it must have been before we moved in; I honestly can't remember – to persuade the local management to convert a room, which I cannot remember the purpose of that room, into a small kitchen for the parents so they could have a microwave and make a cup of coffee and sit down. That was achieved. We have offsite accommodation for families. Of course, they keep changing their name, and I never remember what they changed their name to, but it was CLIC Sargent.

They've now got another name.

Q Was it Marion House?

A Marion House, yes. So we did pay-- We have a lot of endowment. Whatever has happened here, families are very generous to us and very supportive in terms of fundraising for us. So we did have money, and we paid for an extra two rooms to go on to Marion House, and we paid for a housekeeper because the number of rooms required another housekeeper. The group of children who came out the best from the relocation were the teenagers, who got a nice unit of their own and a very, very nice and generous social space, and it was very well decorated. It was paid by the Teenage Cancer Trust. So, we contacted the same company and paid from our endowment funds for the rest of the ward to be-- decorated is the wrong word, but brought up to the same standard.

Q Thank you. Now, you anticipate that mainly what we are going to be speaking about is issues with the water and the ventilation systems and the drainage system indeed but, before we get to that, and I will try and take this quite quickly if I can, I think there were-- we heard in the patient family evidence, and we see in your statement, that there were

a number of other issues with the hospital that presented themselves really from the start. I think in your statement, for example, you remember issues with cladding, issues with windows falling out and a sewage leak. Is that right?

A There were often sewage leaks, yes.

Q Yes, and I think you agree with the patient and families that there were also issues with temperature, and with blinds, and TVs not working. Is that right?

A Yes.

Q Yes. I think you indicate in your statement that you are aware of an issue with the smell from the nearby water treatment works or sewage treatment works, depending on your perspective. Is that right?

A Well, when you go out, yes. Particularly when you're outside, you can smell it. I don't mean every day, but you can occasionally smell it, yes.

Q In your statement, you indicate that you yourself are not aware of the smell having impacted upon patients undergoing chemotherapy, in the sense of nauseating them.

A Well, maybe that wasn't a very good thing for me to write. I

don't know. I'm not necessarily the person who would be aware of that. The mothers and fathers are much more likely to say that to the nurses as the nurses go in. I probably shouldn't say "more important things," but there's things they will talk to me about and things they talk to about the nurses that are in and out all the time. They're much more likely to say to the nurses they felt sick after that smell. They wouldn't necessarily say that to me. They're much more likely to say to me, "Is everything going okay?" It's a difference in who you are.

Q Yes, and I think you were also aware of flooding from showers. Is that right?

A Yes.

Q Was that something that gave rise to a safety concern from your point of view?

A I suppose anything like that gives you a concern. I don't know about safety. A concern about the building.

Q Well, that maybe takes me to the question I was about to ask you. A number of the patient and family witnesses indicated that that, while the main issues that we are concerned with here are around water ventilation and drainage, these other issues might be things that contributed to a loss of confidence in the building. Is that something that you have got any perspective or awareness of?

A Well, I do remember the parents complaining the TVs didn't work. I mean, the cladding was quite a big thing, mainly because I suppose everybody thinks of Grenfell and cladding, but the cladding was difficult. So much happened, to be honest. I find it difficult to remember the dates in great detail, but the cladding did-- We did prophylax with the cladding, as I remember. We had to enter the hospital in a different route. So it did have an impact. Yes, I suppose anything has some effect on your trust, doesn't it?

Q Well, from your perspective, was that-- if we just take-- As we start to move through the story in 2015, and we just think about all of these other issues that you have just spoken about, would you say these are things that also impacted upon your, as it were, trust in the building?

A Well, I was very aware of them. So much happened that it was very difficult to think what was the main thing that impacted your trust. I suppose I was much more preoccupied with the infections than I was with anything else.

Q Yes. Okay. Well, let us

move on, then. I want to start to ask you some questions around events that occurred in 2015, shortly after patient migration. Now, I will just try and take things in the following way. First of all, try and get an understanding of what I think you have said in your statement, and ask you the following questions. You have already made it clear that the doctors were not consulted on what the ventilation system would be. Again, without, I hope, leading you unduly, would you see yourself as somebody who is an expert on that question?

A No. I would know what the requirements for a transplant unit-- you know, I knew you had to protect against, but I'm not a ventilation engineer, and I wouldn't really know how you test water other than you don't have Legionella in it.

Q In your statement, however, you do indicate what it was that you had been told in advance that the unit would be provided with in terms of ventilation. You mentioned something called the-- is it the JACIE standards?

A The JACIE, so the Joint Accreditation Committee in transplant, yes.

Q I will not ask you to go through any of that in any detail.

There is a helpful passage in your statement about that. Are we right to understand from your statement that your understanding of what would be provided was, for transplant patients, positive pressure rooms with High Efficiency Particulate Air filtration? Is that right?

A HEPA filtration, yes.

Q Yes, and for patients undergoing chemotherapy in the unit, what was your understanding of what their rooms would be provided with by way of ventilation?

A Well, I don't know if I ever knew the detail of it, but we were told that this was a unit which was built to the standards of a haemato-oncology unit.

Q Do you recall whether it was your understanding that the rooms would have a positive pressure?

A I don't. I don't recall if we were told that or not.

Q Thank you. Now, you indicate in your statement that at some point around the move you sought assurance from the then lead infection control doctor about matters. He said that it would be safe to start transplanting when you moved in. Is that right?

A Yes.

Q But is it right that shortly

after the move there was an issue immediately discovered?

A Well, I think the first problem was shortly before the move. We had tried to get data-- We'd hoped, six months after the move, we'd reapply for JACIE re-accreditation. You have to be in a place for six months to do it. We had tried to get some data to complete our application, which was about air sampling and air safety and things like that. During that process, it was discovered or noted – I don't quite know the best word for it – that the filters were not in place. So, that was the first problem we had, and that-- I mean, we moved on the 16th and the filters were in place by the 12th.

Q The 16th of----

A June. Gosh, now you're asking.

Q And the filters were in place on 12 July?

A No. They were in place before.

Q I am sorry.

A We would not have moved without them being in place.

Q No, I apologise.

A But I think earlier that-- Anyway, I can't honestly remember the detail of how it came to light, but the filters weren't-- but they were put in

place before we moved, and they were-- and so that may be the response-- that email may have been the response from Craig Williams when we'd asked, "Are we safe to move?"

Q Yes. You make this clear in your statement. You say that, shortly before the move, some sort of inspection or visit was done----

A Yes, it's a visit, yeah.

Q -- by colleagues, and they discovered that there were casings in place for the HEPA filtration units, but the units themselves were not there. Is that right?

A The filters weren't there, yes.

Q The filters were not there.

A That's my understanding anyway.

Q Yes. I mean, what effect would that have had as regards the ability to transplant in those rooms?

A Well, we couldn't have transplanted until the filters were put in place, so the effect it would've really had, it would have delayed the migration of the hospital.

Q Can you remember what your reaction was or how you felt at the time about this?

A Very surprised.

Q Yes. I wonder if we might just look at some of the email correspondence from around this time, and I wonder, Ms Soczka, please we have in front of us a document, bundle 8, page 125? Now, if we can just maybe focus upon the email that is set out in blue script from Professor Gibson. Are you able to read that, Professor Gibson?

A Yes.

Q Yes. You say-- It is an email from you to a colleague, I think:

> "We have a planned transplant who will need hepafiltration around 20th June. If we can't guarantee this then we need to refer to Newcastle. That will cost £250,000. It is inconceivable that a transplant unit was built without hepafiltration. Truly shows the priorities all show and no substance."

You may think that the email speaks for itself, but I wonder if you perhaps could tell us a little bit more about what lay behind that and the frustration that you expressed.

A Well, I think the frustration reads for itself. I mean, you did say, "What lessons do we learn?" My main lesson: I'm never about sending another email, but I think we were pretty shocked that it is such a basic requirement that the filters were not in place. It isn't easy to send out a patient. The cost is irrelevant, actually. It's the planning that's the problem. It's not the cost. There was so much good publicity around this hospital. It was a flagship hospital and all the rest, and I was just very angry that the filters weren't in place.

Q I am thinking about the statement you make at the end of the email about truly showing the priorities, "all show and no substance." Can you say whether that reflected any broader concern that you had?

A Not at that time, no.

Q Now, we know from-- or we have seen evidence from one of your colleagues, Dr Ewins, who tells us in her evidence that around this time the unit was anticipating carrying out a transplant in a particularly anxious case and that, around that time, a further issue arose with the discovery of-- I think what she described as high particle counts in the corridor and in the rooms, the bone transplant rooms. Is that something that you have got a recollection of?

A Yeah, but that would've been after the move. That would be my recollection, that there was air sampling after the filters were in. I

mean, the filters were in, and we were reassured that they were validated and all was well before we went. But, yes, and we did-- My recollection is it was very difficult to-- or the Control of Infection at that time thought it was very difficult to interpret that because the doors have all got to be closed. The particles were in the corridor. This is all about having the right level of positive pressure to allow the air to go from the corridor into the rooms, and it made it difficult to interpret, but we had-- I do understand why-- that statement about trying to get transplants done because we'd been very keen not to move any really sick child. So we had tried to plan things so that we predicted-- so we hoped there wouldn't be anybody that would need to be moved by Intensive Care or anything. So we were needing to start transplanting.

Q Yes. There are a number of emails over this period and other documents. I do not want to look at too many of them, and we have also got your evidence and that of Dr Ewins', but are we right in understanding that these concerns continued over July and August and indeed into September?

A Yes. I think there are-- you're right, there are a number of

emails. I was copied into some and not all, but I think I've probably seen them all now. The first two transplants went ahead, there was kind of no problem, but then I don't know why there was some air sampling done. There was some evidence that-- we've already said that the air particles were high. There was evidence that some-- that there had not been sealing of light fittings and such things, so there was air able to enter into these cubicles via non-sealed light fittings. We then re-- they were sealed, or a number of the rooms were sealed. The air sampling was repeated. There was concern particularly-- By this time, Teresa Inkster was the Control of Infection lead, and she was unhappy for transplantation to carry out-- to go ahead, and I can't remember the dates but August or September seems about right because there was Aspergillus and high particles found on air sampling on plates.

Q Thank you, and again I wonder if you could just give us an impression of the level of concern and frustration within the unit around these matters at that time?

A Well, I think we expected that the transplant cubicles would be built to a standard and that we wouldn't be seeing these kind of

problems. The frustration is that, as I've tried to explain, you have to plan a transplant. You can write a stroppy email that says, "If you don't sort this out, it's going to cost you £250,000," but that isn't the reality because even if you want to send them somewhere, and it would be Newcastle for us, they've already planned all their transplants, and they may have many months before they can accommodate another patient. So, sending them out isn't the solution it may seem.

Q Yes. Well, I wonder if we might just look at a further email that might just illustrate your concern around that. Now, we are going to skip one of the emails that was on the list that I gave. Ms Soczka, if we go to an email, which is at B8, 129, page 129. It is an email on 19 August 2015. There has obviously been some redaction here, Professor, in order to deal with patient confidentiality concerns, but are we right in understanding that this indicates really what you are saying, that there was a concern about the ability to push on with a transplant in relation to patients, and that impacts on you but also on the family?

A Yes. It impacts a lot more on the family than it does on me. They're anxious to-- I mean, it's a very

scary time at the best of times, and having postponements is hard. There's a fear of losing the donors. There's the fear of a lot of things.

Q Yes. I wonder if we might move to page 132 of this bundle, please. So, again, are you able to read that, Professor? Thank you.

> "We now need a definite decision regarding SCT transplant rooms. I understood that if we couldn't go ahead two weeks after the last meeting, that we would send children elsewhere. Two weeks have elapsed, so you either reassure the SCT team that these rooms are fit for purpose now or we make arrangements for these children to be treated elsewhere. We should not have moved until it was known that the environment was safe."

A That's true.

Q Again, I mean, you may see that that just speaks for itself, but would it be fair to say there is a fair amount of concern building by this stage?

A I think that there was a lot of concern. We had a Control of Infection lead who said the rooms were not suitable to transplant in. We have to take our instruction from

Control of Infection. There was a lot of argument-- not argument, that's-- well, maybe argument. There was a difference of opinions on whether they were suitable or not, and risk was being assessed. Now, I don't see-- and Control of Infection had a very clear view. She was not going to say that these rooms were suitable. We then had to-- but at the other side of the coin, you have a child who needs to go to transplant. You're never moving them to Newcastle in the time that that happens, and a risk assessment was being taken by, I think, our medical director at that time. Should we proceed or not proceed? I feel quite strongly that was a very difficult position for the transplanters to be put into. I do feel that we had the right to expect to be transplanting patients in rooms that met the specifications.

Q I wonder, against the background of what you have just said, if we could look, please, at page 133. Again, if we can just enlarge it slightly so we can all read it. I wonder, Professor, if you just want to take a moment to read that email from you, and indicate to me once you have done that.

A (After a pause) Well, I think it just highlights our frustration

that the rooms that were not suitable and that any remedial work had not resolved the issue or it hadn't happened on time. To us, it was very urgent, and I think we felt that perhaps there wasn't the same urgency of being shown.

Q Who is Jennifer Armstrong?

A She's the medical director at Board level. So, she is the most senior of the medical directors.

Q So she is management?

A She's management, yes.

Q When you say, "as a clinical team, we have lost faith," what did you mean by that?

A Well, we'd moved into-- We'd initially gone over and we hadn't had any filters at all. We now had particle counts and Aspergillus in the air, and the rooms weren't sealed. We just felt we were going from one thing and to the next, and where was the resolution that would allow us to safely resume transplantation?

Q And you say, "We feel that we are due an explanation." Did you get one?

A Well, it's an angry email, I totally accept that, but she did attend a meeting three days later.

Q And what was the explanation?

A Well, I don't think there was an explanation, but she did give instruction that things were to move forward.

Q And at the end of the email you say that the transplant programme has been severely compromised. Was that your assessment of things at that point?

A We were postponing over-- We were continuously postponing, and does compromise your programme. You postpone one child, it postpones-- it ricochets.

Q Yes. Does it take us back to what you said earlier about the narrow window and the anxious decisions to be made?

A Yes. Well, there are some you can delay with comfort, but not all of them, and I can maybe delay them with comfort because I know they won't come to any harm from the delay. That's quite different from a parent's perspective.

Q Now, we can put that to one side. Thank you very much. There are just two further matters I wanted to ask you about as regards to this stage. One that you have already touched on, and I just wanted to be clear I understood your evidence. You said that there was going to be a JACIE inspection, and you say this in your statement, about six months after the unit moved and there was some difficulty about the provision of information that did not permit that to go ahead. Have I got that correct?

A There was difficulty about information. I suspect the technical team were just so busy trying to get the hospital open, but we couldn't go ahead because six months later-- not six months-- because of all the problems we had with the environment. We were moved to-- Eventually, as you know, we moved to transplant in the adult unit, and we weren't asking for accreditation to transplant in that unit. We had to wait until we came back to 2A or to Schiehallion in 2022 before we could go ahead with our JACIE application, which, I have to say, has happened and more successful.

Q Thank you. The second thing I wanted to ask you about is we understand from information available that there was-- while all of this was going on in the Paediatric Unit, there was an issue with the Adult Bone Marrow Transplant Unit on Ward 4B. Can you recall whether that was something that you were aware of at the time?

A I was peripherally aware of it. I didn't know the detail. I was

probably the most reluctant person to move off the Yorkhill site because I felt I was leaving behind something I built, but the one good thing was we would be co-located with our Adult Transplant Unit.

A You have to remember we're paediatrics. They're adults, but there is teenagers in transition in between, so we saw lots of advantages to being co-located with the Adult Transplant Unit. So, it was very disappointing when they came over and then went back to the Beatson. We heard all the rumours, but it was only rumour. I think the detail I've probably read for this Inquiry, you know-- more than I knew at the time.

Q If it is possible to confine yourself to what you knew at the time then, even if it was only rumours, what was the nature of the concern that led to the move back?

A That the environment wasn't appropriate for transplanting.

Q In what respect – the water, the ventilation, or what?

A Well, I heard the ventilation.

Q So, if we just draw 2015 to a close then. I am going to ask you to just think about – if you are able to – what your reflections on all of this were at the time, or indeed even now looking back. Thinking about the responsibilities that you explained to us earlier about the provision of care and the provision of a building in which to provide that care, did you have any concerns over the period of 2015 that the Board might not have provided a safe environment for the provision of care?

A I don't think in the way you're asking, no. When we came over, we expected snagging problems and minor problems. Whatever the tone of emails are – and I'm quite famous for my emails – we accepted that there would be snagging problems. The filters were quickly sorted. There was a lot of email exchange, a lot of meetings, and they were put in place in a timely enough manner that migration went ahead at the right time. So, I think that everything was done to remediate that situation. We did expect some problems with the cubicles. I think we thought once they were sealed-- and that it wasn't just that they were sealed. There were plans being made in 2015 for the builder to upgrade some of the cubicles, perhaps two at a time, to a higher specification. So, I think we felt that although, yes, there were problems, they were being

addressed, and once they were addressed, it would be okay.

Q Yes. In the meantime, I think as you have indicated, you felt that doctors were being put into a difficult position and having to strike a balance of risk. Would that be fair?

A Well, to a degree, yes. Yes, but we didn't have ever to make the decisions on our own. We did have a medical director, and we did have Jamie Redfern, who was very supportive. I think they were very-- but if you read the emails, which I've had to do, Alan Mathers' email to Theresa Inkster, or I can't remember who it was to, it does say that he's in favour of proceeding, but he'd only do it if Control of Infection and the Transplant team agreed.

Q I think in her statement Dr Ewins describes this period as being one that was extremely stressful for these reasons. Does that capture it as neatly as it can be captured?

A Yes. It wasn't what we expected, but I still think the efforts were made to resolve it and I thought that was going to be the end of the matter. I didn't think that problems would-- Yes. Postponing is very difficult because you have to deal with the families. You have to worry will you lose your donor, and it isn't

something that you can turn around quickly.

Q Thank you. Now, we are getting close to the point at which Lord Brodie indicated we might take a break, but I think there is one further matter I might just be able to squeeze in before we do that, and I am going to move forward in the chronology to 2016 and 2017. I am going to ask you some questions about that. Now, I want to say something just at the outset of all of this questioning. My desire throughout this questioning would be to avoid any discussion of any individual patient case. The Inquiry has not been set up to decide what happened in individual patient cases, so please do not think that is what I am asking you to do. Again, you have set this out in your statement, so if you will forgive me, I will just lead you a bit on this. Is it fair to say that colleagues in 2016 and 2017, and by that, I mean clinical colleagues, saw an increase in unusual infections in the unit? Is that right?

A Yes. I think we would say-- we would get reports back from infections that we weren't-- I think I said in my statement, were they unusual or were they renamed, or we weren't quite sure, but we were

beginning to become suspicious. We were seeing a pattern. But I stress, and I think they would all stress, that it is for us to say to Microbiology, "Is this normal?" It is for Control of Infection to say if it is or not.

Q Yes. I think just to mention – going back to the classifications – I think the papers we have, the IMTs, for example, indicate a concern around Aspergillus in around about August 2016. Is Aspergillus a fungus?

A A fungus.

Q Yes. I think, again, not going into any individual cases, in 2017 again the IMTs and the other documentation indicate something happening in relation to gram-negative infections. Would that that be right?

A Yes.

Q I think you do deal with this in your statement. Are we right in understanding that you did not think over that period that there was an environmental explanation for these things?

A No. We didn't. You give children lots of steroids and you always see fungus. I think you did ask did we think two cases was-- I think that the problem, you react to fungus very badly because it does need a lot of treatment and you've often to stop

treatment for a long time. I think it's probably the seriousness of it rather than the numbers. I can say that I did note in the IMTs that there was the suggestion that Edinburgh was seeing the same problem, and it was related to this clinical trial. I've checked with the chief investigator. There was absolutely no rise in the incidence of Candida during that time period, and that's not my recollection either. We just had some not very nice cases.

Q Did you say Candida?

A Well, one of the years the concern was around Candida.

Q Yes. Is that also a fungal infection?

A It's a fungus, but it's kind of an endogenous fungus. We all carry Candida. You suppress your immune system, and it comes to light. Aspergillus comes from the atmosphere.

Q Yes. I will maybe just conclude this section with really two questions. The first one is: you have already answered the question that an environmental cause was not suspected from your point of view at that time.

A No.

Q Why was that?

A I don't know that I can answer that question. "I don't know" is

the answer to that. It certainly wasn't raised by Control of Infection at that time. We would have taken our concerns. We do meet the microbiologists every day. At that time, it was probably face-to-face. Now it's on Teams or by phone. We would have raised our concerns and they didn't express any concern that this was environmental up until March 2018.

Q Yes. I think in your statement you do deal with this, and you say the microbiologists did not advise.

A No.

Q So that was one aspect. Another aspect that we are aware of from other witness statements is: are we right in understanding that there was line care work?

A A lot of CLABSI work going on, yes.

Q Yes. CLABSI work.

A It's the central line. It's just how you care for a central line.

Q Can you say whether that indicates at least a possible hypothesis that people maybe wondered whether what was going on with infection was to do with line care?

A It was looked at. It was audited and the audits were very good. You know, when you say "to do with

line care," most of these infections occurred in somebody with a line.

Q Yes. I meant line care rather than an environmental cause.

A I think that-- Nurses do the line care. They are audited regularly. I think they work to extremely high standards. There's always improvements as new things come out. I don't think there was ever any suggestion that the nurses-- I personally don't think there was any reason to think that the nurses were handling these lines in any way that was not of best practice.

Q Thank you. The final aspect on this question of whether or not or why people perhaps were not thinking that there was an environmental cause is something that appears in the statement of Dr Ewins. She says that she felt there was no clustering going on in relation to these infections. Can you say whether that is something that you recall?

A Yes. If this was coming from one source in the environment, you might expect a number of patients to have the same infection that could be typed and they would be identical, and that wasn't what happened. The typing didn't link the organisms between patients and, well, neither did they link it to environmental organisms

that are taken, but I think she means that if there were three Pseudomonases (sic), you could have typed those Pseudomonases (sic) and they would've been exactly the same thing.

Q I think what she was really meaning in her statement was the appearance of whether they all appeared at a similar time and place, that kind of idea. She was indicating that she does not recall that being what was happening and thus does not see that as being something that would have pointed towards an environmental explanation.

A Well, I don't know what time period she's talking of.

Q I think she is talking about 2016, 2017.

A Yes. She would be right, yes.

Q Yes. The final thing I was going to ask you then about this period is, just before we move into 2018, can you remember whether at any point towards the end of 2017 you were aware of any concerns about the environment raised by microbiologists, whether through the whistleblowing process or whether through any other process?

A I think I was aware there was an undercurrent concern from the

microbiologists about the environment, but I didn't know about it in detail.

Q Thank you. Lord, I wonder if this is a useful moment.

THE CHAIR: Yes. We will take a break for coffee. I hope you will have the opportunity to have a cup of coffee, Professor, and we will try and sit again at five to twelve.

(Short break)

Q Professor, I am going to move now into 2018 and we will walk through the chronology of the various events that begin around then. In order to do that, I am going to ask you to give us a little bit of context around certain procedural things, in order that we understand how things work. One of the things that you discuss in your statement is how clinicians and colleagues share information. For example, you refer to regular multi-disciplinary meetings. I think probably what I would be quite interested just to hear you tell us, if you can, is give an overview of how information is shared among colleagues about issues of concern or importance affecting the ward.

A Okay. I'll try. So, twice a day we have what we call a handover meeting, and everything is of course

now done by Teams. It would have previously been face-to-face during some of this pre-COVID. So, in the morning the medical staff, the middle grade medical staff, what you'd call registrars and that level, and the consultants who want to be there, and whoever is on service for the different areas will be there, and the nurse who's in charge of the ward. They will go over any of the unwell patients, what we'd call a watcher. You know, anybody who had been particularly unwell overnight, and they would tell us any new temperatures, or they would not necessarily-- other than a Monday, where we'd go over everybody from the weekend, they will highlight the patients that there was something specific to tell us about.

So that might be a temperature. That might be somebody going to theatre for a bone marrow or lumbar puncture, but they will highlight the issues on the ward. After we've done the ward rounds, we will contact Microbiology if we have any queries with them, and we'll have a lunchtime handover at 12.30, when we will then go through every patient on the ward. Again, we will then update on what needs to happen. Do the antibiotics need to be changed? Do they need blood? Do they need platelets, or

what should be happening to all the patients? So that is the two kind of ward-wide general meetings we have to update.

As individual disciplines, and by that I mean by leukaemia and solid tumours, we will each have a number of weekly meetings where all patients will be discussed within a multi-disciplinary team. So, on a Wednesday afternoon we'll order all the chemotherapy for the leukaemia patients. The nurses from the ward will be there. The nurses from Day Care will be there. Pharmacy will be there, and we'll discuss any issues we've got there, and there's a similar meeting that will occur for solid tumours.

In terms of other meetings that I suppose are relevant, we have what we call a Schiehallion Unit meeting which I chair, and we have that every second month. We will go through any issues that we have on the ward that concern us. That will include everything. Somebody from Control of Infection comes and they'll highlight any problems that we've got on the ward. We will talk about any issues related to staffing, education. We have an agenda that we will work our way through, and that's a multi-disciplinary meeting. So, the doctors

will be there, the nurses will be there, the pharmacists, the social workers, the outreach nurses, psychologists, anybody who's got any input into what is a multi-disciplinary team.

The in-between months we have a clinical governance meeting which, up until recently, Jairam Sastry chaired, and that will go through a slightly different agenda. It will go through any Datix's. So Datix is the system that we use to report-- It's an electronic system that we will report any incidences, if there's been any delays in chemotherapy or any problems with it or anything like that, and so we'll have a governance meeting, and we'll have a unit meeting which is attended by a multi-disciplinary team, but we are a relatively small-- So, we also have a consultant's meeting on a Monday afternoon. If we had any real concerns, that would be raised at that. So, we have a lot of meetings we can raise issues at.

Q And share information.

A And share information, yes.

Q With one exception, I think what you have described there is really a process of sharing information through discussion. The exception, I think as you mentioned, is the use of

something called the Datix system, and that leads me to my further question which is to what extent – if you are able to answer this – is the process that you have just described, of these oral exchanges of information-- to what extent are you given regular updates about issues of importance that are arising in writing, whether an email, or in other systems, or other forms of alert?

A I'm not quite clear what you mean by that.

Q Well, so if, for example, there was an issue of importance on the ward, say for example there was an issue arose in relation to an infection pattern, presumably that would be something that would be discussed among you at the meetings you have just described.

A Yes. On a Friday afternoon, our Friday lunchtime, our handover is more extensive. So, Microbiology comes to that. That would be our opportunity to discuss anything. We would discuss on a daily basis any individual infections, but if we were concerned about any patterns, we can bring that up at that time. We also have a sort of record where we record any gram-negative infections, any lines removed and that type of thing, and we go over that on a

Friday.

Q Again, I am taking us into territory which really are for further hearings, but it is helpful to hear your perspective on them. Are you indicating to us that in addition to the oral exchange of information about things to do with infection, there are systems, IT systems, which would enable you to be able to see whether there was an issue at a particular time?

A No. We wouldn't record infections necessarily on a Datix, no.

Q No. Are you aware of any other----

A But we would hear about them at the handover twice a day, so we'd be very aware of them and if we had concerns, then we would contact Microbiology first, and then their contact is to Control of Infection. What you have to remember, these infections are identified in the lab long before they come to us, so the system of communication is not necessarily us to them, but them to us.

Q The next thing I am going to ask you about which follows from what you have just said-- I take you to be describing the usual way that things work. Where something of particular concern arises, are we to understand that there are further processes that

can be engaged, one of them being something called a Problem Assessment Group?

A Yes.

Q Can you tell us what that is?

A Well, the Problem Assessment Group as I understand it, it's really Control of Infection that run those and that would be if there was a concern with any one infection identified. If there was two within, I think it's a two-week period, then there's an IMT called.

Q What's an IMT?

A I knew you were going to ask me that. I can't remember. It's a management team, something management.

Q Is it an Incident Management Team?

A Yes, it is. Yes.

Q Again, maybe implicit in what you have just said, would that again be something for Infection Control?

A Yes.

Q Again, implicit in what you have just said-- I am not going to ask you to give us an enormous amount of detail on how these things work. It is just to allow us to understand what they are when we start to look at the minutes of their

meetings, but if you could very briefly just tell us what their purpose is.

A Well, their purpose is really to decide or try to come to an agreement, if not decide, where the source of the infection came from and is it enough to cause any concern. So, whatever the infection is, one of the clinicians will give some history on, for example, there are some infections that can be either endogenous or exogenous. You know, there are some that you can get in the environment, but you can equally get them from your own gut, so you will give the details.

Do they have any diarrhoea? Do they have any mucositis? Was there anything else to suggest this could have been of exogenous origin rather than anything else? And that will be discussed. There will be some kind of timeline of what rooms the patients were in, where they travelled around the hospital to see if there's been anything similar. Then, as a group we will-- as an IMT or our PAG, they will come to a decision: was this just an endogenous infection that gives no cause for concern, or was it something endogenous that might give some cause for concern?

Q Is it obvious from looking at the minutes that these are multi-disciplinary meetings?

A The PAG, well----

Q I am thinking more about the IMT here.

A The IMT, well, it depends what you call multi-disciplinary. There will be clinicians at it. There will be a nurse representative from the ward. There will be a nurse representative from Day Care because most of our patients spend some time both on the ward and on Day Care. Then there will be Control of Infection at it. There will be Estates. There will be Facilities, so it is multi-disciplinary in that it takes the group of people who would need to bring around any rectification if that had to happen.

Q Thank you. The final contextual matter I want to ask you about is something we touched on earlier. What is an SBAR?

A Well, it is something where you put down what the problem is and then you work your way through what can be done about it.

Q Yes. It is a system of reporting and assessing and proposing action in relation to an issue. Is that right?

A Yes.

Q Did I take you to say earlier in your evidence that you were aware of concerns that had been

raised by some of the microbiologists in late 2017? I cannot recall whether you said you were aware of any SBAR that they had prepared at that time.

A I wasn't aware of the SBAR. I mean, I have since read the SBAR as part of the documentation sent for the Inquiry, but I wasn't aware of it. I was aware they had concerns and that they had expressed these concerns to the Board.

Q Where-- Well, let me cut to the chase here. Do you think that is the sort of information that you ought to have been made aware of at the time?

A Well, I would say from the microbiologists and Control of Infection point of view, I think they felt they were raising it with the appropriate people. We were discussing individual infections with them, but they were not looking for action from the clinicians. They were looking for action from senior management.

Q Yes. Thank you. Now, if we move then onto the events of March. Sorry-- Yes. Well, beginning of March 2018, and as you have indicated, we have asked you to do a little bit of reading in advance of this. The purpose for that is to try and see if we can go through this reasonably

swiftly. Have you had an opportunity to refresh your memory, at least in relation to some of the IMT minutes from the period beginning in March 2018?

A Until June 2018.

Q Well, if we just stay with March at the minute.

A Okay. Yes. I have read them, yes.

Q Thank you. Would you be able to just, even at quite a high level, summarise your recollection of what happened in March, or would you prefer that I put to you what we take from the IMT minutes?

A Well, I'll try. There is quite a lot of detail in them, and I think you have to also be very aware that these IMTs occurred very frequently. Sometimes they were occurring daily. Sometimes they were occurring every second day, and some of them were quite repetitive. I have to say, as I read them, I can't remember the detail of them all, but I think-- I don't mean this to sound critical about the taker of the minutes, but I'm quite sure some of the things are perhaps not represented exactly as they might have been said. So, I think you have to take-- So, my recollection is that I think around February some time Teresa Inkster as the Control of Infection came to visit us

as a group of consultants to say that there had been a positive blood culture in a patient for a very unusual organism called Cupriavidus.

I have to say I had never met anybody with it before, so it was very, very rare. There had been a previous one, I think in 2016, associated with the Aseptic Pharmacy Unit, where the typing had showed a connection between the source and the patient.

Q To interrupt, sorry, the source being----

A I think water within the-- I think water within the Aseptic Unit. Then there'd been another case in 2017, so this was the second case. So, this is a very rare organism and I think two cases occurring within roughly six months of each other caused her a great deal of concern as an experienced microbiologist. She then met with us and told us that they had been sampling the water outlets on the ward where – gosh, I've forgotten what they grew – but they certainly grew Cupriavidus, and they grew other gram-negatives, and I think one of them was positive for Pseudomonas and other environmental organisms.

Q Can I jump in at this point? Were there also fungal pathogens?

A There were later, but the fungus takes a bit of time to grow so that wasn't available to us at that time.

Q Okay. Sorry. Please continue.

A Yes. So, we had a number of-- I think you know there was a number of IMTs looking at this, where she reported back the findings of investigations of the water supply where gram-negatives were grown from the water, and Cupriavidus was grown. I can't remember, to be honest, the details of exactly all the organisms. There was a lot of talk about the hypothesis and what we could do about it. There was talks of, if I remember rightly-- and so much did happen that I'm not sure I do remember the exact course of events, but I remember IMTs where we looked at taps, which were very complex with lots of bits that the bugs could sit in and form biofilms.

There was lots of talk about straighteners being in the taps – which was a completely new concept to me – which could also encourage the growth of biofilms. The outcome of that series of IMTs, as I understand it, was that because they were growing from so many sites, that they would stop sampling. They would treat the water with silver hydroxide, and they would

remove the taps, clean the taps up and put filters on the taps.

Q Thank you. So, I take from what you have said, and perhaps just filling in one or two details that I take from the IMTs, is first of all, there was a concern that there was an increase in clustering of gram-negative infections, beginning with the Cupriavidus.

A Yes, and that they were environmental.

Q Yes. I think you mentioned too, I think the IMTs indicate Cupriavidus, Stenotrophomonas and Pseudomonas----

A And Pseudomonas, yes.

Q Yes, and possibly later fungal pathogens as well.

A Yes.

Q I think the IMTs indicate that those were being found not just in the children's hospital but in the broader hospital, or is that not something you can remember?

A Well, I can't remember the exact chronology, but at one stage they sampled ICU, the Intensive Care Unit, and they sampled the Renal Unit where haemodialysis is ongoing, so the water supply is also very important. I can't remember exactly what they isolated from each, but they did get

infections both in the Renal Unit and in PICU, which implied that this was not just a 2A or a Schiehallion problem. That altered the hypothesis because the initial hypothesis had been that there might be an infected outlet and patients or staff were spreading it with their hands, but the fact that it was now found in other areas of the hospital, certainly patients and the doctors and nurses couldn't be held responsible for spreading it to those areas. I think once that was found they then sampled-- I think it was 4B or 4C. I can't remember, but it was the Haematology and the Transplant units in the adult hospital.

Q Thank you. I think another thing that we heard a lot of evidence from the patients and the families, and again is referred to extensively in the IMTs, is that really, from the very start of the discovery of the of these issues, there were measures taken to protect patients from the perceived risk: restrictions in the use of water; you have already mentioned dosing of the water; I think there was mobile handwash units. Then, ultimately, are we right in understanding that the IMT effectively closed at the end of March or so, at the point that filters had been put onto the taps. Is that broadly your

recollection?

A That's broadly-- yes. That is. There was a period of time when the dosing and-- before the filters went on, when there was concern about the safety of the water and concern about the time of the dosing, where the water had to be turned off, where they couldn't use it. So, there was periods of time when families couldn't shower or couldn't wash, and I don't know what's worse, cleaning a baby with a wipe or a 15-year-old, but it was not easy for families to do that. We had bottled water for handwashing and cleaning teeth, and sterile water for drinking, so there was a lot of measures put in place during the dosing and until the filters were put onto the taps. Yes, and then once the filters were on the taps, there was no bugs found post-filter, and it was thought that there had been control measures put into place and the IMT stood down.

Q Thank you. Now, what I would like to do, having established that chronology with you, is just look at three or four bits of it just to understand your recollection of particular aspects of that. I am going to start towards the beginning of it, on 6 March – an IMT that took place on that occasion. What I was going to

ask you to do, Professor, is to have a look at your statement, which I wonder if we could have put up on screen, Ms Soczka? So, it would be at page 46, I think, of the statement and it is paragraphs 183 and 184, so if we could enlarge those. Do you want to just take a minute to read through those and tell me when you have done that?

A (After a pause) Yes. Well, if I can go through it bit by bit, I think the first paragraph is that I attended that IMT at the beginning of March, along with my colleague Dermot Murphy. When we looked at the organisms that had been isolated, they were mainly environmental and that was the cause for concern, and I'm sure that either we didn't-- There was fungus, I think, grown. At the time of that IMT we didn't know which fungus it was, but we were concerned that the combination of fungus and environmental organisms did suggest that there was something fundamentally wrong with the infrastructure. I don't know what I said after that.

I think you've asked me, I was not aware that Theresa Inkster and her colleague – I have now read their SBAR – had written to management two years earlier. I wasn't aware of

that. I've since read that SBAR. I think you asked, "Was it the clinician's responsibility to escalate this to management?" The normal practice would be that, in an IMT like this, senior management would be present and it would escalate up the ladder to the chief executive via senior management. The only reason that we did something to escalate it was that Theresa Inkster had told us that she had had no reply to her SBAR, and this was a very serious matter for us. We were those closest to the patients and we wanted to be sure that this was escalated up in a way that it was acknowledged at the highest level, those who could take some action.

Q Thank you. Now, I have been asked to have you confirm or clarify one aspect of this. At the very end of paragraph 184, you say:

> "Teresa Inkster had stated at the IMT on 6 March 2018 that she had highlighted concerns about environmental issues to GGC and Health Protection Scotland (HPS) via an SBAR two years earlier but had no response."

Now, can you say whether you have a recollection of her-- Well, let me take this in stages. Are you

indicating there that you took her to be saying that she had no response either from GGC or from Health Protection Scotland?

A I can't remember about Health Protection Scotland. I certainly understood her to say from GGC.

Q Yes. Thank you. I wonder if we could have a look, please, at the minute of this meeting itself just to perhaps assist you. Ms Soczka, it is bundle 1 and it is page 56. Just so you can orientate yourself, Professor, just at the top, we see, "Incident Management Team Tuesday 6 March 2018." Do you see that?

A Yes.

Q You are there, Dr Inkster is there, and your colleague, Dr Murphy, yes?

A Yes.

Q Now, Ms Soczka, could you take us, please, to page 157? I think it was just the next-- I do apologise. It is my mistake. Page 57. Thank you for responding to that so quickly. Could I ask you, please, Ms Soczka, to enlarge the section underneath "Microbiological report"? Could I ask you, please, Professor Gibson, to just look at the second bullet point?

A Yes.

Q

"TI informed the group of the findings from the microbiological sampling carried out on the tap and showerhead… to date, Cupriavadis [and some others mentioned, and then it says] Cupriavadis is going from the hot tap and the flow straightener."

Is that right?

A Yes.

Q I mean, I take your point about the accuracy of minutes of meetings, but is it your broad recollection that there certainly was discussion of flow straighteners at----

A Well, there definitely was discussion of flow straighteners, yes.

Q The other bit I just wanted you to have a look at, please-- You drop down to the bullet point that is the second from bottom-- I do apologise, the bottom one. If we enlarge that one, Ms Soczka, the one that begins, "BG and DM queried…" That, I think, is the bit that connects to paragraphs 183 and 184 in your statement. Again, if you just want to take a moment to read that paragraph and then confirm to me once you have done that.

A (After a pause) Yes, I've read it.

Q Thank you. If we just take the first section:

"BG and DM queried if the concerns of the clinical teams relating to the environmental risks in 2A had been communicated higher. TI explained that she shares these concerns and had indeed reported these to the highest level in GGC and HPS over 2 years ago. DM and BG felt dissatisfied that there had been any response from senior management or out with GGC which offered reassurance to clinicians."

If we just pause there. Now, again, I take on board your caveat about minutes but----

A No, I think they're accurate.

Q They are accurate?

A Yes.

Q Just thinking about the clarification that I was asked to seek from you, does that suggest to you whether or not the absence of response was only from GGC or was also from outwith GGC?

A It suggests to me it was also from outwith GGC.

Q Thank you. We can put that----

A But it doesn't say who outwith GGC.

Q Yes. I mean, again, it may speak for itself but what was the concern that you and Dr Murphy had at this point about this aspect?

A Well, I think these were environmental organisms. If I'm honest, I'm not sure we ever, prior to this, had really thought of whether organisms were environmental or not. We thought of them as endogenous and exogenous, if I'm really honest, but as clinicians we knew that the-- whether you call them endogenous or environmental organisms, we were talking about-- Pseudomonas and Stenotrophomonas were organisms that we feared in our patients. They were organisms – certainty Stenotrophomonas – that formed biofilms that could be very difficult to eradicate. They were often resistant or sometimes-- I shouldn't say "resistant" to antibiotics, but Stenotrophomonas, we would often treat with Septra, which we don't like giving to children because it drops their neutrophil count. So it was complicated for that reason, but I think our concern was that these organisms-- forget about Cupriavadis because I'm not sure we knew anything about it prior to this, but the Stenotrophomonas and the Pseudomonas were the kind of organisms we would fear in children,

and the kind of organisms that could be life-threatening to immunocompromised children.

Q In a later IMT, and I will not take you there, you were recorded as describing organisms of the sort you have just described as "lethal." Is that essentially what they are?

A Lethal, fatal. Choose your word.

Q But for your patient cohort, I mean----

A They can be, yes.

Q Yes.

A You hope that you treat them, you remove the line and they're not. I think I've already said that, for children in RHC Glasgow treated upfront for ALL, in 10 years we didn't have a single infection-related death. I'm not-- I exclude the transplants, but of the non-transplanted patients. We did see these organisms, but it's not like having Coagulase-negative Staph that's unlikely to make anybody really sick. These are the organisms that make you really sick.

Q Thank you. Now, I want to then just move on a little in this bundle, please, to page 60. I think you have got in front of you there, Professor, another IMT dated 9 March 2018. Is that right?

A Yes.

Q Again, you are recorded as being there. On this occasion, I just want you to look at the section-- it is underneath “investigations.” It is the second last paragraph on the page, “Dr Inkster informed the group that an SBAR from 2014…” Have you got that?

A Yes.

Q I wonder again if you could just take a moment to read that and tell me once you have done it?

A (After a pause) Well, I think it’s accurate as to-- it’s accurate. That’s what was said at the IMT as I remember. She talks about an SBAR in 2014, which advised against installing flow straighteners and taps in high-risk areas, and I think by high-risk areas, she means in areas where immune-compromised patients are being cared for. My understanding is that flow straighteners encourage the growth of a biofilm and that, if you encourage the growth of a biofilm, then you’re going to encourage infection. That’s where the bugs will seed out and be difficult to eradicate from there.

Q Do you recall a discussion along the lines of the Board having felt that the cost implications of changing the taps were impractical?

A That was said at the IMT. I remember that being said at the IMT,

but I wouldn’t have known about it in 2014.

Q Did you then, or do you now, have any reaction to that?

A Well, yeah. If there is a guideline which says-- or a building recommendation or whatever you would call whatever guideline you give about straighteners going into taps, then I think it should’ve been followed.

Q Now----

A I have to say, this is not something I would’ve known had this not-- I don’t know-- I mean, I wouldn’t have known if you put flow straighteners into taps or what’s in a tap. I learned of these things at the IMT, so I don’t have any expertise on them at all.

Q No. We have your evidence on that, and nobody is expecting you to give expert evidence on the safety of taps or ventilation systems or anything of that nature. We can put that to one side, Ms Soczka. I wonder if we could go back to your statement, please. It is at paragraph 260 of the statement. If you just bear with me-- I have not noted the page number, so please just bear with me. You are ahead of me. Page 63. Paragraph 260. Again, could you just take a moment to read that, and then we can discuss what is in in it.

A (After a pause) Okay. I've read it.

Q Thank you. Now, helpfully, you have quoted from the IMT minute there, so we do not need to open it, but I wonder-- again, you may feel that that speaks for itself, but could you maybe just explain to us what your concern was around the use of the language around prophylaxis being given "just as a precaution due to issues with the water supply"?

A Well, it depends how you interpret the word "precaution," doesn't it? I mean, I think we were saying that we were making a recommendation here, and I'm not sure that "precaution" and "recommendation" are quite the same word or have the same impact.

Q Yes. Does this go to the question of what you would be saying to patients in relation to the provision of this medication?

A I mean, it's very likely, though I can't remember with detail, that there were some-- there would have been a written statement that we'd have given to families, but I can't remember if this happened here or not, but what we would've done is that we'd have each taken responsibility for our own patients, probably, and gone round and discussed prophylaxis with them.

Q Yes. I mean, you say in your statement, "I felt it wasn't the best word to use in the situation because we had serious concerns about the risk of infection." To be clear, I am only going to ask you what your recollection is. I have nothing else to put to you on this. Am I taking you to indicate that you saw the provision of prophylaxis as being around the risk of infection? Is that therefore something that you would have wanted to communicate when you were speaking to your patients?

A Well, we were giving the prophylaxis because of the risk of infection.

Q Yes. I am just trying to tease out what it is you are getting at in this paragraph. Are you feeling-- Are you indicating that to describe it as "just a precaution to do with issues with the water supply" is maybe just saying a little less than should be said?

A Perhaps, yes.

Q Yes. Thank you. Now, just to complete the chronology around this stage, you have already confirmed to us that the IMT process closed around the end of March. At this point, in this period of time, was there also a discussion around a look back on the infection patterns that there had been

in the last two years?

A Well, there was discussion around that, but I can't exactly remember when that happened. It might've happened later on, to be honest.

Q It really goes back----

A But I can't remember.

Q There is a discussion of it in the IMTs, and would you be content that we just proceed on the basis of that? It may not matter particularly when it happens.

A Yes.

Q Thank you. It is really just to connect to what you said earlier, that in 2016 and 2017, the advice coming to you was not that there was a suspected connection to the environment. Is that right?

A Yes, that's right.

Q But, at some point in 2018, it was decided to have a look back at that. Is that really all it comes to?

A In February, March 2018, we were being told very strongly by Control of Infection there was a problem with the environment.

Q Yes. Can I ask you to perhaps just offer some reflections on this stage of things? We have already touched on some of it. From your perspective, how did communication

with patients work-- or rather, how was it supposed to work as regards the events in March 2018?

A Well, to be fair to all concerned, I don't think-- I've personally never seen anything like this. In a very long career, this was my first experience of anything even remotely like this. I think that would go for all of-- well, it would definitely go for all of my colleagues. Communication, as I remember, it came from the medical and the nursing staff mainly. There were handouts. There were things written after IMTs that we would hand out to the families and try and explain what was happening, and the local management – in as far as Jamie Redfern and Jen Rogers – they very often participated in that.

Q Can I maybe just summarise what I take from your statement, and you can confirm whether I am drawing the right conclusions? I think what you say in your statement is that, at the start, the information would come in a written statement from management after the IMT had taken----

A That was true generally, yes.

Q -- and this was shared with patients and families. Now, Professor, I am going to pause there

because what I am going to do is I am going to give people paragraph references. I am not asking you to look up your paragraphs.

A The thing I have to say about communication: although that's what came as communication for the IMT, you communicated with these families all the time. The trouble is, if you don't know what's going on, you can't tell people what's going on.

Q Yes. So, that is paragraph 152 of your statement. Was it your understanding that-- We can see from the IMTs that there was often, and perhaps always, a communications person at the IMT.

A I'm not saying there was always, but there was generally a communication person at the IMT.

Q In terms of how the written statement came to be prepared, is that something that you have any direct knowledge of?

A No, but I think sometimes-- I don't think I ever participated in any of the written statements. I might have-- not about-- not following the IMTs anyway. Sometimes I think-- some statements were written by Teresa Inkster. I remember very clearly she wrote about the cladding and the antifungal prophylaxis then, but the Comms person would go away to write the statement. I always assumed it was passed by senior management, but that was an assumption. I don't know for certain because it then just came back to the ward.

Q Thank you. You say in your statement that your understanding was that it went to Board level, but are you indicating that is an assumption, in fact?

A It is sort of an assumption. I do remember-- They often came on Friday at half past six at night, and I remember it being said, "We're waiting for X, Y and Z to read this," and X, Y and Z were members of the Board.

Q Another issue I would raise, just arising from what you have just said –I should have asked you this already – how long did IMT meetings tend to last?

A Somewhere between an hour and two hours.

Q Was there an appointed time of day when they tended to occur?

A No. I think they just occurred when everybody-- I mean, this happened quite suddenly. So diaries were filled and so I think they just happened-- They would've had core people they had to have present,

and they would have had-- Teresa Inkster was obviously the most important core person, and they would happen with availability.

Q In terms of the conclusion, the point at which the-- I am sorry, let me rephrase that. You indicated that the written statements would come round about half past six. Did you consider there was any delay or anything being held up in terms of the provision of information?

A No, not necessarily because the IMT may not have finished until four o'clock. I think that they were written and then they were checked, so there was time taken for the availability of the checkers, but I don't think they were-- they didn't happen in the morning and then they came at six o'clock at night. Often the IMT that drove that statement had happened in the afternoon.

Q Just to try and make it-- I mean, it is quite artificial, I accept, to try and look at all of this in detail, not least of all without a detailed bundle of documents from the period, but maybe trying to look at matters more broadly then, just focusing on March, did you consider whether the process of communicating with patients and families was or was not satisfactory at that time?

A I think initially in March it wasn't satisfactory. I think it did improve, but I don't think in March it was satisfactory.

Q What was it that was not satisfactory?

A I think there just wasn't enough of it, and I think the families didn't-- it wasn't that they didn't want to speak to the staff on the ward, but I think they wanted to speak to people more senior than that.

Q So was it a combination of what was being said and who was saying it?

A Yes.

Q I mean, you mentioned that Jen Rogers and Jamie Redfern were on the ward communicating. Are you indicating that people wanted to speak to somebody above that level?

A Yes, I think so.

Q In his witness----

A Or have a statement from.

Q In terms of the content of what was being said, what was your impression of the concern that people had about the content of what was being said?

A Well, during this time, I think it was believed that you put the filters on the taps and all would be okay, but there were time-- but the

bottom line is we didn't really know what was going on. We didn't really know what was-- and you can't tell people what you don't know. So I'm not sure how-- The statements were useful in terms of telling you if you were being prophylaxed or if the water was being turned off or if there was HPV cleaning going on or practical things, but I think the families probably wanted to know what was the real problem, and we didn't know what was the real problem.

Q I suppose if you do not know what the problem is, you cannot say that you do not know what the problem is?

A You can.

Q Was that something that was said or not said?

A The statements tended to describe what was known and what control measures were being put in place.

Q Yes. In your witness statement, you describe-- you say this, you say the statements were not "dishonest or inaccurate… just written in an unusual style and lacked meaningful information." What do you mean by that?

A Well-- fair. They lacked meaningful information, and they would tell you, "The water's being

turned off or you're getting HPV cleaned and you'll be moving rooms," and that kind of thing but they didn't say what the underlying problem was, and that's what everybody wanted to know.

Q In his witness statement for the Inquiry, Dr Sastry indicates that he thinks that communication underplayed the concerns about the environment. Can you say whether that is a----

A I think that's a fair statement. Perhaps that's why I used a word like-- I wouldn't use the word "precaution" because I think it did-- It would be factual, but it put the best emphasis on it that it could.

Q Thank you. Now, if we move on from communication, Professor Gibson, and just to try and think about the impacts from this period. I emphasise again, I put to one side the question of whether or not infections were or were not caused by the environment. That is not a question I am asking you, but would it be fair to say-- or rather, were there concerns that that is what was going on?

A Can you say that again, sorry?

Q I know it was a poor question. I am sorry. I am not asking

you whether or not infections were caused by issues with the environment, but were there concerns among patients and among staff that that is what was happening?

A Yes, I think there was concerns. We didn't know, but certainly initially that was the message coming out from Control of Infection.

Q And were there also postponements of treatment, including transplants, over this period or----

A There was. We've talked of putting the filters on the taps. I can't remember the exact lifetime of a filter, but filters were replaced at regular intervals. I think it was 30 days or something like that. The issues that were highlighted at the IMT for the transplant patients was that-- the view had been that the filters would go on and then they would resample the water weekly up until, let's say, 30 days. So they could see the integrity of the filter up until then, but we didn't have 30 days to wait to start the transplant programme, so we sampled the water at day seven and then said, "If it's clean or clear or free of infection, we will change the transplant filters every seven days" because that was the

time interval that we knew of the integrity of the filter. Teresa Inkster also felt that-- also the company said, "Nothing can get through those filters." Whatever their test system in the laboratory might be, we were seeing multiple organisms, and difficult to know if that was comparable to the test system in the laboratory. So, cautions were kept in place – by that, I mean, don't shower, don't drink the water – for the transplant patients longer than they were for other patients because they were most vulnerable. Their filters were certainly planned to be changed at seven-day intervals until we could demonstrate the integrity of a filter at day 30.

Q Thank you. Just to mention some other impacts that patients and families spoke about in their evidence, and you deal with this in your statement. One of them is-- they described it as an "increase in source isolation," and you say that is not something that you were aware of.

A Well, I couldn't say that with certainty. Source isolation is often done for viruses, as opposed to bacteria. You wouldn't source isolate somebody because they had Stenotrophomonas. So, source

isolation is generally practiced for viruses. I can understand why the families might've felt like that because there was a lot of not coming out of the room and a lot of changing of the room. So, every time somebody came in to replace a filter or do something like that, that room was closed down, and the families were moved out, and they'd be out-- the same thing happened every time rooms were HPV cleaned. So, there was a lot of moving around of the families went on, and that was stressful.

Q Just overall then, I am thinking about you and your colleagues, what was the impact upon morale at this time?

A Well, people were worried and morale was low, and I think morale was low because we didn't really know what was-- we didn't know exactly what was happening and had we got the right control measures. It was difficult to work in. Families were anxious. You were dealing with anxious families. You can understand why they were anxious. We have drilled into them, at presentation, that infection is the greatest risk to life, and all of a sudden we're telling them there's now a risk of infection. It is hard to be in a

hospital for weeks on end. If you are then not able to shower, you're being asked to drink sterile water, you're cleaning your teeth with something else, that has a huge impact on families. I think they were-- I think we were all at the stage of wondering what was going to happen next.

Q Thank you. Now, moving a little further on in the chronology, I want to ask you some questions around the summer of 2018. So, I am looking really at the period May to July, and I am not going to take us up to the period of decant. I am thinking, really, about the early summer. Now, how do you want to do this? Do you want to give me your overview at high level, or would you rather I gave you what I take from the IMTs?

A The latter, please.

Q The latter. Now, something I should perhaps have said earlier, in doing this, I just wish to emphasise that I am doing no more than summarising what is written there. I do not proceed on the basis that the events that are described are proved as having happened. We are just interested in what was being said. Anyway, my impression from the IMTs is that around about mid-May, it was 15 May, there was a return-- there was a

concern about a return of an increase in infections.

A That's true, yes.

Q I think, when you fast forward a little through the IMTs, we do indeed see references to Stenotrophomonas. I think there's references to Serratia marcescens as well. We also see that swabbing of drains took place and disclosed various gram-negative bacteria. Would that be right?

A That's correct.

Q Yes. Ultimately, Dr Inkster thought that at least some of the infections were associated with contamination of drains. Is that right?

A That's correct.

Q The advice at the time to the IMT was that this was likely to be a site-wide problem. Is that right?

A That's correct.

Q Now, I think we can also see from the IMTs that there was also a case of a gram-positive infection reported at the time, an atypical Mycobacterium.

A Yes.

Q Now, there were further instances of that particular infection the following year, and I will ask you about that later. There was a concern about showers not draining, which you have spoken about. Is that

right?

A Yeah.

Q I think as far as impacts are concerned, the IMTs indicate additional prophylaxis starting in early June and then stopping a few weeks later. The detail does not matter, but would that be broadly correct?

A I think that's correct. Well, the prophylaxis was almost stopped when it thought that the control measures were in place.

Q Yes, and a return of cases in July, I think, is what is also indicated.

A Yeah.

Q Now, what I want to do, having established that chronology, is really just try and tease out some of the clinician concerns around that time. Do you recall a point where clinicians indicated that they were no longer comfortable admitting patients to Ward 2A over this period?

A Yes, I do. The drains had been swapped because of a number of infections with Enterobacter and Stenotrophomonas. As the numbers increased, I think we lost—I think we were less than confident that we had got to the bottom of the problem, even if the drains were being cleaned. I'm just struggling to kind of keep up with the different IMTs.

Q I want to ask you to look at-- Again, I am trying to take this in fairly broad strokes and just ask you to focus on particular aspects of things that were said. One I am interested in looking at was at the IMT meeting on 8 June 2018, which is in bundle 1, and it is at page 109 and again----

A I've found it, yeah.

Q You have got it, yes. Should be up on your screen. Again, it is an IMT that you were at, and if we just, please, move through the bundle to page 112 and under "AOCB."

A Yes, I see that.

Q It says:

> "Dr Gibson chaired a meeting on Monday with her medical colleagues and asked them if they had any concerns/issues in Ward 2A. They have since come back saying they are not confident we are in control of the environment as there have been numerous issues surrounding Ward 2A since its opening."

Now, do you have a recollection of saying something like that at that meeting?

A Well, I think this is perhaps an example of maybe the minutes not being-- really reflecting exactly what would happen. I would leave every IMT and go and speak with my colleagues and say, "This is what happened." They would ask me, "Are we prophylaxing? Are we not prophylaxing," and things like that. So, it would not at all have been unusual for me to-- when it says I chaired a meeting, I think that's rather grand. I probably just spoke to them within the department and said, "This is now the problem with the drains, and this is what is happening," and we would've all said, "This is just another event. Are we really in control of the environment? Is this safe?" I don't think it was any kind of formal meeting. I probably just got them together to tell them what had happened at the last IMT. I mean, I went after every IMT and reported back.

Q What does the-- what do we take-- Let's, again, take this in stages. The statement, "The clinicians are not confident we are in control of the environment," does that capture what you were being asked to reflect?

A Yes. I think-- I was representing them at the IMT. I was one of them. Sometimes it reads in the minute that I wasn't part of them, but I had the same anxieties as them and the same problem. In fact, a worse job because I'd go to the IMT, then go back and tell them what was

happening at it. I mean, I particularly look at that last sentence, "Dr Inkster, Dr Gibson and Jamie Redford are meeting the medics/surgeons." I mean, I was part of the medics. I mean, I wasn't part of the Control of Infection or part of the local management. They'd have come and met me in the same way that they met my colleagues.

Q Well, I suppose----

A I just might have arranged the meeting.

Q What was the concern-- What did not being in control of the environment mean? Who was it that was not in control of the environment?

A Well, we'd had the problem with water when we'd put on the filters, and that was meant to resolve the issue with infections. We were now being told there was problems with the drains. We'd had problems with the showerheads. There had been a sequence of problems that had occurred, and I think it made us all feel that there was a fundamental problem that we were not identifying.

Q I mean, does this indicate, though, that-- we go back to the very start of what you said about the respective responsibilities, provision of care, provision of hospital.

A If you're asking who is responsible to control the environment, I think I've already said that. The responsibility to provide a safe environment lies with the Board.

Q Is this indicating that the perception at this stage was that that was not something that was happening?

A Yes.

Q Thank you.

A I mean, the Board may act through Control of Infection, but they ultimately are responsible for providing the environment.

Q Can you recall at that time what response, if any, you got from the Board about that concern that they were not in control of the environment?

A I don't remember any response. I mean, I don't know if anybody from the Board was present at that IMT. I'd have to go back and look at the attendances. I mean, I presume that Jamie Redfern, as the manager, would have reported this up to Kevin Hill as the director, who would have reported it up to-- there's a lot of reference to an executive group – I'm not entirely sure who they were – at the Board. Our way up the ladder was through Jamie, Jamie Redfern, to the director and up.

Q Thinking back to the IMT that we looked at earlier from March where you and Dr Murphy raised the concern about the escalation of concerns to a high level in GGC and nothing coming back, I wonder whether you consider that the concern that you are raising here in June 2018 has similar echoes?

A Well, it is quite powerful for a group of clinicians to say, "We're not happy to carry on treating in this environment." There's nothing much more powerful you can say than that to a manager.

Q What I am asking you is whether you feel that that is something that should have been communicated to management at the most senior level----

A Yes.

Q -- and whether in-- Yes?

A Yes.

Q And whether, in addition, there should have been a response from management at the most senior level?

A It should certainly have been communicated up the ladder to the most senior level and, yes, there should've been a response.

Q Thank you. Now, my Lord, I am nearly at the end of this particular chapter, but I notice the time. I am in your Lordship's hands.

THE CHAIR: I am in your hands, Mr Duncan. Do you want to take the break now or carry on?

A I'm okay.

MR DUNCAN: I wonder if we maybe just go for another 10 minutes, would that be----

THE CHAIR: Yes.

MR DUNCAN: Thank you. I would like to ask you about some reflections just at this stage. As I said, we will move after lunch to later stages and, in particular, the decant. I am going to ask you some context, first of all. As at June or July 28, what awareness did you have of risk assessment of the hospital water system that had been carried out by a company called DMA Canyon in April 2015?

A Well, I can't answer that for June or July because I can't remember, but I do remember this being raised at an IMT. So, the first I knew of it was at some point post-March 2018, but I don't remember which IMT it was at.

Q Can you recall what it was that was raised, even in broad terms what was said about this?

A Well, what I remember coming from one of the IMTs, there was discussion around how the water

might've got infected, for want of a better word, and one of the things thought was that it might have happened in the commissioning stage.

Q What was the relevance, as you understood it, of this risk assessment report to that?

A Well, that was a statement made at one of the IMTs. There wasn't-- I don't think we heard about a risk assessment.

Q I see.

A We just heard that that had been one of the things hypothesised.

Q There are documents that have been provided by the Health Board for the purposes of the Inquiry that indicate that, around June 2018, they "identified" that a risk assessment of the hospital water system had been done in April 2015 and, as I say, was identified in June 2018.

A I think I now remember what you're alluding to. I don't know if it's a risk assessment or if it's just routine practice, but the number of viable particles in the water, I think – is that what you're referring to? – had been measured and sent, I think, to microbiology by the company.

Q I think the understanding may be that the report in question indicated concerns about the water

system as well. Can you recall whether that was something that was drawn to your attention in relation to the discussion at the IMT that you mentioned?

A The only two things I remember from the IMT about that: one was that water would be sampled, and water has to be tested for Legionella and Pseudomonas even before all of this, so I know other things were added. There was-- whatever it is they measure, in a total viable particles, there is a limit of which-- the water should not have the number of total viable particles. That had been sent to microbiology, I understand, in 2015. That was said at an IMT, and it was also said at an IMT that one of the possible ways that water might have got contaminated was during the commissioning processes with pipes lying around and getting infected and biofilms forming.

Q Thank you.

A But I'm not an expert.

Q Thank you, and just one other piece of the jigsaw from that time: were you also aware, or were you made aware, of any expert analysis that was done in round about June 2018 of the flow straighteners within the hospital?

A No.

Q You were not?

A It was said repeatedly at the IMT that flow straighteners should not be in taps where immunocompromised patients are cared for.

Q Did you know at the time whether an investigation was made of the flow straighteners and that that did indeed disclose the extensive biofilm----

A Biofilm. I didn't know at the time. I think you sent me that report.

Q Do you feel that that is something that you ought to have known at the time?

A Yes. I think in retrospect, yes.

Q Thank you.

A But I don't know what-- I think we'd already established that straighteners shouldn't have been there.

Q Thank you. My Lord, I think that might present an opportunity to break.

THE CHAIR: We will take our lunch break now and try and sit again at five past two.

(Adjourned for a short time)

THE CHAIR: Good afternoon, Professor Gibson. Mr Duncan.

MR DUNCAN: Thank you, my Lord.

Questioned by Mr Duncan KC

Q Professor, can I maybe just go back and have you clarify one matter that I asked you about earlier? It was about the report by a company called DMA Canyon? Now, in your statement you indicated that was not something you were aware of at the time.

A Not in 2015 or whenever it was commissioned, yeah.

Q Yes, and at some point, you subsequently became aware of it. Is that right?

A I heard of it referred to at the IMTs, yeah.

Q Yes, but just on the question of who did or did not know about the report and what was in it and what it said about total viable counts or anything else, is that something that you yourself have any direct knowledge of?

A Well, I would know who was-- I wouldn't be able to name individuals. My understanding is the report was sent to Facilities, Facilities sent it to Microbiology but I don't know who the individuals were and I don't

know if it went further afield, than that.

Q And you do not know----

A And I only know that second-hand from the IMTs.

Q That is really what I was asking. I think that is the critical part.

A Yeah.

Q None of the people in the departments that you have just mentioned are going to be giving evidence in this hearing so I do not know what their position on those things would be. So, is your position that you yourself personally do not know who saw it or when they saw it?

A I don't know the individuals who saw it. I only know what was reported at the IMT.

Q Now, moving on then, I want to move on to the decant in September 2018. Now, the way I want to do this, again, similarly to try and see if we can, as it were, hasten ourselves through the chronology and I am also conscious that there are other witnesses who can provide quite a bit of evidence on this bit of it. If we just start the story again then at round about the beginning of September 2018 and, again, I think I will try and do this the same way. I am going to ask you just to give a kind of overview and then I will maybe ask you about individual bits but, just really to get an idea from you of why there needed to be a decant, what was your broad understanding at the time?

A Well, this is my broad understanding: more organism, more gram-negatives had been isolated and patients. The view of control of infection was that they were coming from drains. We had already cleaned the drains, we'd dosed, we had done everything we thought that would clean up a drain and we still had the problem. So there was contact with an expert drain person and the view was that there would be more work requiring, which wasn't just about brushing and cleaning and dosing drains but might be about looking-- scoping drains and, anyway, long and the short of it is that all the remedial things that had to be done would be very difficult to do with the patients still in their rooms and in the ward, so one of the reasons – I'm not saying the only reason – but one of the reasons for moving was to make it possible for that work to be done.

Q Yes. Can you remember whether – again, emphasising that we are at the stage of September 2018 and not later – there was any suggestion or discussion around then about a review of ventilation system on the ward?

A I remember ventilation systems being spoken about, but I can't honestly remember with any confidence exactly what that discussion was, but the ventilation was discussed because the chilled beams were discussed and I don't really understand chilled beam technology if I'm honest. I never heard of chilled beams, really, until all of this, okay, came about.

Q Yes.

A So there was some discussion around the ventilation in relation to the chilled beams.

Q And again then, I am taking my lead from what you have just said about not being an expert on these matters and just trying therefore to look at the broad strokes of this. Are you indicating that among the concerns that was being raised was around the chilled beams?

A Well, the drains had been cleaned and the problem had still reoccurred, so we were looking for other sources of water that might be causing the infections and one of the sources of water was either condensation from the—there might have been others, but one that was discussed that was the chilled beams, either condensation or leakage from the chilled beams.

Q Thank you. Do you recall over this period, whether your fellow clinicians and you were raising concerns that things were no closer to a resolution?

A Absolutely. We all felt we were no closer. This was something like the third event we'd had. We'd had the March one; we'd had the June/July one; and now we were into a September issue with infections.

Q And did you eventually have a meeting with Kevin Hill about that?

A We did. We had a meeting ourselves, as I remember rightly. I don't know if you want to show me any minutes, but we did have a meeting of ourselves where we really questioned the safety of the environment. We were no closer to a resolution despite a lot of remedial things having been done and we had a meeting with Kevin Hill about an option appraisal of what might happen.

Q Did you feel that you were getting a response from the appropriate level of management on these questions?

A You know, I felt – and this was perhaps my feeling and not everybody's – but I think it was, that we had been, by September-- We'd

started in March, and during that time we had taken the taps off, we'd pulled them apart, we'd cleaned the straighteners, we'd put filters on, we had to replace the shower heads, we'd douched or dosed everything with silver peroxide, we then douched it with carbon dioxide, we'd brushed the drains, we cleaned the drains. We'd done everything, but nothing got in. Nothing was stopping whatever was happening. We were no closer to the resolution. So, in some ways, perhaps-- I'm not saying I didn't think it was being escalated properly – I didn't think it was – but I was also very concerned that we may not have the expertise around that table to sort it. I mean, if I had a recurrent medical problem, I would go to who the recognised world authority in the UK is, and I felt that it was time for us to take a step back and just say, "Stop cleaning the drains" and try to really get to the bottom of what is going on.

Q Now, against that background and that comment that you have just made, I wonder if you might have before you-- If we could have it up on the screen, and it is Ms Callaghan this afternoon, I think. If it is, bundle 1, please, Ms Callaghan, page 169. So, yes, 169. Now, this is an IMT of 17 September and we see your name not recorded as one of the attendees and then, do we see, below that an explanation, you are not there, and you have provided a statement that Dr Inkster read. Is that right?

A That's correct.

Q And I wonder, Ms, Callaghan, if we could just maybe enlarge the paragraph that begins, "There has been another positive blood culture…"? Yes, that is fine. Thank you, thank you, that is perfect and, again, if you just take a moment to read that. The "Can you please assure me…" bit, I think, is the bit that you will want to read.

A Yes, I've read it.

Q Does that reflect the concern that you have just suggested to us?

A Well, I think by this time I felt very frustrated that we weren't getting to the bottom of the problem and it's maybe not to the best-- To the best of my memory, we'd had a previous IMT, the minutes of which I would not have seen because the minutes tended to be tabled just before the next meeting, so I would not have read them. I had been phoned that weekend and told we had another blood culture and positive blood culture, and at the same time I had been told that the executive group had

not agreed to the decant or not agreed to that. Now, that turned out not to be true. They had postponed the decision rather than not, but I wouldn't have known that because I hadn't seen the minute. I just wanted to say, "Let's just stop and review what we're doing because what we're doing is not working. There has to be somebody out there who has seen something like this before who can give us some direction", and I would refer you to later on in that minute where Teresa Inkster talks about contacting somebody called Peter Hoffman, who was meant to be the UK authority on these kind of things, who said exactly the same thing: "Stop cleaning your drains and try to get the source of problem." I'm not saying-- I mean that metaphorically, of course; you have to clean the drains if they're infected but it was more than just doing that. We had to try and get to the source of the problem.

Q And just so that we can see that reference for ourselves, Ms Callaghan can we turn on to page 171? And it is item 4. I think it is the second paragraph. It does not need to be enlarged. That is perfect. "Dr Inkster has…", have you got that Professor?

A "Dr Inkster has spoken to Peter Hoffman and his opinion is that you should not have to clean drains continuously…" And we were cleaning them continuously; the grime would come up every four to six weeks. "…and that the underlying issue should be resolved."

Q Yes, thank you. Just then to go back to really the paragraph that we were looking at, we do not need to go back to it to look at it but just to really tease out what you are saying. Does it really go back to what you said a moment ago that was your concern that the Board did not have the right people around the table looking at this particular issue?

A Well, I don't know who decides who's around the table. I don't know whose decision that is, if that choice lies with Control of Infection. It's not so much about not having the right people around the table because I don't doubt that the people around the table were very good plumbers and facilities and directors. It's just that nobody had seen anything like this before, and surely out there was somebody who had seen something similar like this who could point us in the right direction because it doesn't matter what we did, the problem came back.

Q Thank you. I want to

move on a bit and still in the same period of time and still on the subject of the decant, I want to ask you some questions around the choice of ward that the children were decanted to and the unit was decanted to. Did the clinicians get any choice as regards to that?

A We were part of the option appraisal and I remember going to more than one meeting about the option appraisal. The things that-- It's in the minutes, it's in my statement, we discussed the possibility of everybody going to 4B. Well, you've already highlighted-- 4B is the Adult Transplant Unit for those who might not know that. You already highlighted the problems the adult transplanters had getting into their units. Well, they weren't going to move out and give us all the beds, and that was very understandable. We talked about going to the Beatson where we knew that the ventilation and everything was fine, but we had no paediatric intensive care.

We couldn't go to another ward in the hospital because, as you've already said, the problem was endemic; it wasn't just confined to one ward. We talked about a portable army type facility in the carpark, we don't get that overnight. That takes a

lot of planning in that would have been a long delay. So the only choice was to go to another ward and the Queen Elizabeth. So, yes, we were part of the decision that that's what should happen, but we didn't choose the ward. I mean, we're not in a position to choose the ward. Only somebody who can control adults-- or with some directorship over adult services could ever have agreed to that.

Q And were there, among your colleagues, clinicians who had concerns about the particular choice of ward, as far as you can recall?

A There wasn't an alternative. That was the only ward that could be vacated, I think it was Rheumatology, and they went to Gartnavel site or something like that. We were making choices out of what was the least unacceptable.

Q Yes. I wonder if I rephrase the question, perhaps. Can you recall whether anyone had a concern that-- And it may not just be about the individual ward, more just the fact that it's the same hospital campus, did anyone have any concern as to whether the children were just being moved somewhere else where there might still be problems?

A That was raised at an IMT. I can remember-- I think it was

the Facilities people who raised it to say, “You’ve got the same drains. You’ve got the same--” My understanding is that the ward was inspected by Control of Infection and it was passed.

Q Yes. Now, just picking up on something you have just said, a number of people in the evidence that has been provided to the Inquiry have indicated that they had understood at some point that the adult hospital had a separate or different water supply from the children’s hospital. Was that something that was ever suggested to you?

A No. Prior to this I wouldn’t have known where the water came from either of the hospital but, my recollection, as we talked about dosing the system with silver hydroxide or whatever it was, that we did know that the maternity hospital and our campus were different tanks because they were both tested separately, but I think I understood-- I’m not sure that was specifically said, “Where does the water supply from the Queen Elizabeth comes?” (sic), but I certainly knew we had a different tank from the maternity hospital.

Q And do you know, or do you recall anyone ever suggesting just when the options were being looked at

as to where children could be decanted to? Was there ever any concern or was it ever suggested that a decant within the RHC itself would not be suitable because of the concerns about----

A That said that we couldn’t decant within the children’s hospital and because of the the similar water supply.

Q Thank you. Now, in a moment I am going to ask you some questions about the principal ward that children were decanted to – Ward 6A – but, before we get there, I want to just stay with 2018, I mean, because obviously discussions about what was going to happen on Ward 2A and B in relation to the problems continued and I want to focus on that. Initially, what was your understanding of how long it was going to take before the decant could come to an end?

A Well, to the best of my memory, we moved out after the September bank holiday, which was, I think, 26 September or something like that, and we were told we’d be back in for Christmas.

Q And, I mean, that obviously is not what happened. What was it that changed that, as you recall?

A Well, I think, first of all, one should say that when one talks

about the suitability of 6A, we went there with the understanding it would be for a few months. We didn't go there with the understanding it would be for a few years. Sorry, what did you ask?

Q I asked you what changed from the time scale back before Christmas?

A My understanding is it was the ventilation. There was a problem identified with a ventilation on 2A and I think, I shouldn't say how serious, but how much work that was going to take to resolve that changed over time.

Q Thank you. Now, just in order to better understand that, I wonder if you could have a look at another IMT minute and in bundle 1, Ms Callaghan, could we go to page 223? So, you have in front of you an IMT minute of the 2 of November and, again, you are noted as having been present. Is that right?

A Yes.

Q Yes. Now, Ms Callaghan, could you take us to page 224, and I am conscious that people are watching on the big screen. So, section 6, could you enlarge that for us please? That should be fine, I assume. Again, if we just proceed in the way we have done before,

Professor, could you read that to yourself and then tell me when you have done it?

A Yes, I've read it.

Q Yes, and so the takeaway from that is that----

A Well, for some reason, Tom Steele was the director of Estates, as I remember, and Teresa Inkster, in her capacity as Control of Infection, had been looking at the ventilation in Ward 2A. Now, I don't know what prompted that, but they had been. So, ventilation, ideally, for looking after immune compromised children should be what you call positive pressure. That means the pressure within the child's room is higher than the pressure in the corridor so that any particles or infections don't go from the corridor into the child's room. What that says is, and I think that is what did happen, at the time of the design and the specification that had been decided to make the rooms neutral to slightly negative, the problem of making rooms neutral to slightly negative is that over time dirt gets into the filters and they don't work as effectively and the pressures become negative, you know, within the rooms.

Q Thank you.

A So, I think there was the

need to try and address how to make it neutral or positive. My understanding is that later on they then found a problem with the ducts, but I'm not enough of a ventilation engineer to really understand what that problem was.

Q Yes. No, I will come to that in a minute, but just going back to the two questions I asked you some hours ago: now, in terms of what you thought had been provided in 2015, can you say whether you had understood the position would be that the non-BMT rooms would have a positive pressure?

A What we were told was that they would be built to a standard required for Haematology/Oncology Unit. Now, I don't know if the word positive pressure was ever said, to be honest. I think there the reference to negative pressures is about viruses. You don't want viruses to come out of the room in a positive pressure, but that's the reason that you might have a negative room but, no, I was not aware that they had not been positive or neutral.

Q Thank you. I think it might be only right to notice – and we have put the minute away, but that we do not need to see it again – that Dr Inkster said there was no evidence

that there had been any outbreaks of infection linked to this.

A I think that's fair. I mean, ventilation is about Aspergillus. It's not about gram-negative bacteria.

Q Now, just on the matter that you have just raised about something to do with the ducts, was it your understanding that there was a further issue discovered, something to do with air being recycled from the bathrooms?

A Yes, into the into ducts that-- Yes, I think, yes.

Q Are you aware of whether any concerns were raised about that, and what sort of concerns?

A I don't think there were any clinical concerns raised about that. I think it would just not be what I think would have been standard practice, you know, to have happened, and if they were refurbishing then there was every reason to correct that at the same time.

Q Yes. I mean, did you yourself ever see or hear of an SBAR written in November of 2018, which indicated that this might give rise to the potential for cross-contamination?

A I never saw that SBAR, no.

Q Moving then to Ward 6A, and I want to ask you then about some

issues arising from the decant. The first thing I want to ask you about is clinical and nursing care challenges, and these are all things that, in a variety of ways, you deal with in your statement, but if we were to sum up or, rather, if I was to have you sum up the challenges that the move to 6A presented to you, your team, your colleagues, and your patients and families, what would you say?

A They were considerable. First of all, we had come from an in-ward patient 2A ward, a daycare 2B, and we had to accommodate both wards on one ward. Now, there was no natural break anywhere where you could say, "That's daycare and this is the ward," so we had flexible rooms all the time. We lost our TCT Unit, our Teenage Cancer Trust Unit, and we lost things like playrooms and other things that 2A and 2B provided that, because of the restriction in the floor plan, we couldn't replicate. So, I think that was I think perhaps bed occupancy or bed space to man a very busy daycare area as well as a ward was very challenging.

However – I'm just trying to make myself notes of what not to forget to say – we were in an adult hospital. We are what's often referred to as a user service. We use other services

as opposed to being a giver of services. So it's very important that we have good access to Intensive Care because we have very, very sick children. It's important we've got good access to radiology because we do a lot of scanning and things like that, and that became very challenging. We were a long way from Intensive Care. Intensive Care was on the first floor of the children's hospital. We were on the sixth floor of the adult hospital.

You know, first of all, I should make it clear, you know, when children deteriorate, you should predict their deterioration. We should not have, really, arrest calls going out. That's what happens when you have a heart attack, you know, and that's not what makes children deteriorate. So, you try to predict, but if we did have to put a call out, it was very difficult for our switchboard to realise that we're calling the paediatric arrest team to go to a ward in the adult hospital.

So, we were nervous about having an intensive care support at such a distance from us. It was where we moved children far further to get them to Radiology. We had to move them to get to theatres because our theatres were still on the first floor of the children's hospital so, you know, they had to go down five flights, pass

an adult Coroner Care Unit, and pass some things that you'd prefer parents didn't have to see en route to something.

We also were dependent on nights on the hospital. We're one of the luckiest departments to date, and we have managed to maintain it. We have dedicated resident on-call doctors till ten o'clock at night but, after that, it is what we call hospital at night, so that's a team of doctors covering all wards with consultant cover from our unit from home. They were moving considerable distances. You know, they would generally spend most of their time in the Emergency Department where new cases, you know, were coming in, or their Clinical Decision Unit. For them to come across to the children's hospital was difficult, because they were being very geographically separated from where most of their activity was happening.

So, you know, we had concerns about how safe it was delivering that service. We were exceptionally lucky that we have quite a number of advanced nurse practitioners, and they agreed to cover ten o'clock to nine o'clock in the morning, but that means if they cover ten o'clock to nine o'clock in the morning, they can't be there during the day. So it reduced what

staffing we had during the day. So, it wasn't without a lot of difficulty.

We also had the additional problem of the children who are being transplanted were two floors down on Ward 4B. We borrowed negotiable numbers of rooms, but mainly three rooms. You know, in our facilities were a desk in a corridor where the nurses would sit and do what they needed to do, and we would just visit, as you do, in a ward round, but we didn't have the capacity to have a resident medical presence on 4B and was dependent on saying, "You need to come down and do…" If, for example, we were returning donor cells or doing something that somebody had to be there all the time, then we just have to send one down for that duration, but it was much harder than nursing everybody within one unit and looking after everybody, medically, within one unit. Does that answer the question?

Q It does, and there is one aspect that I might go back and just tease out a little bit more. In particular, the proximity to in Paediatric Intensive Care is something I would like to ask about. What are the different considerations and specialties that arise in the context of paediatric intensive care that would make it more

difficult or, perhaps, inappropriate for adult intensive care to be provided? Sorry, that was a terrible question.

A That's a terrible question.

Q Yes, thank you.

A You'd be shot down if you said that.

Q Yes, indeed. Yes, thank you. Do not spare me. So, I mean, are there particular----

A There is a specialty of paediatric Intensive care medicine. So, they are primarily, firstly, paediatricians and, secondly, intensive care. You know, paediatrics starts at birth. Some of these are 3/4/5 kgs, and it ends up with teenagers. Managing fluid balance, airways, everything that intensive care managers-- is completely different in children than adults because of the size, and because of the spectrum of ages.

Q Yes, thank you. A further thing I would like to ask about is just to maybe get your reflections on some of the evidence that we----

A I should add, it isn't just paediatrics. You know, you've heard about the toxicities of what we do so we call in Gastroenterology, Nephrology, all the -ologies and they all had to come and from an adult hospital and, you know, they came.

I'm not saying they didn't come, but it wasn't without more effort than it would have been to walk up and down one flight of stairs.

Q Yes. We have got statement evidence from a number of your colleagues and some of them will also give oral evidence, but Dr Ewins, for example, mentions how anxious she was as a result of the patient pathways that she describes, especially in the context of the----

A The transplant patients, yes.

Q -- transplant, and as she particularly mentions transplant babies.

A That is true. They were on an adult ward. There was no resident medical care overnight and any problems they had, it was hospital at night that were covering them, and they were a long way from PICU, geographically, in distance.

Q She says geographically and, as it were, temporally. She said it could take at least five minutes to get to PICU. Would that be----

A That is easy but, you know, generally what would happen is PICU would come to us and PICU would transfer them to PICU, and we were not-- sometimes we did but, generally, we were not the people

transferring them. You don't move somebody who's unstable. You bring in the team and then you stabilise them; then you move them, but we were still a long way from PICU.

Q Okay. So, if I also maybe ask for your observations on some of the evidence we heard from the patient and family witnesses about the suitability of 6A, I suppose, particularly in the context of what you said about it not being a short-term decant. I mean, I think the overall description from them was that it just was not suitable for paediatric haemato-oncology patients.

A I think that is probably fair, but there wasn't really an alternative ever proposed. I mean, the problem was the length of the decant.

Q In that context, some of the witnesses painted quite a bleak picture of life on Ward 6A. Some described almost feeling institutionalised on the ward. Is that a picture that you would recognise?

A Well, I think two things happened that might have made them feel institutionalised, and I do understand that. Because of the infection and the problems with infections, we, the IMT, would look at what were the possible sources of that infection. So, I mean, one was that

visitors should be reduced – you know, visiting teams – so instead of five gastroenterologists turning up, four stood at the door and one came in. You know, normally a consultant would come with their trainees and their senior nurses, but they wouldn't enter the ward, so we tried to restrict the number of people passing through the ward to cut down the infection. So, that's one of the things that probably made people feel a bit institutionalised: that they didn't have the normal flow of visitors. That's very important if you're stuck in a room, you know, that somebody comes to relieve you for a bit of time.

So, I think that's one of the reasons they probably felt like that, but the other thing you have to remember is for a significant-- I honestly can't remember the dates. I'm dreadful with dates, but COVID was with us, you know, during the time that we were in 6A and COVID seriously restricted, you know, what could happen. So, it wasn't all about COVID. It was a mixture, but there were two reasons that they might have felt institutionalised.

Q Yes, well, that allows us to move forward in the chronology a bit, I think, to early 2019, which I suppose is probably about a year

before COVID was an issue, and I am going to have you look at a few IMT minutes from around that time. Now, again, I am anxious that we do not get into individual patient cases. I think it is particularly important we tread quite carefully at this stage. So, what I will do is, rather than have you set out your recollection of things, which may or may not take us somewhere where it might not be best to go, I will ask you to look at some IMT minutes and we can use those to frame the discussion.

So, if we begin, please, Ms Callaghan, if we can go to bundle 1 at page 255. It should have a minute of 7 January 2019, and it is another one that you have attended. We can stay on that page – and please say if it needs to be enlarged – but below the redaction, we see that:

"Haem-oncology patients are receiving prophylaxis as agreed. The provision of prophylaxis in the paediatric population is problematic and further described below."

Now, again, just trying to confine ourselves to really what is said there. There was a return at this stage of the prescribing of additional prophylaxis. Is that right?

A Looking at the date, I would imagine that was a return of

antifungal prophylaxis.

Q Yes. That is what I was really about to ask you. I mean, I presume you are familiar with this particular minute.

A Yes.

Q Yes, and I think you know that there was a concern about a pathogen called Cryptococcus.

A Yes.

Q Is that right? I think we can see from the minute that sampling in a plant room had found signs of Cryptococcus, and I think it might be important to say that that was not confirmed as being the particular species.

A Strain? No, it was a different strain.

Q Yes. If we can move over the page, please, to page 256, and do you see at the very top of the page something which I think you have just touched on:

> "Air samples taken on 6A – 4 rooms… have heavy growth of fungus but no Cryptococcus identified."

Do you see that?

A I do.

Q Then if we drop down the page – I do not think we need it enlarged – to the section beginning "Hypothesis," and if you just move two

paragraphs up you see, “In 6A and 4C...” Do you see that?

A Yes, I do.

Q

“In 6A and 4C we would expect to see fungus on plates as they are not HEPA filtered wards however 6A seems significantly heavier fungal growth than 4C, the reason for that is unclear.”

Is that right?

A Yes.

Q Now, does that accord with your recollection of the concern about fungal growth at the time?

A Yes, it does, and if I remember correctly, I think Cryptococcus was grown once the-- I know initially it just says a heavy growth of fungus, but I think a, as you say, a different strain was grown.

Q Yes. So, as you have raised it, I think we will see when we go through the paperwork that a little later – I think on 6A itself, in fact – Cryptococcus, is it, albidus----

A I think so, yes.

Q -- that was found, but not Cryptococcus neoformans?

A Yes.

Q If we go over the page, please, to page 257 and, Ms Callaghan, I wonder if we can just enlarge a little the paragraph at the top, the patient prophylaxis one. Thank you, that should be fine. Again, professor, if you want to just take a moment to read that and then indicate when you have done it.

A Do you want me just to read the first three lines?

Q Yes.

A Yes. No, I can read that paragraph now.

Q I do not think the redaction really changes anything.

A Okay, I have read that, yes.

Q Thank you. I mean, does it really speak for itself?

A Well, firstly, the first sentence, I’m not sure that that’s a correct record of what was said. I would have said that we’d had a number of patients who’d had reactions to the AmBisome. I have never given an adult AmBisome in my life, so I wouldn’t know if there are fewer side effects or not. My recollection is that the adult physicians were involved with some of this because they also had a case, and they probably said, “We give it with no problem,” but the reason that this was raised was that we’d had one or two children have reactions to the AmBisome.

Q Thank you, and if we

pass over the next paragraph we see, is it, Dr Inkster saying:

> "…concerned that patients will now be on 6A for a significantly longer period that first envisaged when the prophylaxis regime was agreed and there are concerns regarding the safety of the prophylaxis. In addition, air sampling has shown heavy growth of fungus and 6A is not heap filtered ward."

Do you see all of that?

A Which paragraph, sorry, is that?

Q It is the one that It begins with, "TI concerned…"

A Yes.

Q Can you just take a moment to look at it?

A Yes, I've read that.

Q Thank you. Does that accord with your recollection of what was being said at the time, broadly?

A Yes, it does, but you have to bear in mind 2A wasn't HEPA-filtered either.

Q Yes, but I am not going to be asking you about the absence of HEPA filtration to be absolutely clear. I am more interested in the concern about the use of prophylaxis as a result of that concern.

A Well, I think, first of all, I should start off by saying, as the haematology-oncology team, we prophylaxed when the IMT recommended prophylaxis, and we stopped the prophylaxis when they told us safety measures were in place and we could stop the prophylaxis.

All drugs have side effects, and there are a number of drugs you can use against fungus. You can use AmBisome, which is our norm for in-patients. You can use any number of drugs belonging to the family of azoles. I think posaconazole is mentioned, or you can use caspofungin. Cryptococcus is not sensitive to caspofungin, so we either have AmBisome or an -azole. For us, looking after children with leukemia, we give them a lot of vincristine, and you can't combine vincristines with azoles because azoles accentuate the action of vincristines and there's a risk of seizure activity.

So, we were limited in what we could use, or it became incredibly complex of giving them three days and stopping and starting – you know – to get to have time away from the vincristine. So, we tended to use AmBisome, but we did see reactions to the AmBisome and I think that's the point I was trying to make there: that, you know, accepting the risk of the

fungus, this wasn't ideal by any means.

Q I mean, just pausing the chronology just now, I am thinking about everything that you and your patients and families had been through leading up to a decant and who you were in the new ward. You are going to be there for longer and there is now a concern about risk from fungal growth. There is also a concern about Cryptococcus and there is the provision of additional prophylaxes again. How were you feeling at that point?

A Well, by the environment I think quite frustrated if I'm honest. We have to take prophylaxis within the setting that we're used to working. We prophylax a lot of children by protocol. You know, we were extending the amount of prophylaxis and we were seeing side effects.

Q Yes. I mean, overall, I think we take from this, among other things, that-- well, in fact, what I was about to ask might be captured in another page of this minute. If we go to page 258, and if we enlarge the section headed, "Staff":

> "BG will feed back to clinicians at award meeting this afternoon. She will inform them that the air sampling results are abnormal and there is a wider fungal problem."

If you were feeding that back to the staff, would it be your expectation that that would also be fed back to patients and families?

A Well, they would certainly be told why they were getting antifungal prophylaxis.

Q Yes.

A I don't know if I would use those words, but we would have said, you know, "There's a risk of fungus and you're getting antifungal." To be fair, we still prophylax a lot of these children, so some of what we did that we're still doing because we recognise the risk of steroids and neutropenia.

Q I took a step back just to pick up on something you said a moment ago. Are you feeling really frustrated by this stage?

A Yes.

Q Did you, at this stage, seek to escalate that to senior management?

A I think, if my memory serves me right I, at this point, wrote to Jennifer Armstrong and I asked her to come, and I think this is the timing. I do have to confess to struggling to remember just exactly the chronology of everything, but at one point I did

write to Jennifer Armstrong. I think I told you we had a unit meeting and I invited her to the unit meeting to come and meet with the-- when I say the clinicians, you know, it is a multidisciplinary meeting to discuss what was going on.

Q I wonder if we might have a look at what I think is the communication to Jennifer Armstrong. If we go to bundle 6, please, Ms Callaghan. Page 43. Now, the redaction is, once again, to reflect a concern about patient identification and it does not change anything. I do not know how easily people can see that, but maybe just enlarge it a little if possible. Thank you.

A Well, I think that kind of says what I previously said to you, that we were prophylaxing with AmBisome or posaconazole, we couldn't use vincristine, and that we were seeing toxicities that gave us concern, and we wouldn't want to be prophylaxing unnecessarily.

Q What is a serious anaphylactic reaction?

A Children that got AmBisome and perhaps wheezed or got swollen lips or had some kind of allergic reaction to the AmBisome.

Q And if we go to the paragraph that begins, "Securing the safety of our environment requires action across the Directorates." I would just refer you to the conclusion of that paragraph which says, "Promised statements from the Press Office have not materialised and we are prophylaxing children without any agreement on what information should be given…"

A If I remember rightly, this meeting was 7 January. A number of actions had been discussed prior to Christmas, and I think in this I'm saying they hadn't all delivered and that they involved not just paediatrics, but if there were laboratory things, they involved the Laboratory Directorate – Estates was a different directorate – and I was asking her as somebody at Board level, who could cover all directorates, what she was going to do about it.

Q What did you mean by, "It is hard to believe that the gravity of this situation is really appreciated by those charged with resolving it"?

A I think I mean exactly what is said. I did feel if the gravity of the situation was appreciated, then things would have been done at the time, over the time period. You know, Christmas would not have mattered. Estates would have acted, the Laboratories would have acted and

we'd have been closer to some resolution.

Q When you were thinking about those charged with resolving at which level of----

A Ultimately, the Board is charged with resolving it. They can delegate things down but, ultimately, the Board is charged and if they can't do it, they are charged with making sure that those they delegate to do it.

Q And when you refer to the Board, are you also referring to its Executive Management Team?

A Yes.

Q And you when you say----

A I probably am referring to the-- I don't really know who the Executive Management Team is.

Q The chief executive?

A Yes, yes.

Q As you have said, you mention the unit meeting and ask if Jennifer Armstrong would be "willing to use this as an opportunity to meet with us. If you are not the appropriate person at the Board, please let me know who is." I mean, who did meet with you after this?

A Well, my recollection, it was Marion Bain, who I think became our deputy for control of infection or something. There will be a minute

from that meeting. I just don't have it.

Q At the time, was she senior or junior to Jennifer Armstrong?

A Junior.

Q Did you receive any response from, for example, the chief executive in relation to this?

A No.

Q Did I take you a moment ago to indicate that your frustration was directed at that sort of level?

A Are you asking me was my frustration directed at a senior management level/executive committee?

Q Yes.

A Yes.

Q What was your frustration?

A That nothing had resolved, that we were seeing one problem after another related to the environment.

Q But what was the frustration that you directed particularly at that level of management?

A I'm not sure I understand that.

Q What is it that you thought that they were not doing?

A Resolving the problem.

Q What was it they were saying to you?

A Well, I was ask-- we

were expecting them to deliver a safe environment for treating children.

Q Did you feel that you were getting an explanation from that level of management as to what they were doing?

A No, but I don't know what they were doing. I mean, they could have been having a six o'clock in the morning meeting every day for all I knew. I had no contact with senior management other than occasional contact with Jennifer Armstrong.

Q Was this an email intended to indicate that as the lead clinician for this most vulnerable group of children, you considered that there needed to be a communication from that sort of level?

A Well, as the lead clinician for the most vulnerable group of children, I wanted somebody to hold somebody responsible for making sure that actions which had been promised were delivered.

Q Do you consider that you got an adequate response this email?

A No.

Q Now, moving on slightly from there, I want to ask you a bit about the communication of matters with patients and families at that time. It goes back really to something we discussed earlier. At what level of

seniority and management did you understand communications to be handled at this time or controlled?

A From what I saw, the communication from management came from the local-- the face-to-face communication with parents came from local management, so from Jamie Redfern and at that level.

Q Where did you understand, if you did understand, the direction of that messaging to be coming from?

A I presume it came from Kevin Hill, the director, and from the directors at the Board.

Q I wonder if you might have a look at another document. It is in bundle 5, Ms Callaghan, and it is at page 170. Now, if we just enlarge that a bit, please, so people watching on the big screen can see it. It is the-- yes. So, we have got an email from Jennifer Rogers to you saying, "This is the final brief for the families as agreed by the exec team." Who are the executive team?

A I don't know who the executive team are, but they will be at Board level or certainly above local management level.

Q Are we talking at the level of the chief executive and the Board as you would understand it?

A Well, I'd understand that, but I honestly don't know who is an executive. I think directorship level at least, yeah.

Q If we go over the page to page 172, please, and we will just walk through this. "It is our priority to ensure a safe environment…" and so on. "There is a review of two isolated cases of an unusual fungal infection." There is then the reference to the "extra precaution," HEPA filters and it then says:

> "As an additional measure those children most at risk were, and continue to be given prophylactic antifungal medication.
>
> "We continue to monitor the air quality regularly within the unit and these results are being analysed by our experts."

Do you see all of that?

A Yes.

Q In thinking about what we have just seen – the discussions around prophylactics, the concern about high fungal counts – I mean, do you think that this was or was not adequate messaging to parents?

A I think, with time, the information that went to parents improved and I think this is reasonable, or a reasonable statement to make to parents, yes.

Q I do not think it says anything about high fungal counts. Maybe we do not know enough about what the fungal counts were at that point.

A Yes, and you can't tell people what you don't know.

Q Yes, but we certainly could see from five days before or a week before that there had been reports of that. Do you think that is something that ought to have been contained within this?

A Well, you are having a balance of being as honest as you possibly can and not scaring people unnecessarily. I think probably the families knew what you looked at the air quality for. Yes, you could easily argue that something should have been put in there about the fungal counts. Gosh, by 13 January everybody knew about the problem with the air and almost everybody anywhere in the world knew, never mind these families.

Q Yes, does it go back to something that you spoke about earlier that the fact of the matter is that communication with these families would have been happening all the time with clinical staff?

A Yes, they would have

asked staff what that meant if they'd any doubt.

Q And your expectation would be for what, a candid account of what was going on-- would have been given?

A Yes. I don't think anybody ever lied to anybody.

Q Now, we can put that to one side, Ms. Callaghan, thank you. Just to continue with the chronology then and to pick up on something you said earlier. We do not need to turn this up. It is my understanding that, well-- or rather the IMTs indicate that Cryptococcus albidans (sic), if that is what it is called----

A I know which one you mean.

Q -- was indeed found within 6A around about 16 January, and there is then another one I would like to just have you look at, just to maybe help me with the detail, and it is on 18 January. It is again in bundle 1, and it is at page 274. I think we have got an IMT meeting again, 18 January 2019. Is that right? You see that, Professor?

A Yes, yes.

Q Again, I think you are an attendee.

A Yes.

Q I just want to have you help me with one reference in it, and it is at page 276 and it is under the heading "**Press**":

> "A press release has been drafted which will be checked for accuracy before being sent to the Executive group for final approval.
>
> "Some members of this group may not all agree with the press statement but not everyone across the multi disciplinary colleagues who attend IMTs will, so it is about getting the balance correct."

I mean, I quite appreciate that it is perhaps even impossible, if not challenging, certainly challenging, to have a discussion about that without having the press statement in front of us, but do you have any recollection of that discussion of what it might be about?

A Well, I imagine it's about the Cryptococcus, but I don't know the detail of the press statement.

Q Do you have any recollection of disagreement at an IMT about what went into or did not go into press statements?

A I'm not sure that we had input to the press statements if I'm honest. I think the press statements were drafted by Comms and went to a

higher level than us. I mean, that was one complaint of the IMT that this statement should have come from the IMT. So I don't know that I would have seen this press statement.

Q Thank you, and we can put that to one side. Now, I want to move on a little in time and deal with the period when the unit was the subject of a further decant briefly at the beginning of January.

A Yes.

Q Now, I think we can see from the papers that we have got that the unit appears to have been decanted to something known as the "CDU" between 22 January and 8 February 2019.

A Yes.

Q Now, I am going to ask you a bit about what the CDU is in a minute but, before we do that, what was it that led to a requirement for a further move?

A My understanding is that it was the finding of mould in some of the bathrooms.

Q Yes, and are you able to say a little bit more about that, about what that was, what that was about?

A I can't remember which mould it was, most of them were Mucors. "I don't know" is the answer to that but they were found in the

bathrooms, presumably from leakage or water somewhere.

Q In any event, the investigation appeared to reveal some issue with mould.

A Yes.

Q And that led to advice that the unit had to be moved out again. Is that right?

A Well, the remedial work required that the unit moved again.

Q Yes, and thinking about this stage of things, again, I mean, what was your reaction to discovering this?

A I think the same reaction as we'd had to every other discovery: that this was just something else that's been that had been found and was it ever going to end?

Q Thinking back to the exchange that we just had about the beginning of January 2019 and whether you felt you got an adequate response from the most senior level, did you feel that this was again something that engaged that kind of requirement for response at the highest level?

A No, I think consistently the responses came from our local-- information we got came from our local management to staff.

Q Yes, and just when we

are speaking about them, do you mean Jennifer Rogers and Jamie Redfern?

A Yes, yes.

Q And what was your assessment of how they managed communication over the period that we have been speaking about?

A Do you mean with the families?

Q Yes, yes.

A I think they did their best. They came-- usually the three of us stayed on a Friday and went around the parents with whatever was the handout from after the IMTs. I think they tried to engage well in that.

Q Yes. I mean, did you feel at this stage that there would be an advantage in patients and families hearing from somebody in management at a more senior level than that?

A Yes, I think I would go further and say there'd be an advantage in the staff hearing from somebody at a more senior level.

Q And did that happen?

A No.

Q I want to ask you a bit about the effect of the decant. What is the CDU?

A The Clinical Decisions Unit. It's like an emergency

department, but perhaps for children who are a bit sicker that might come in and they decide if they are being transferred to a ward as an inpatient.

Q And I think you have already answered the next question. This is in the children's hospital, is it?

A Yes, it's on the ground floor of the children's hospital, yes.

Q What, if any, concerns did patients or staff have about a decant back to the Children's Hospital?

A Well, I think as before, there's a sense of disbelief that this has happened again and people are very anxious, and it does query the fabric of the building. By and large, the families were pretty good at accepting what we said to them and allowing things to happen. I think whatever has been said, I think they felt that we were acting in their-- at least the clinical staff were acting in their best interests and we did try to explain to them why it had to happen. Quite a lot of the families were actually builders, you know. They could see the mould. They could tell us what was odd. They could tell someone like me what was going on, and we explained to them that this was the safest thing to do and, if it was the safest thing to do, they were accepting

of it.

Q I am just thinking back to the discussion that there had been in September 2018 in which the IMT had concluded that the children's hospital was not a safe alternative, and I wonder whether against that background there was a concern about going there, or are you indicating that there was not an alternative?

A To going to 6A?

Q To going back to CDU in the children's hospital?

A Which was the only place we could go to because it was the only place you could decant that group of patients. They were decanted to elsewhere in the children's hospital and that's the only place we had cubicles and beds. To be fair, things like point of care filters were put on and it was cleaned and everything else that would make it as safe as possible was done and inspected before we moved. So, precautions were taken or lessons were learned from 2A and it was well cleaned. I think it was HPV'd – I honestly can't remember – but as much as possible could be done to make it as safe a place as possible and there was nowhere else we could go.

Q Just thinking about what you said at the very outset about whose responsibility it is to provide an environment, just on what you said about whatever provision was made about trying to ensure that CDU was as safe as it could be, that would not be something that would sit within your sphere of responsibility, would it?

A Not if it's about the environment.

Q Yes.

A I can't clean the drains or put on the filters. That's for Control of Infection to see what was necessary after an inspection and for Estates and Facilities to do it.

Q Yes, and what I am really working up to is saying that any assessment around whether it was or was not safest to go there would be a matter for others to make a judgment on, not for the clinicians?

A Yes, yes.

Q In any event, the unit was moved back to 6A round about the beginning of February, 8 February 2019 or something of that nature. Can you remember on what basis it was declared that it was okay to go back?

A Well, I can't, but it was again about control measures being in place and I can't remember everything that had to be done. I think something had happened to the drains and the mould was fixed. We put HEPA filters

into the bedrooms at some point; we put HEPA filters into the bathrooms. So it was about the-- and the air was sampled, and with the installation of the HEPA filters the fungus wasn't growing. So it was about after showing that air sampling showed it to be safe and the water, nothing was growing from the tap, from the post filter-- the tap-- the water post filter grew nothing and HEPA filters were in place and all control measures that could be taken had been taken and suggested it was safe.

Q Thank you. I want to move forward in time to the summer of 2019 – patients and families, the unit is still on 6A at that point and 4B I suppose. Again, I will try and take things in fairly broad strokes, but I wonder if you could just set out your recollection of what you recall of a return of a concern about infections in the summer of 2019?

A Well, in the summer of-- as I remember it, there were more patients with-- there were further gram-negative bacteraemias. I think the number rose to-- I don't know what it peaked at, but I can see from my notes, at one stage there were 12. Some of them were definitely hospital acquired. Some were questionably hospital acquired or could have been

acquired somewhere else, but that again raised concerns, and I think again the question of whether it was the drains arose, and this time I think it was the chilled beams in fact.

Q And, again, I will try and do what I did before and just set out what I have taken from the IMTs, and I emphasise again I am only taking what I take to have been said. Whether the events described happened or did not happen is for another time. There seems to have been a return of gram-negative bacteraemia in the summer of 2019. Is that right?

A That is true.

Q Yeah, and actually that is a word we have not used before, "bacteraemia." What are bacteraemia?

A Like septicaemia, or bacteraemia means you can culture the bacteria from the bloodstream.

Q Yes. Would it be better to say there has been a return of infections in the summer of 2019?

A Yeah, yeah. I mean, it's always been bacteraemias when we've talked about the patients, yes.

Q But I think something that we touched on earlier in your evidence, I think there was also another case of Mycobacterium chelonae. Is that right?

A Yes.

Q And you indicate in your statement that advice from microbiology at the time was that this was likely to have been caused by access to unfiltered water in the hospital?

A Yes, yes.

Q And for anyone wanting a reference, that is paragraph 250. Do you have a recollection, and we did touch on this earlier, of a discussion around a patient having had the same or similar the previous year?

A Yes, I do.

Q In his evidence, Dr Sastry says that he believed that the earlier infection must have come from the environment and that it is his recollection that he asked for sampling – this was in 2018 – to be done and was told that it was not standard practice to sample for this organism in 2018. Do you have any recollection of that?

A I don't have any recollection of the detail, but I do remember there was a lot of discussion around it.

Q If not a recollection of the detail, do you have a recollection of the broad description that I have just said?

A I think so, yes.

Q Now, as far as staff concerns at this stage, and again, at the risk of repetition, what were the staff concerns at this point in the summer of 2019?

A Well, there was a recurrence of gram-negative organisms and infections. I think this time it was harder to know if they were above the expected background rate or not, and as you go through the IMTs you can see that that is questioned several times. That's a difficult decision to make or to have any certainty over. They weren't all definitely hospital acquired. Some of them might have been acquired outside in the community or somewhere else, but my recollection was that there was another-- "spike" is the wrong word because we don't know if there really was an increase, but we were seeing a re-emergence of infections and we had to balance that with the fact that we will always have infections in our unit and was it more than expected or not was hard to know.

Q I mean, it goes back really to the discussion at the very outset of this where I think you indicated that you do have experience that would, as clinicians, allow you to form a judgment on whether

something was or was not an unusual pattern. Did I take you to say you would not go the distance of saying, "I have got the expertise to say whether that is correct or not"?

A Yes.

Q Yes.

A And I think what was always here was the question of the pattern of the infections rather than number.

Q And by the "pattern" do you mean the clustering, or do you mean the type?

A The type.

Q Yes. Again, Dr Sastry, I will give him another name check at this stage, in his evidence he says that in 25 years you would expect to see one or two of the organisms we see mentioned in the IMTs in a single year?

A I don't know if that's true or not. I'm not challenging it. I suppose I'm looking after a much more vulnerable population than him because he's looking after solid tumours. That's possible. We could look back and know, but that's certainly more than we saw.

Q But, again, even if it is true, you would say that there is a limit to what you as clinicians can say about that?

A Yes, there is.

Q Now, just to then think about some of the evidence that we had from the patients and families, at least-- it may just have been two families I suggested, discussions with clinicians around this time around whether or not it might be safer to recuperate or be at home? Do you recall anything like that?

A I think I know what you are talking about. I mean, I think-- well, maybe I'm remembering wrongly, but there were some families that came from outwith Glasgow that could have had more of their care done locally and we thought it might be better that that's what happened.

Q And there was a description from parents that by this stage they were close to breaking point, and to be fair a number of them described that as regards earlier stages. Is that what you saw?

A Yes, I think the staff were close to breaking point too.

Q Yes, and in that context, I think we can see from the IMTs that there was a meeting at the beginning of August among clinicians ,and one of the IMT records the staff as having concluded at that meeting that their concern was that the control measures were not working. Is that your

recollection of things, your recollection of the concern at least?

A Yes, and that there was no resolution and we hadn't really got to the bottom of what the problem was.

Q Yes. Now, I am going to ask you some questions about the IMTs that took place in the latter part of the summer, so I am thinking about August in particular. Now, again, I am going to try and tread warily here and would encourage you to do so as well. None of the microbiologists or Infection Prevention Control people, and particularly none of the chairs of the IMTs, are witnesses or due to give evidence in this hearing, and I think we need to be careful about saying anything that they might consider required a right of reply. But, if we were able to just take things broadly, I think you describe in your statement that there was a change of emphasis at some stage in the IMTs in August. Are you able to say a little bit more about that?

A Well, I can't remember the dates, but there was a change of chair. I don't know when that happened. Teresa Inkster was replaced with – I forget who it was – Dr Crichton, I can't remember her first name, and I think there was a change of emphasis. I think they felt that the

emphasis was changed to the environment being much safer. I think that, at that time, she took a view that the control measures were in place, that everything was fine, and that the environment was controlled.

Q In your statement – you do not need to turn it up, but for those who want to, it is at paragraph 227 – you say there was a change of evidence to one of positivity. What do you mean by that?

A Well, I think we were always told what a great job we were all doing and that the environment was good and that there was no reason to have any concern about it. There was a lot of data presented about rates of infections and Yorkhill and whether or not these were really any different from what we had seen since the move.

Q Yes. Again, without trying to personalise any of this, Dr Sastry, in his statement, says of the IMTs after the change in chair that the emphasis changed to being about disproving whether there was----

A I think, yes.

Q Would you agree with that?

A Yes, I think so. That's perhaps what I meant by positivity.

Q Yes. So, disproving a link to the environment?

A Where previously we'd always looked for a link.

Q Yes. He, in his statement, describes frustration, feeling demoralised and an intimidating atmosphere. Is that anything that you would recognise?

A Demoralised, yes. I'm not easy to intimidate. I didn't feel particularly intimidated but, yes, certainly we felt demoralised and we did feel that we were being-- actually, intimidation is probably quite a good word. Maybe it's a bit strong.

Q If we move from the handling of the concern back to the concern, was it that, as clinicians, you still had the concern about the pattern of infections?

A We had still had the concern about the pattern of infections and, you know, we still had then and still have now. We still don't know what really happened and whether there really was a problem with the environment or there wasn't a problem with the environment. I still think, you know, we still are confused about what the real issue was.

Q Against that background, I think are we right in understanding that at the end of August you and your clinical colleagues wrote to the chief executive. Is that right?

A We did.

Q I wonder if we could go to bundle 6, please, Ms Callaghan, to page 1416. I wonder if we just enlarge the section from "Dear Jane and Jennifer…"? Thank you. So, this is a letter to the chief executive and to Dr Armstrong. Is that right?

A That's correct.

Q

"We, the clinicians of the Haematology/Oncology Unit wish to express our concerns about the infection and environmental issues which have affected our Unit and as a consequence our immunocompromised patients, for the past 18 months."

We then see you say:

"We seek management's view on the safety/appropriateness of the environment in which our patients are being treated. A recurring theme of recent IMT's has been questioning of the magnitude and clinical significance of recently documented infections with environmental organisms. Control measures instituted previously have reduced the number of positive blood cultures, but those that remain are due to rare, environmental organisms,

highlighting concerns about the safety of the hospital environment."

Now, just pausing there. Again, is that the point that it is not about the numbers, it is about the nature of the infections?"

A I think it is about both but it's hard to interpret the numbers, but the nature of the infections was probably the predominant issue and I think that's really what I'm saying about they became more positive: "…questioning of the magnitude and questioning of the clinical significance…"

Q Then you say in the next paragraph:

"It is of concern that no definite source of these unusual infections has been identified… [and so on, and then in the next sentence] Some of these control measures, including additional antibiotic and antifungal prophylaxis, have caused toxicities to patients."

Is that what you were describing to us earlier regarding reactions?

A Yes, yes. Well, depending on what drug you use, the toxicities are different. I described the reactions to AmBisome, but the patients were getting diarrhea and nausea with the ciprofloxacin. They were getting other problems with the azoles. Every drug has a different spectrum of side effects.

Q

"The absence of a confirmed source of these problems means that there is uncertainty that the control measures are adequate and hence it is difficult to reassure patients, family and staff of the safety of the environment."

If we then just go to the next page:

"At a recent IMT it was agreed that an external review would be essential and we would very much support this. This review should be led by an individual from outwith Scotland, who is a recognised paediatric Control of Infection Expert."

Now, again, you may feel it is self-evident what that is indicating, but it would be helpful to have you explain a bit about what the external review you wanted would be about, why it is you wanted it, and what sort of person you wanted to do it.

A Well, I think at this stage we predominantly wanted-- because there was, at the IMTs, a lot of alluding to whether there really was a problem

or there wasn't a problem. I think that was primarily why we wanted an external expert to come and tell us what the chances of what we had seen happening by chance or by natural variation, you know, might be. We wanted a recognition of, "Had we really been dealing with the problem or not?" I don't know that a paediatric control expert might have been the person who could have told us what the problem was. That might have taken somebody with some ventilation or water expertise, but I think what we're really questioning is whether or not there's a recognition there was a problem.

Q What was the response to the letter, as far as you can recall?

A I can't remember, to be honest. There must have been a response, but I don't remember seeing it.

Q Was the external review undertaken to your knowledge?

A There have been reviews, but I don't think there was one taken at this time that I'm aware of.

Q Well, was the external review that you were asking senior management to instruct, was that done?

A No.

Q Now, I think we know

from the IMTs and other meetings that discussions around the question of whether or not----

A I'd need to go back and say something about that, because that's maybe not strictly true. You will know we had a clinical case review so that was done, but I don't think that's what we meant by "review of an expert paediatric Control of Infection person."

Q Yes, the clinical case review that you are talking about, that was not instructed by the----

A No, it was instructed by the government.

Q That arose as a result of the concerns and the special measures to use a----

A Yes, yes.

Q Now, we can see from the IMTs – I am not going to take you through these – that you and colleagues continue to express a concern that you did not have an explanation for why there had been this concerning pattern of infections again. Is that right?

A That's true, yes.

Q Now, I am going to spend more time on that matter with some of your colleagues because I think some of them were at IMTs about this that you were not at. Is that right?

A That's possible.

Q Yes. Dr Chaudhury and Dr Murphy, in particular, were at a number of them, but what is your broad understanding, or broad recollection, of what happened over that period leading up to the reopening of the ward?

A Reopening of which ward?

Q Of 6A. Sorry, I need to take a step back. One of the things that we have passed over is: is it correct that over this period there had been a restriction on the admission of patients to Ward 6A because of these concerns?

A Intermittently there had been. That was either done because of concerns of infection, or it was done because works were ongoing and there weren't enough beds. You know, we didn't have enough bed capacity. So, yes, we did intermittently restrict admissions and send patients to Aberdeen or Edinburgh.

Q Yes. Now, we can see from the papers that we have that there was a meeting on 11 November 2019 at which agreement from clinicians, I think, that the ward could open up again was reached. Now, you do not appear to have been at that meeting.

A I was in India.

Q What was your understanding of where the assessment came from that it was safe to lift whatever restriction there had been?

A Well, I wasn't at the meeting, so I don't know. I think the assessment came from control measures having been carried out and the view that we hadn't seen any recent infections, but I don't know for certain. I don't know what was said at that meeting.

Q To what extent does it go back to the discussions or the approach that was taken at the IMTs in August that you spoke about earlier? Can you recall whether the advice that was coming from Infection Control people within the Board was that they were satisfied that there was no issue?

A Yes, yes.

Q Now, I want to ask you about one further document before we move towards concluding your evidence, and it is in bundle 6. It is at page 10, and I wonder if we might just enlarge that a little, please. Thank you. Before the top disappeared, Professor Gibson, were you able to see that that was an SBAR?

A Yes, I was. Yes.

Q Is that something you have seen before?

A Not before this Inquiry.

Q Yes, and if I help you with the background to it, a clinician external to GGC from another health board was asked to do a review of prescribing of prophylaxis and, in particular, I think around the communication in relation to that and he was asked to do that by the Oversight Board. That was part of the measures that were put in place by the Scottish Government. I really only want to ask you to help me with a couple of bits in the SBAR that he wrote but, before I do that, do you recall any meetings or discussions with him, Mr Andrew Murray?

A No, I don't recall meeting with him about discussing the prescribing within the unit at all. I think I met him when he was first appointed as the Chair of the MSN, but I certainly didn't meet with him over this topic.

Q If we just go to the fourth paragraph down or fifth paragraph down, "Haemato-oncologists have provided…" Can you see that?

A Yeah, I see that, yes.

Q

"Haemato-oncologists have provided confirmation that they are reassured regarding the safety of the water and the environment in 6A, based on evidence from a range of sources and the longstanding improvement approach to Infection Control."

Did you say that to him?

A Personally not, no. I mean, I didn't meet him at this time. I have no recollection of having met him.

Q Do you know where that---

A No, I don't know where that statement came from. I think we had moved back into 6A and accepted the current Control of Infection view that it was now safe and, after all, although we say that providing a safe environment is the job of the Board, deciding if an area is safe to give that treatment is the responsibility of Control of Infection.

Q Would you take any issue with what is said there? I mean, it seems to set out the position of the haemato-oncologists and you are saying it does not come from anything that you said to Mr Murray, but do you take any issue with what is said as regards your position?

A I don't know the date of this. What is the date of this?

Q It is December 2019.

A I'm trying to think-- I think we had moved back in by then,

so he's presumably assumed that we were happy with the safety or we wouldn't have moved back in.

Q He seems to be going a bit further than that. He is saying haemato-oncologists have provided confirmation that they are reassured.

A Well, I don't remember ever meeting with him.

Q You do not remember being asked to or providing the confirmation, either directly or indirectly, to him that you were reassured?

A I don't remember.

Q Thank you. Now, we can put that to one side. Just trying to pull all of this together, Professor Gibson. Thinking of the story that you have set out to us today and that the patients and families also set out, how would you assess the impact of all of the events that you have described on families overall?

A Well, I think they have told you the impact it's had on them. I think it's been considerable. It's been one of fear in terms of infection, but it's also been one of fear in terms of all the remedial works they saw and their questioning about the safety of the environment that their children were being treated in. So, I mean, I think it's had a big impact on them. If we look

at the current patients going through, I think the current patients going through the new unit is much better. I think they're happy with the environment and, I think, I do feel that the current patients trust us.

Q I mean, just on that point on the issue of trust, and it is important to hear from you on this, we have stopped the chronology at 2019; it is now 2023. Now, accepting that you and your patients have been through COVID in between, have you seen, in the period since 2019, a return to any of the concerns about infections that you had seen before?

A No, I don't think I have. However, just the concerns or everything else was reiterated last year when the parents gave evidence, and I'm sure the same will happen when the clinicians give evidence this week. So, some families will relive it – there is no doubt about that – but I don't think actually trust for the clinicians was ever lost, and I think it is certainly there now.

Q What was the impact on you and on your colleagues of all of this?

A Some people have described themselves as destroyed. It was significant. You can't reassure or tell somebody not to worry about

something if you don't know what the root cause is or what the problem truly is, so it was very difficult trying to be reassuring and honest and supportive at the same time. I think as a team we did question what we were doing all of the time – "Was it right what we were doing?" – but we did all of this in the background of actually being told on one hand there was a problem and one hand there was no problem, and that certainly compounded how difficult it was to deal with this.

There was an enormous amount of stress around staff: staff who went to their unions, staff who didn't want to come to work. I've never seen a toll taken on staff like it, and old enough now that I won't ever see it again, but it was very, very considerable. You know, one has to recognise that the biggest toll was taken by the parents, and I would never want to say anything that sounded as if I didn't recognise that because I do, but the strain on some of them, particularly the nursing staff, was huge.

Q Something that you, I think, touched on a moment ago and in your statement was on this question of trust. You say that you think there has been no loss of trust in the clinical staff, and certainly I think most people

would say that is what they took also from the patient and family evidence but, in your statement, you do indicate that there may have been a loss of trust in the hospital environment.

A Yes.

Q Are you concerned that that issue remains unresolved?

A Well, I'm concerned the issue remains unresolved, but if you're asking am I concerned about the current unit we're in, I'm not concerned about that. The families who are in it seem very happy with the environment. We'll never make it perfect unless we can make it twice the size it is and that's never going to happen, but we're talking about safety here.

Q Just picking up on something you said a moment ago, are you concerned that the inevitable attention that this hearing will get may give rise to current concerns about the building, about the hospital?

A Yes, I mean, I think we have to acknowledge that any child going through treatment now, if they get an infection or a gram-negative bactaeremia, the family are going to think that it's the environment that's caused it even if it is not.

Q What could be done, do you think, to try and address that

concern?

A I think we just have to try to explain to the families that that's not the case, where we think the infection came from. I don't really know what happens, but I think there might have been some merit in telling the families going through at the moment that this was happening and pre-warning them, you know, so that they weren't-- and I'm not sure that that happened, but I think something might have been put on the Facebook page. We did ask for that to happen, because I think they're better to be pre-warned than turn on the news.

Q Do you think a clear account of what did happen might assist?

A Well, it's quite hard to give a clear account of what did happen, because it was so complex. I mean, it's not a one sentence job.

Q We have seen in your evidence that on a number of occasions you saw an account at the most senior level of management in the Health Board. Do you ever feel that you got an explanation?

A I still don't know. You know that there is two versions of what's happened: "There is a real environmental problem," and, "There's no environmental problem at all." I still

don't know which is true. All I can say is that we have had our £11 million refurbishment and we now have what is said to be the best ventilation system that money can buy, and we have got water that is coming out of a post-filter tap, which has no bacteria in it.

Q Yes. You have told us about the debate in late 2019 about what the cause was, but your evidence started in 2015 and you told us about concerns about the Transplant Unit at that time and the escalation of concerns at senior level. You told us about concerns in the beginning of 2018 and later in 2018 and further concerns in 2018. You told us about advice that there was an issue with the water; there was an issue with drainage. You told us about the issues that then arose at the beginning of 2019, a further decant to another ward, and you have also shown us that throughout that period from time to time you, as the lead clinician, sought an answer at the very highest level. I ask the question again: do you ever feel you have had that?

A No.

Q I want to try, and I know you also want to try, to finish your evidence in a more positive note, and I wonder if we can start to think about

the future for the Schiehallion Unit as you might see it. What do you think that looks like, from your perspective?

A Well, one of the things that I've personally found hardest was the loss of reputation. You know, we are well-known nationally for this problem that we've had and that's not how you want to be recognised. I think all we can do is move forward as positively as we can. I think we're a very strong team, we're a multi-disciplinary team, we're inclusive, and I think we just have to move forward. We provide quite a lot for Scotland that nowhere else in Scotland does. We have the National Bone Marrow Transplant Unit. We have the Minimal Residual Disease Laboratory. We have the Early Phase Trials Unit. So, we provide a lot that isn't provided elsewhere in any of the other centres in Scotland, and we just have to develop on that.

Q I will give you the opportunity to offer any further reflections that you want to offer, but I wonder if it might be important to have a look at something that is in your statement, and it is the very end of your statement. Ms Callaghan, could we have up on screen page 69 of the statements bundle and, in particular, paragraph 295. It is Professor

Gibson's statement. It is page 69 of the statement bundle, sorry, and it is paragraph 295. I don't know what you want to do, whether you want us just to read it or----

A You read it.

Q No, I think you should read it, if anyone's going to read it.

A Oh, God. I can't read it.

Q Yes, well, I am pretty sure I cannot, so----

A Okay, I'll read it. Okay, so here it goes:

> "As difficult and as unbearable as the last 3 and a half years has been, as a multidisciplinary team we all recognise that we are privileged to look after this group of children and engage with their families at the worst time in their lives. I chose to name Schiehallion for our Unit to symbolise the uphill struggle these families face. We are now back in our refurbished Unit and this summer will climb a mountain as we did in other years before this problem. Those who can walk up the steep but broad path will do so with staff, families and friends and those who can't will spend the day in the field at the bottom catching tadpoles in the stream, having their faces

painted, having a massage, or toasting marshmallows on a bonfire, because that's what we are about."

Q Thank you. Just one point of detail on that. I mean, the metaphor in that, intended or otherwise, is obvious and incredibly moving, but am I also right in thinking that that the unit does actually go hill walking?

A Yes, we do, yes. Well, we don't all walk up. You walk up if you can. It's not an easy Munro. So I've walked up about five times with the unit, Jairam's walked once, and we take the children who come up with their parents and the brothers and sisters, and they walk if they can and the younger ones sit at the bottom of the field and play.

Q Thank you. Professor Gibson, I have got no further questions for you.

Is there anything you want to add to what you have said today?

A Well, I shouldn't, but I will. For all of how awful this has been, I do think we are a great team. I built the unit and I'm very proud of each and every one of them who's walked in it and has survived this. As Churchill said, "When you find yourself walking in hell, keep walking" and that's what we did. We did our best and we just want everybody to appreciate that we did our best and that we did try endlessly to bring attention to the concerns we had to those above us.

Q Thank you. That would conclude the questions I have, my Lord.

Questioned by THE CHAIR

Q Thank you, Mr Duncan. I have to confess, Ms Gibson, when I first read your statement, I thought that was a metaphor.

A Oh, no, it's real.

Q I read your statement again and it occurred to me that given the detail it might just be true or rather not metaphorical, an actual statement, and I thought it was a strong metaphor, but I thought it was even stronger as a statement of fact. Now, I am slightly embarrassed because I am going to ask two terribly detailed questions which really do not measure up to the power of that statement. One is in relation to what-- and I do not require detail, it is just that I-- you know, slightly better understanding. Datix, which I take to be a digital----

A Something like that, yes.

Q Yes.

A I can send you that.

Q My question is, I think you made the point that in relation to information about infection, it is really the laboratory that tells you rather than----

A Yes.

Q -- you tell the laboratory because presumably----

A They're first detected in the laboratory so the laboratory tell us. We may ask laboratory for more information, but they tell us what the organism is and they will then tell us the sensitivities.

Q Right, and is Datix a means of communicating that information or is it something different?

A Datix is an electronic way of reporting any incidents. So, if chemotherapy was delayed or if there was a spillage or anything like that, that's the type of thing you do on Datix.

Q And the reporting is-- well, if it is any sort of incident, can anyone use Datix to----

A Oh, anyone can put in a Datix and then they are reviewed. We review them, review the transplant ones. We have a transplant quality management meeting. So we'll review any related to transplant at that and for the rest of the unit, it will be reviewed at the clinical governance meeting.

Q Thank you, and the other question was-- If I can find my note. Yes, you were asked by Mr Duncan, in the context of the summer of 2019, he drew your attention to a return of concerns and you replied that, as you remembered, there were further gram-negative infections. Now, you then went on to give what looks like a precise figure which you attributed to hospital-acquired infections. Is that information that you got from someone else?

A It comes from the minutes. Each minute would give the total number at that time point, so I don't know what the actual total number at the end of that period was, and they did split them into definitely hospital-acquired and ones which could have been acquired elsewhere.

Q So, my fault for not hearing clearly, where did that information come from?

A For me, it came from the minutes because that's how I was supplied the evidence by Control of Infection at the meeting, but that data will be available from microbiology.

Q All right, thank you. Now, as I indicated at the beginning of the hearing this morning, and I am intending that we conclude your evidence this afternoon, Professor,

what I am going to do is rise for ten minutes just to allow everyone the opportunity to consider whether there is anything that has arisen which could not reasonably have been anticipated having regard to the material that was before legal representatives. I would like to think that we can do it in, if not in 10 minutes, not much longer than that. Once I get clarification that we have been able to do that, we will convene with you, Professor, either to be perhaps asked additional questions or just to confirm that there are no other questions. So I would ask Mrs Brown to take you back to the witness room. About 10 minutes, although I appreciate that that might be a bit short.

(Short break)

THE CHAIR: Now, Mr Duncan.

MR DUNCAN: I do not understand there to be any further questions, my Lord.

THE CHAIR: If we ask Professor Gibson to rejoin us. Professor Gibson, there will be no further questions, and I am very glad that we have been able to finish your evidence within one day. You are now free to go but, before you go, can I just thank you for your evidence today, but thank you for all the work that has gone into preparing that evidence. What is very evident is that you have many responsibilities, and I am very conscious that preparing to give your evidence has no doubt had an impact on the many other things that you have to do, and I repeat my thanks for giving evidence and, when it comes to it, I probably owe you even more thanks for preparing to give evidence, but you are now free to go.

A Thank you very much.

(The witness withdrew)

THE CHAIR: Now, the timing is such that we will be able to resume tomorrow but not at ten o'clock. I understand from Mr Duncan that we will be able to take, is it Dr Chaudhury?

MR DUNCAN: Dr Chaudhury, my lord.

THE CHAIR: Dr Chaudhury but beginning at two. So if legal representatives were able to begin at two o'clock, that would be very satisfactory. See each other tomorrow afternoon.

(Session ends)

16:20