SCOTTISH HOSPITALS INQUIRY

Hearings Commencing
19 August 2024

Day 32
Thursday, 10 October 2024
Dr Jennifer Armstrong

CONTENTS

10.02

THE CHAIR: Good morning, everyone. Now, Mr Mackintosh?

MR MACKINTOSH: Our witness today is Dr Jennifer Armstrong, the Medical Director of NHS Greater Glasgow.

THE CHAIR: All right. Good morning, Dr Armstrong. Now, as you're aware, you're about to be asked questions by Mr Mackintosh, who's sitting opposite you, but first, I understand you're willing to take the oath.

THE WITNESS: Yes.

Dr Jennifer Armstrong

Sworn

THE CHAIR: Thank you, Dr Armstrong. Now, we've scheduled your evidence for the day and it may take all of the day. We will take a break at half past 11 or so for coffee, but if at any stage either in the morning or the afternoon you wish to take a break, just give me an indication and we will break. Now, Mr Mackintosh.

Questioned by Mr Mackintosh

Q Thank you, my Lord. Dr Armstrong, I wonder if I can take your full name and your current occupation?

A Jennifer Louise Armstrong, and I'm Medical Director of Greater Glasgow and Clyde.

Q And you produced a statement for the Inquiry?

A Yes.

Q Are you willing to adopt that as part of your evidence?

A Yes.

Q Thank you. Could I just check a couple of things about your professional background just for clarity? What was your practice area before you became medical director in 2012?

A I was a consultant, public health medicine.

Q Thank you. Now, if we can go to your statement on page 376 where you produced your CV at Appendix D, I want to just understand a little bit more about the description that you've given of your current role at the bottom of this page, and you've described yourself-- as your role as including:

> "… developing GGC clinical strategy; ensuring patient safety and driving forward quality improvement; financial, staff and professional governance; and ensuring that there is a robust clinical governance system in place."

I just wondered if you could explain how do you see your role, particularly in

respect of ensuring patient safety?

A Yeah, I mean, maybe if I could give you a bit more of a description about my role.

Q Sure.

A So, Greater Glasgow and Clyde is 4.4 billion and it employs a staff of about 41,000, and my role is, first of all, the professional lead for around 4,000 senior doctors and we train around 2,000 junior doctors a year. I've got about three different areas. So, I'm one of the non-exec directors on the Board and I give clinical advice on the Board.

In terms of The Corporate Management team, I'm a member of the Corporate Management team which has six directors who all do the primary care and mental health, as well as the acute chief operating officer, who does all of the acute sector, and then headed up by the chief executive.

And then my third role is really around-- I have a number of teams that report in to me. So, one of them is the Clinical Governance team. The other one would be the Medical Education team, the Pharmacy team, as well as the Planning and Strategic team. I also used to be the HAI executive lead for Greater Glasgow and Clyde from 2012 to 2020.

So, that's really my role, and it expands right across acute, mental health and also primary care, so the whole

Health Board.

Q I just wanted to understand how you would explain to a lay audience, if you can explain it briefly, how you see-- what part of your role, or what you do, through your working month, as it were, how do you ensure patient safety? What is it that you actually do to ensure patient safety?

A I would say there's a range of things. So, one of them is the Clinical Governance team, the Support Unit. They will produce policies. They'll also support all the teams across the board in terms of ensuring that there are good processes and structures in place for patient safety.

In terms of my role for professional leadership, I also will put forward doctors for revalidation every five years. So, it's making sure that the medical professionals, and indeed other professionals that we have in place, are properly trained, but it's also looking at the governance structure for the Board. So, it's looking at the Board clinical governance and we have three pillars underneath that.

One is mental health, primary care and acute, and it's also looking at-- we've got proper processes in place. We've got the proper staffing in place in order for us to ensure patient safety, and really patient safety, I think, is the heart of

everything that we do.

Q Thank you. I want to just look a little bit at the reporting structure that existed for Infection Prevention and Control in the period from 2015 to the end of 2019.

A Yes.

Q Now, I'm going to try and set out what I think I understand, and I'd like you to tell me what I've got wrong. So, firstly, in that period you were the Healthcare Acquired Infection lead. That's right?

A Yes, HAI executive lead, and it's a common title across all the Health Boards.

Q Yes, so what do you see-- what did you see, when you had that role, was the role? What did you have-- what did you need to do?

A Well, the HAI exec lead, it's a corporate position. So, I would chair the Board Infection Control Committee. One of my main functions was also to make sure that the Board was fully aware of infection control issues. The Board Infection Control Committee, as well, looks at all of the policies coming in, mainly from Scottish Government and others, and makes sure that we consistently approach policy across the whole Board area, because it's got to be consistent, as well as the Infection Control manager who'd report directly to me. So, I would provide leadership to the Infection Control team.

Q Well, I want to look at the team next. So, for the period up until March 2019, I understand the Infection Control manager was Mr Walsh?

A That's correct.

Q And then from then until a date later in 20-- well, then it was Sandra Devine, I understand?

A That's correct.

Q And did it then become Marion Bain? Have I got that right, or am I misunderstanding?

A Well, no, Marion Bain-- she was-- there was a new post created around about January 2020 which was called the director of Infection Prevention and Control, and that was part of the escalation process that the Scottish Government put in place. So, Marion Bain held that for a couple of months and then that was taken over by Professor Angela Wallace.

Q And so where did Marion Bain sit in the system? Did she sit between the Infection Control manager and you, or to one side, or how?

A No, she took the responsibilities of the HAI executive lead. So, she had a role with Scottish Government, and she also reported, I think, directly to the chief executive, and Sandra Devine would have reported in to

her.

Q Right, and then within the Infection Control team itself, there would then be two professionals. Initially, it would be a lead Infection Control nurse, Sandra McNamee, then Devine. You're nodding. Now, there's a transcript person.

A Sorry.

Q We have to remember them. And that job title changed over time?

A Well, just-- if I could take a step back----

Q Of course.

A -- because it's actually-- So, Greater Glasgow and Clyde is a general management structure, and what that means is that at each level there is a manager, and the manager will have a nurse and a doctor, a senior nurse and a senior doctor. So, if you look at something like the chief officer for acute, they will have a senior. So, you've met them, the deputy medical directors and a deputy nurse director, and they'll have a team of people, and they will be responsible for all of the governance, all of the finance, and all of the staffing, and that then goes down through the divisions.

So, with Infection Control, it's the same thing. So, there will be a senior manager, and there will also be a senior nurse that will report into the manager as well. So, there is a nurse and there's a manager who will run Infection Control.

Q So, the manager has two people reporting to them in terms of managerial. One is the nurse - lead nurse - and the other is the lead doctor?

A Yes, correct.

Q And I don't know whether you can help us. Just from your perspective, Ms Devine's job description changed. She became an associate nurse director. What was going on there, or have I misunderstood?

A I'm not sure that that did change. So, when I was there, her position didn't change until she became the acting Infection Control manager, and then after that she'd become the director of Infection Prevention and Control laterally. So, that was what happened.

Q And then we have a lead Infection Control doctor?

A Yes.

Q And am I right in thinking that pretty much consistently through '15 to '19-- towards the end of '19, they were-- half their sessions were infection control and half their sessions were microbiology?

A It did vary, but yes. I mean----

Q In broad terms?

A Yeah, in broad terms. The Infection Control manager would manage the lead Infection Control doctor and they

would organise the sessions between them, but in broad terms you're correct.

Q And then there would be a number of sector ICDs around the Health Board with a couple – sometimes a few more – sessions within their job plans?

A Yes, so there were teams right across. There were five teams, and they would have a sector ICD, but there would also be a lead nurse as well for each of the sectors.

Q So we, for example, met in the context of the Queen Elizabeth in its early years. We met Professor Williams and then Dr Inkster as lead ICD.

A Yes, correct.

Q And we met Ms Pritchard and Ms Joannidis as lead nurse, and we met lead nurses within-- Infection Control nurses within the two hospitals within the Queen Elizabeth site?

A Correct.

Q Yes. It's very helpful just to put it in context. What I want to do is turn to your involvement, or rather, I appreciate, your non-involvement, but it's the context of it, in the procurement of the hospital. Now, you've been very clear in your statement that you weren't involved in the procurement of the hospital and the specification of it, partially because-- mainly because you weren't there. You arrived in 2012.

So, firstly, I'm interested to know what you were told about this new hospital when you arrived as medical director in 2012. What was the way it was pitched to you as a facility and its level of standard?

A So, maybe if I could go back a little bit. So, I was-- before I left Glasgow, because I came to work in Edinburgh for seven years, I was involved in acute services review and what that was doing was that there were five very old hospitals in Glasgow, and I was leading the site from the north of the city. So, what I knew about it was that we were bringing together three huge teaching hospitals in Glasgow, as well as then later on, about 2004/5, we then added in the Royal Hospital for Children at that point.

So, from my point of view, when I arrived in 2012, I knew it was the consolidation of three big teaching hospitals. It was also the-- York Hill was moving over, as well as a number of other hospitals, about four or five hospitals. So, for me, it was the end of an acute services review that had seen the brand new Beatson open, I think, 2009.

It had seen the ambulatory care hospitals open, both in the Victoria Infirmary and in Stobhill, and this was the end of a strategy which started in 2002, and for me----

Q What was-- Sorry, carry on.

A Sorry. So, for me, it was a tremendous thing, but for the new hospital, I was expecting a fantastic hospital. I really did, because I thought it was a great step forward for Glasgow and Clyde. I was really pleased-- it was called the triple co-location, to bring the children's hospital on board and maternity. So, it was the first time we'd brought district general hospital services, tertiary services and children's services, so I just thought it was great. When I arrived in 2012, the new labs block opened, and you've heard a bit of evidence around that when the labs were consolidated on that, so that was the very first thing.

Q Yes, because the thing that I want to just sort of capture from you is that we're going in the moment to talk about what's in your statement, about the realisation that particularly the Adult Bone Marrow Treatment Unit, in various ways the ventilation wasn't what people hoped for. We'll talk about that in a moment, but I just want to understand what you, as it were, thought before you became aware of these-- I'll call them "problems" at the moment. So you were involved in the original decision to move the Adult Bone Marrow Treatment-- to add that to the project in 2013?

A Yes. Do you want me to----

Q Yes, do, please.

A So, in May of 2013 – I remember it pretty clearly – the clinicians had come to me to say that they wanted to be co-located on the new big-- it was called the New South in those days, because we needed to co-locate them with Intensive Care. Also, as you know, the bone marrow transplant are the sickest patients by a long shot. Therefore, we wanted them to be next to the renal physicians, next to the respiratory, the whole bit.

So what I asked them to do at that point because they were-- Initially, they wanted to move more beds over, and at that point the hospital was being constructed. So I asked them to speak directly to the project director because I wanted to make sure that we got the right specification. What happened there was we probably didn't have enough beds, so we couldn't take the Elective Haemato-Oncology over, but it was the Bone Marrow Transplant.

So I took it in July. I think it was called the Q&P Committee, and we had to-- I think it was about 800,000. Now, my understanding at that point was the hospital was in the process of being built, so I didn't understand that it was going to be a compromise, if you know what I mean. I thought it was going not to be a compromise. So, the clinicians were

keen. I took it to the Q&P Committee and asked for about £850,000, along with the chief operating officer. At that point, they agreed because I put forward the clinical case for it, and then we handed it over to the project team and the design team, and they didn't----

Q Well, it's a useful example because it enables me to prompt a supplementary question-- is that we've had some evidence, I think, that the ventilation systems that are ultimately installed in the hospital do not have enough duct capacity to deliver, without major refit work, more than 6 air changes an hour, even with a lot of work. So we'll get to how this story happens in a moment, but ultimately Ward 4B gets to 6 air changes an hour and it can't go any higher. Is that-- You share my understanding of that?

A I didn't at the time----

Q Well, I appreciate that, but----

A -- but as I've gone through time-- But I could maybe-- When we get to talk about that, I could maybe tell you exactly how that came about.

Q Well, indeed, but just picking on the idea that we sort of now know that it can do 6 but it can't do 10----

A Yes.

Q -- it's been put to couple of witnesses that maybe if people had known back in 2013 that you couldn't do 6, it might've prompted a different decision. Maybe either people would've spent more money on bringing it up to standard, or they might have decided not to bring the bone marrow treatment patients over, just notwithstanding all the good reasons you've just given. So, do you see there's a sort of "What if?" counterfactual there? That if people had realised in 2013 that the ventilation system in the building that was ultimately built couldn't actually support the standard of 10 air changes an hour, that might've either made the decision harder to bring the BMT over or caused it not to come over at all? Do you see that's sort of a realistic hindsight question to ask?

A Yes.

Q Right, because what I want to do is to look at a particular document----

A Could I answer it, though?

Q Yes, of course.

A Yes, so what I would say to you is that we were actually facing that position. When you're looking at the safety of a service, the environment's part of it, but it's only part of it. What the Bone Marrow Transplant clinicians would say is another big part of it is actually having the co-location of Intensive Care, and the co-location of Renal, and the co-location of Respiratory. Certainly, I actually went around the unit, and I can talk more about when we to that and tell you exactly how

we managed the difficult circumstances we came to. I talked to them, and actually one of the consultants I knew in 2013, way back then, and he said he would always still come over.

Q Well, I do appreciate that those balancing acts happen, and of course one does happen in respect to the Paediatric BMT after it's moved in. There is a balancing exercise that's carried out, and it's decided, if I got this right, that they have to do the bone marrow transplants because they need to do them, even the rooms aren't quite what people want. Is that roughly a quick summary of that position?

A Well, I would probably-- So, you'll have seen in my statement, and I don't want to go forward if you don't want me to, but you will have seen the complex decision-making that we made around that in September 2015.

Q Indeed.

A So it's not quite as easy as just saying you need to transplant or not. There's a whole series of factors that were taken into account there, in terms of the pressing need to do it, in terms of what Infection Control are telling you, in terms of what Estates are telling you, in terms of what the clinicians are telling you. That's what I'm saying, that patient safety is a balance of many risk factors, and it's quite a complex, carefully thought through process, but in the end of the day the only thing that matters is making sure the patient is safe. That's it, and you have to make those decisions, and you can't walk away from them, particularly when there's a child at risk.

Q Right. So, well, I think possibly that's two very helpful answers because you've saved me having to go down those routes, but I'd like to look at a particular document, which is in Bundle 14, Volume 1. It's Document 3, and it's at page 82, and it's an Update Paper/Timeline, which is actually produced, we understand, on 26 April for you, I think possibly by Ms Devine.

A No, it actually was Dr Inkster that sent it to me.

Q Oh. So, it consists of extracts from a series of-- or sort of-- Would you see it as sort of a summary extract of a series of emails?

A Yes, I do, and I was intrigued as to why I'd actually asked for it, but yes, it's a series of emails and it's up to April 2016.

Q Because what I want to do is just to look at things that happened at two discrete points, and one of them is before handover and one of them is in the discussions that occur primarily around the Bone Marrow Treatment Units after handover. I want to ask you a series of questions about what you did and what

you could've done at the time. Now, if we look at this summary-- and I appreciate it's not your summary on this page 82 of 11 August 2014. So that's, what, five months before handover?

A Yes.

Q This email isn't to you, to be fair. It's an email to Ms McNamee, and there's some discussion about Infectious Diseases and, in very short terms, there being some difficulties with the way things have happened. Is that-- I'm keeping it at that level because I don't want to get into the detail of what it said. It's more what it tells you. If we go on to the next page, we have a BICC minute, and again this is discussion from Dr Seaton. I appreciate that Dr Seaton ultimately takes a particular position and gives you some advice about this unit, but the issue of the Infectious Diseases comes up at the BICC on 6 October. Do you remember this BICC?

A Vaguely, yes.

Q Yes, and then in December – you've described this in your statement – there's another BICC, and Professor Williams is now giving some information again about the isolation rooms in the Infectious Diseases.

A Yes.

Q Then if we go on to the third page, there's another BICC in January, the day before handover, and do you see about six lines down, someone's recorded:

> "Dr Armstrong stressed that the keys for the new hospital were being handed over tomorrow…"

Now, in a sense, there's a similar email trail around the Adult Bone Marrow Treatment isolation rooms a little bit later in time, in which people notice that they're not as people hoped them to be: there are holes; there are filters missing. The same sort of thing happens with the Paediatric Bone Marrow Treatment rooms. Again, people notice that there aren't HEPA filters. Again, it's a little bit slipped forward in time. It's in 2015 in both cases, but would you agree there's a similar realisation that there are some problems and then discussions of what to do about them for all three wards?

A I don't think I would agree with that, the reason being that I remember this series of events, so in 2014-15. Just to put it in context, there is a project team. There is Estates teams, and there's a project director, so David Loudon, and there is the building taking place – but we were not involved in that, and I certainly wasn't involved in that – and there's contractors and everybody else. I had not been aware-- The Infectious Diseases Unit was a late addition----

Q Yes, I think Brookfield weren't aware at one level.

A Yes. So I didn't know about that, but it was a late addition, and what was happening here was different from what I think you've described. What was happening here is that the lead Infection Control doctor was saying that he didn't have the assurances that he was seeking. I think-- Now, I'm not an expert in that, and I'm taking advice from them, but it seemed to be around the guidance. It seemed to be around whether or not the guidance was fit for the rooms, both in terms of the Bone Marrow Transplant and in terms of the ID Unit, and so they had to then write to David-- I asked them to write to-- because I wanted it documented.

Q No, you did ask them to write to David Loudon, yes.

A I wanted to write to David Loudon also because I was not the expert in this – there was no way I was trying to put forward to him what it was – and I wanted clear advice. I was surprised it was this late in the day, I have to say, but I wanted clear advice, and I also included the board chief executive because it should've-- it was the project team doing this. So what happened was they wrote, as you can see, in December/January and it comes back, and I didn't even know who the contractors were. I expected the project team to be able to give us the advice, and then there was a series of emails between Craig Williams and indeed the project team to see what----

Q Indeed, we have them in our bundles, yes.

A So the reason I'm suggesting it was slightly different was what came back from that, from my recollection – and this is advice that has been given by the project team, by the contractors and by the lead Infection Control doctor – was that there was guidance but it hadn't been updated, but they felt that what was on the table was fit for purpose.

Q Absolutely.

A Therefore, that was then accepted by the-- It was up to the project team to do that.

Q So, in terms of the Infectious Diseases, you're explaining that questions arose, advice was sought, and the response you get back is they are indeed fit for purpose.

A Yes.

Q Right. For the adult-- I don't know whether we need to take you to the documents. I'll just put it to you, see what you think. For the Adult Bone Marrow Treatment isolation rooms and the Paediatric Bone Treatment isolation rooms, have I got it right in that, in those two cases, what happens is there are

questions about the physical fit out, whether the building-- those two sets of isolation rooms are physically fitted out to the standard people were expecting? Have I got that right?

So, in this-- So, if I can just take it chronologically now. I'll come to that. So, in this particular issue in 2015-- because I was very clear this was paediatric.

Q Yes.

A Adults was not mentioned, and this was about whether or not-- Now, again, I was not at all *au fait* with all the technology, but this was about whether or not the rooms which had been built were fit for purpose, and it came back that, yes, they were. So this was before we took entry. After we took entry, the first thing that I knew was around 1 July, which was the Adult Bone Marrow Transplant. That was a series of emails which-- I thought we were getting, as I've said before, a fantastic hospital because we'd been working so long for this, but we didn't get what we expected, and the first thing that was-- in terms of the fit-out was 1 July for me. That was the Adult Bone----

Q Yes, but the point I'm trying to get across, and it may be I'm taking this at far too high a level, is that during the period just before, but mainly just after handover, there becomes a realisation that in respect to the isolation rooms there are some things that are not right. Would you accept that?

A From my own point of view, I didn't know about the after handover. My involvement was this particular involvement for the Infectious Diseases.

Q Let's put the Infectious Diseases out the way.

A Okay.

Q Let's focus on the two Bone Marrow Treatment Units. Have I understood it correctly that in 2015 there comes a point during the year for both Adult and Paediatric BMTs when you become aware that there are aspects of the physical fit-outs of the isolation rooms in those two wards that are not what other people are expecting?

A So, if I take it chronologically, in 5 June, prior to the Paediatric Bone Marrow Transplant, I became aware that the HEPA filters had not been fitted.

Q Yes.

A In 1 July, after the Adult Bone Marrow Transplant Unit had moved over, I become aware absolutely that that had not been built the way it should've been.

Q Right. So we have that.

A Yes.

Q Now, you are very clear that you're reliant on the advice of the project team and the lead Infection Control doctor. Have I got that right?

A Along with the clinical team as well, yes.

Q Along with the clinical teams, yes. In respect of the Paediatric Bone Marrow Treatment rooms, if we look at Bundle 14, Volume 1, page 200, we have an email to you from Professor Williams explaining that they found some problems and that he's spoken to Mary Anne Kane. Do you remember that?

A Yes.

Q Yes. We then have a situation where there's a series of more emails. So we then have an email on 7 July. Let me just check I've got the right page reference. Sorry, wrong bundle. So, that's the paediatric one. We then have an email from Professor Williams to you on 7 July about the adult paediatric unit (sic), and that's Bundle 27, Volume 9, page 411. The next page, I think, is the document itself. Do you remember seeing this document about the specification of what's being built in Adult BMT?

A I remember it looking back, yes.

Q Yes. In fact, the Adult BMT had gone back to the Beatson by this point?

A I think it went back on the Monday, so possibly.

Q Yes. So that's-- presumably, that was quite a big thing for them to do?

A Absolutely. I think-- yes.

Q Yes, and then we have Professor Gibson. Well, that's before----

A Can I just say something about this?

Q Yes?

A Please? So, I think what I said in my statement was I don't think I would have asked for this because, at that point, my focus was making sure that the patients got safely back to the Beatson, and this, I think, was then-- I passed this on to the chief executive of the Health Board.

Q Well, I want to come to that.

A Yes.

Q I'll come to that in a moment. Let's look at another document, this time in Bundle 27, Volume 8, at page 213, which is an email of 10 August-- a meeting of 10 August. Now, Grant Archibald's the chair and you're present, and this is about an action plan for the Adult Bone Marrow-- So there's meetings happening. That's all I'm trying to-- I'm setting up a question, Dr Armstrong. And then we have-- Professor Gibson emails you on 4 September about the Schiehallion Unit, which is Bundle 8, Document 31, page 133. Do you see what Professor Gibson is saying in that email? It's quite a strong email from Professor Gibson.

A Yes, so if I could just go back

to Grant Archibald's----

Q Yes.

A So, what happens is-- so Grant Archibald was the chief operating officer for the acute division. So the responsibility, as I said before----

Q Yes, but Dr Armstrong, the reason I'm not asking you about Grant Archibald----

A Yes.

Q -- is I want to ask about what you did.

A Well, yes, but----

Q So let me get to the question, and then I'll ask you the question.

A Sorry.

Q So, we have an email here from Professor Gibson, and you'd appreciate, although there is a follow-up meeting and the issue is resolved and bone marrow transplants take place, at this point, she's quite firm that there's an issue. You'd accept that?

A Yes. What I would say, at the beginning of August, I got an email from Sandra Devine because a child had been cancelled because there was a problem in the Paediatric Bone Marrow Transplant Unit. At that point, I forwarded that email to Grant Archibald, and indeed phoned him, and to Robert Calderwood, and that led to that meeting that you've just put up there.

Q Yes, absolutely.

A And, therefore, what they had been doing since that time – and I can't remember if it's 10 August – they had been working with the team to try and address the problems of the Paediatric Bone Marrow Transplant Unit, but I absolutely understood Brenda Gibson then came to me on 4 September to say that it had not been resolved.

Q And eventually they source HEPA filters from Northern Ireland and the transplants go ahead?

A No, sorry, the Northern Ireland thing was prior to that. So, before the Paediatric Bone Marrow Transplant Unit moved over, that was on 1 June-- 29 May, and Mary Anne Kane was walking around the unit and found that these HEPA filters had not been fitted. At that point, we were maybe faced with stopping the children's hospital opening, so there was a series of meetings taking place. The HEPA filters were sourced from Northern Ireland and they were fitted, and then the Paediatric Unit opened after that. This was later on.

Q So, the reason I've shown you all those documents and rather cut you off is that I appreciate – and I don't think anyone's disagreeing – that there is activity.

A Yes.

Q Attempting to address the problems.

A Yes.

Q And one can have a dispute – we maybe might get into that in the moment – about whether the activity was adequate, but there's no dispute that there was action being taken by you, Grant Archibald, the project team, and the Infection Control team. You'd agree with that?

A Yes.

Q Yes, right. I'm asking a different question, which is this: at this point, we are now some months after handover in a hospital where questions about whether the building is built as people expected it to be built and whether it is built in conformity to guidance have come up on a number of occasions. Would you accept that?

A Yes.

Q Right. I absolutely understand that you do not have the expertise yourself to assess whether the building is built in conformity to SHTM 03-01. You'd accept that?

A Well, I didn't know what SHTM 03-01 was at that point but, yes, my focus was on the patients.

Q Yes, but one of the problems with a building is it's a very complicated system, and what I'm putting to you is this: if the building is so complicated and if you've become aware-- and it's you personally, and I appreciate we've asked the same question of lots of other people, and we will ask the question, no doubt, to the chief executives in due course. If you become aware, as the medical director with the responsibility for patient safety, that in respect of these two wards there are things that are not built to specification, and in respect of the isolation-- of the Infectious Diseases units, there is some doubt about whether the guidance, what guidance to apply, should you not become suspicious of whether the project team and/or the contractor had done their jobs properly and started asking questions about that?

A What I was expecting, as I said before, was a hospital that would be handed over fit for patients, and therefore, when it became apparent that the Adult Bone Marrow Transplant Unit had to move back, that was extremely surprising. We had to-- my focus was making sure that they moved back safely to the Beatson, and we'd transfer them. When the Paediatric-- and again, as I say, Grant Archibald was the chief operating officer. There is a Women and Children's team beneath Grant Archibald, and they, along with – and I think I've said my statement – the Infection Control team, with the Estates team, are responsible for providing those facilities.

But, yes, we were all, I think, taken aback with the fact that it had not been

built right and that needs to be taken forward, I think, by the project teams and the builders, but that was not my focus. That was not my----

Q No, you see, the question that I'm suggesting is that that's the wrong approach, because if someone has made a mistake-- and it's, I suppose, a purpose of this Inquiry ultimately to find out if that's true. If someone has made a mistake about not building it correctly or not specifying it correctly, the answer may well be found in the conduct of the contractors or the project team. So what I'm suggesting is that you, as HAI executive lead and medical director, had an obligation to ask this question: "If these things are wrong, what else is wrong?" And I don't think you did that, and I'm putting that to you.

A I would have certainly reported all of this to the Board chief executive, and the project director, who actually was responsible for delivering the building along with that team, along with the people that were delivering it, were absolutely responsible for looking at that. I was raising the issue and trying to fix the issue so that we could get patients treated.

Q Did you raise the issue of, "If these things are wrong, what else is wrong?"?

A I think that, at that point, there was the Bone Marrow Transplant, the adult; there was the paediatric one. The isolation rooms were further on into 2016 for me and, at that point, I did actually send an email to the chief executive I think around----

Q In 2016, but I'm looking at 2015. So----

A I would-- yes. So----

Q So I'm trying to get from you, Dr Armstrong – really quite simple, because it may be actually just the answer may be just, "No" – is: are you saying that at the point of 2015 you focused on fixing the problems rather than working out how the problems had occurred, or at least encouraging someone else to work out the problems?

A I was encouraging someone else to do that. I would not-- the project director was also the director of Estates. When the Adult Bone Marrow Transplant went back, we were expecting that they would look at what went wrong and what happened prior to that. I don't think that would be within my remit to do.

Q But it would be-- would it not be a problem-- We haven't spoken to Mr Louden. We will have to do that and hear his side of these events, but it's not impossible to imagine that the thing that went wrong happened, as it were, on his watch within his team? Now, he may not-- that may not be the case and we'll hear

from him in due course, but what I'm asking for you is: you're the senior clinician of the Health Board. You're the hospital HAI executive lead, and I get the impression from what you're saying that, whilst you were focused on fixing the problems, you weren't saying, "I'm now worried about what else is wrong."

A I was worried about the Adult And the Paediatric Bone Marrow Transplant Unit. The rest of the hospital-- and there was a lot of other things going on at that time because when you're bringing in five big teaching hospitals, the rest of the hospital was things like emergency department flows. It was things like the acute medical receiving. So there was a big other part of that hospital which was working well, although we had problems with flows and problems with winter and various other things.

So, where I could see it was there was problems with the Paediatric Unit, which was significant. There was problems with the Adult Bone Marrow Transplant Unit, which was significant, but we had a whole range of other specialties which were working. We had theatres going on. We had trauma going on. We had acute medical receiving going on. So, what I'm trying to say to you is we were absolutely raising that with the project director to say, "What happened here?" But----

Q What was the answer you got?

A I think the answer was that they were speaking to the contractors, and because I wasn't-- it wasn't in my remit to get involved in those conversations, so that was being taken away from where I was. My focus was very much on patients, paediatric patients, but also all of the other parts of the hospital as well.

Q Because one of the problems with that is that we heard from Professor Steele last week, and one of the things that Professor Steele was very, very clear about was that, on appointment, he had a meeting with the chairman and the chief executive in 2019 – albeit four years after these events – and he decided with them to conduct a review of the procurement.

He did that review of the building and he covered in the review, I think, everything apart from chilled beams that we've talked about as a possible flaw in the building, and he obtained a report from a contractor-- from a consultant, and indeed it may be-- I think he admitted it then, to some extent, resulted in your litigation against the contractors. So he acted to find out what had gone wrong.

Now, his predecessor in 2015 was also the project lead. So, if someone-- There was no one in Estates outside the project team who could ask that question,

but you were the medical director and so you could have said, “I want to know what else is wrong,” because we do know now that there was problems with the water system and there was problems with the general ventilation, but you didn’t find those out, and it may be – and I’m putting that to you – that you didn’t ask and maybe you should have done.

A I don’t think it is within the remit of the medical director to look at the areas that you’re talking about. When we had problems with the Bone Marrow Transplant Units, and indeed any other problems that arose, then I was very, very keen on sorting it out, as well as keen on the patient safety aspect. But it is not within the remit of, I believe, any medical director to actually then go into the Estates side and be able to ask questions around, “What was the water system like?” That is actually the responsibility of the project director, the director of Estates and the general management system.

A Would it be within the knowledge of the medical director, or a medical director, that there is a SHFN 30 (HAI-SCRIBE) document that, at Part B, sets out what processes you have to carry out to certify new or refurbished facilities? Is that something you would have known about then?

A No, absolutely not. I saw it in the papers but, no, I was not aware of that.

Q But the very title is, “HAI-SCRIBE” – Hospital Acquired Infection SCRIBE – and you’re the HAI executive lead, so why can’t we assume that you would know about the processes to prevent infection-- hospital acquired infections?

A I would not know about those. There is a team that works, the senior management team in Infection Control, and there’s a lot of experts within that, and I did not have detailed knowledge about HAI-SCRIBE, certainly not in terms of a new hospital. So I think that those are not assumptions that I would make. It was not knowledge that I had at the time, and I don’t think many medical directors would have that knowledge. What you’re reliant on is groups of experts, of individuals, to make you aware of that if that’s required, but for the new hospital, for the Queen Elizabeth Hospital, that was being handed over to us – we believed – with-- I didn’t even know that you had to do these types of things. So, that was not within my remit. It was not within my knowledge base at the time.

THE CHAIR: Could I just clarify that last point? You used the expression you were “not aware of the details of H-SCRIBE.” Do you mean the details, or perhaps you may not have been aware of

the existence of such a process? It's just for me to understand what you were not aware of.

A In terms of the-- So, I'd been the HAI exec lead for three years at that point, and I knew that there was processes in place when we were doing refurbs, but that was part of the team-- it would come up maybe in the Board Infection Control Committee. So, I knew that there was processes that needed to be put in place, but I wasn't aware of the detail and nor should I be because there are experts that do that. But when people are, you know, pulling things out of old wards, that kind of thing, then there needs to be protection put in place, but that's not something that somebody at my level would be aware of the detail, and certainly not in terms of what's being described here about new hospitals being handed over.

Q I understand maybe not aware of the detail. You were aware that there was a process in relation to refurbishment. Were you aware that the same process applied to new construction?

A No.

Q Thank you.

MR MACKINTOSH: What I want to do is now move on to what I've called – and I apologise, it's my shorthand – the working relationships within the Infection Prevention Control team as they emerged in 2015. We had evidence from Dr Stewart. Now, am I right thinking that Dr Stewart was deputy at the time of the new hospital moving in and most of his work was around acute services?

A Yes.

Q But occasionally – and I think it was my word – he accepted occasionally he'd be a bit of a gopher for you and go and do things that needed to be done on your behalf. Is that-- that aren't directly related to acute services?

A He was the chair of the Acute Infection Control Committee, I think, during that period, and he would work with me on certain issues, but that wouldn't take away his responsibility for the for the acute sector.

Q So, the events that happen-- and again, so we don't use up time going to documents that are very long and have lots of detail that isn't important at this point, is that we've heard evidence that on 7 July 2015 there is a meeting between Dr Cruickshank and Dr Peters and Dr Inkster, possibly Professor Jones, in which they intimate their desire to demit or renounce or resign their ICD sessions as sector and regional ICDs. Now, I suspect you didn't know about that at the time, but you now know about it? I'm just checking.

A I knew about it probably

around 9 July.

Q Yes, because Dr Stewart or Dr Cruickshank would have come to speak to you.

A Well, the reason I-- I can't remember exactly who spoke to me, but I have got an email between myself and the chief executive when I'm making him aware that I've become aware that there are three ICDs who wish to demit their sessions for that.

Q Two of them provide letters to Professor Jones. Ultimately, am I right in thinking that you asked Dr Stewart to carry out some sort of review of communication and culture and the way the IPC team works?

A So, what I do recall from that time was, because it was such a busy time getting the hospital ready as well as all the other infection control issues, was that I got, I think, a phone call from Tom Walsh, I think, to see that this had happened and what we had to do was stabilise the service.

I think I spoke to Brian Jones and said that we-- and he was very reasonable, that we couldn't allow-- If I can take a step back. All the consultants have got job plans, and if you want to change your job plan – suppose you're a surgeon and you don't want to do a theatre session anymore – that's got to be done----

Q You've got to go through the job planning process.

A You've got to have-- well, more than that. You've got to actually have the local management team's view on it, because it might be that you're the only surgeon that can do that type of operation and we've got a big waiting list for it.

Q Well, indeed, and these two doctors weren't permitted to demit their sessions.

A Well, I think what happened was that Professor Jones said he would keep them in their sessions because we didn't have anyone to backfill them. I then have-- and I've looked at the email on it. I then appraised the Board chief exec of that. I say, "I don't know the reason," because I didn't know the reason at all. What I do is I ask David Stewart to investigate the reasons why they had demitted their sessions, and that's what I was looking for.

Q Ultimately, does he produce a report?

A He produced a report, I think, that I saw maybe in October 2015.

Q Yes, so his report is-- I'll come back to his report in a moment, but he produces a report and that report is provided-- do you get it-- you get it from him in October?

A It was either-- I think it was October. I think what happened was he

had shown me the report. I had not seen the-- I only saw them in the bundles actually. I had not seen the reasons for the two Infection Control doctors demitting their-- or wishing to demit their sessions, but I saw something, I think, 30 October, and it was being sent to Anne Cruickshank and that was the report. He must have shown it to me slightly beforehand, but I saw it roughly around about that time.

Q Yes, and so what I'm wondering is he produces this report, and the way it's described by the people involved – so him, Dr Inkster, Dr Peters, Dr Cruickshank – is that he sends an email out to the Infection Prevention Control team saying, "I've done some investigations and," in very short compass, "we can do various things; we're going to have a development day." Dr Peters and Dr Inkster reply back to him saying, "What are you doing about the patient safety issues?" and his evidence to the Inquiry was that he told you about the patient safety issues that they had raised with him. Do you remember that?

A No. So, what I got was I got the report which seemed to all be about the dignity at work issues, as I would put that.

Q Yes.

A I hadn't seen the letters until quite recently, actually, of why they wished to demit their sessions. What I did see in November of that year-- I thought it was two separate processes, to be honest. I thought they had a process which had been about demitting their sessions because of dignity at work issues, and then there was separate issues raised in November of that year, because what happens is-- and I remember the email goes out on 30 October, and then I think Anne Cruickshank comes back with a long email trail around that, about, "What about the patient safety sessions? What about these things?"

I then get involved in trying to get Anne Cruickshank into the clinical director role because I thought if we had a stable, safe pair of hands in that-- and then the first time I become aware of the patient safety issues was on the second lot of emails which were sent out, I think, around about 9 November.

Q Well, I'm going to come to those but, before we get there, what I wanted just to do was put two things to you. One: it was Dr Stewart's evidence that he told you about the patient safety issues that were raised in July by Dr Inkster and Dr Peters, but that you only asked him to carry out the dignity at work review.

A No, that's not my recollection

and it's not in the email trail that I have sent to Robert Calderwood.

Q Well, I think he explains he spoke to you but, yes, okay. What I want to do is to then look at the review itself, which is Bundle 14, Volume 1, Document 41, page 464. So, I want to ask you about part of it because it will become important later, which is if you look at paragraph 6 – and I realise it's quite a long report – I have two questions about paragraph 6. So, do you remember reading this report?

A Yes.

Q Right. There is a statement, presumably by Dr Stewart:

> "There is also the need for greater clarity around levels of accountability in the decision-making process, especially where there are conflicting views/opinions."

Now, at the time, would you have agreed with him about that sentence?

A I certainly agreed around the conflicting views and opinions and the decision-making process.

Q Would you agree there needs to be greater clarity?

A Yes.

Q Yes. Now, the next sentence, I'm not necessarily asking you to agree or disagree with the sentence because you didn't carry out the review, but I wanted to see if I'm right to read something into it. I read the next sentence, the one that begins, "On the one hand," two statements of things that were raised with him. One is that:

> "On the one hand there are reports from ICDs of having their professional authority undermined by the over-turning of decisions by the IC Management Team."

Now, he has explained he doesn't remember the report but Dr Peters and Dr Inkster insist they raised that issue with him, and here it is in this paragraph. I wonder if you would have assumed from reading this report that one of the issues being raised with him was that ICDs felt their professional authority was being undermined by the overturning of decisions by the management team. Is that something you would have drawn as a conclusion, that someone's saying it, even if you don't necessarily agree?

A He was interviewing a number of people as part of this report, and he was doing that with Bridget Howat, who was the HR person associated with this. So therefore, when he's writing this as part of his findings, then I'm taking that that was part of his findings because he's talking to both the ICDs and he's talking to the management team as well.

Q Indeed, and so he's saying,

"There are reports of this thing," in the first half of that sentence. Then the second half of that sentence, he's reporting something else that has been said to him:

> "… whilst on the other [I think "hand" is missing] there are reports of ICDs not taking decisions when given authority to do so."

I presumed he's heard that from some people. So, what I'm just checking is that sentence seems to imply that, at the time this report was produced, two issues were known not only to him, but to you, which is that there was a view amongst ICDs that their authority was being undermined by the management team and, equally, possibly from the management team, a view that ICDs were not taking decisions when given authority to do so. Am I right to infer that from that paragraph?

A I think that one of the things that he had suggested, and when we do these types of reports, he had suggested bringing the different parties together, I think, for a meeting.

Q He did suggest that?

A Yes, and sometimes that's actually-- and I've had to do that a few times with teams who may have different perceptions or there's conflict within the teams, and often it's better to bring them together to actually get, you know, exactly what does that actually mean, and what examples of that----

Q No, I appreciate that, but what I'm checking is your understanding, because you asked for this review to be carried out and you received the report, and I want to just check that at this point in October 2015 you would have known, amongst all your other responsibilities in a very busy time, that there were ICDs who felt their professional authority was being undermined by IPC management, and also that IPC management felt ICDs were not making decisions they should be taking. I want to just check that. Would it be something you would have known from reading this report?

A From what Dr Stewart's written in the report, that's what he's written. I would have probably wanted a bit more-- to explore that a bit more----

Q Of course, yes.

A -- to try and understand what that actually means.

Q I wonder if you can help us, because he doesn't remember, what the final sentence means. So, this is:

> "Whilst it is clear that concerns for patient safety is the primary motivator for ICDs when arriving at decisions, there appears on occasion to be a lack of appreciation

by some ICDs of the need to risk-assess decisions from an organisational… perspective."

Now, the way he reacted to that was that I suspected a meaning that doesn't require the word "political" to be in there. It's a sort of risk-balancing exercise of the sort you and I have already discussed this morning. I wonder what you take from that sentence.

A I definitely don't take it as about politics, if that's the inference you're making.

Q No, no, I want to know what you take from it. What do you take from it?

A I think that with infection control-- and I think that Dr Stewart probably touched on this and it is very true, is that with infection control it is one part of a decision-making process, so things like closing wards, all the things that we have to deal with day in, day out, or over winter, you're always trying to make a risk balance of how you actually do it. So, what is the risk of the infection?

I mean, a good example of that would be winter. So, if you look at winter, we've got ambulances that are often queuing outside a hospital with sick patients in the back of them when we need to get them into the hospital. Therefore, there's got to be a risk-based assessment made by Infection Control teams, the clinical teams, based on actually what the circumstances are. Those decisions may vary depending on, you know, if you're in the middle of winter, but they will always be based on patient safety. So, you're always trying to maximise that, and I think that's what he meant by that, because that happens in hospitals right up and down Scotland, about how that's happened, and it needs to be done as a joint endeavour between Infection Control, between clinical teams and managerial teams to make sure that you're maximising the patient safety.

Q So, the final question is indeed about the word "political." One of possible perspectives on that is that he's-- to be fair, he didn't accept this, but is that that sentence is thinking about the reputation of a board.

A I did not read that into it at all. This is a report about how we manage infection control. It's not a report about anything to do with the Board.

Q What I'd like to do is to look at the letter of 9 November, which you just mentioned which is Bundle 14, Volume 1, Document 48, page 478, which is 9 November 2015. Yes, so I take it you saw this letter at the time?

A Dr Stewart would have discussed it with me at the time and forwarded it to me at the time.

Q Yes, because his evidence

was that this letter is prompted – well, the emails show this letter is prompted – by him providing a reply to his earlier email that he understands the matters had been resolved, had been addressed, and he tells us that his source for that information is you.

A Yes----

Q So, how would he have known how the matters in Ward 2A and 4B had been resolved?

A Well, if we can get the timeline correct, so Dr Stewart is the acute medical director and that means that you also are looking at patient safety. You're looking at all of these issues and, in fact, I think he was also involved in the Ward 4B discussions at that point.

So, the acute medical director works with the chief operating officer, works with the nurse director and a team, and they will then work with all of these different teams to do that, but I think with this particular issue, this was 9 November and there is-- and when he, I think, sent this to me, I sent back an email to him – and I've got that – which says, "Can you work with colleagues"-- Because this is not just about infection control. This is about a lot of other issues. "Can you work with colleagues to address these issues?"

He then, as you say, sends a letter back to the ICDs, I think around about the 20th, so after----

Q Just before Christmas, yes?

A Yes. 20 December, and then comes back a response from-- I think it was Dr Peters, to say these issues are----

Q They seem to think it's got worse, is their evidence----

A Yeah. So, what she does, she lists those, and he then speaks to me about it, and then I escalate them, and – particularly around the children's one and the bone marrow transplant one – we then have a meeting at the end of January which sets off a series of actions----

Q Yes, because the point I want to see if I can get you to acknowledge is this: is that in the-- there's a workstream that you're heavily involved in, Grant Archibald's involved in, reacting to the problems with 2A and 4B that we've discussed already. Then along in November comes this long email from Dr Peters and Dr Inkster which seems to be raising additional issues, and you then decide to act on it to some degree. You pass it on to somebody to action it, as you just said.

Am I right in thinking that at this point in this email, and maybe the one that follows just after Christmas, the authors, they're not wrong about the state of the isolation rooms in 2A, 4B, or indeed elsewhere in the hospital, are

they?

A They-- So, there is a lot of debate. So, just taking it bit by bit. There are three or four different teams involved in the Queen Elizabeth at that point and, as I said before, and I think it's quite important for the----

Q No, no, I do understand that. The reason I asked was-- I do understand there's a lot of teams. I'm asking for your opinion as to whether at the end of 2015, in this email and the one that you've just discussed at Christmas, which you then pass on to other people to action, at this point, are Dr Peters and Dr Inkster actually wrong about anything they're saying about 2A, 4B or the isolation rooms?

A So, in terms of the 4B one, there is work going on on that and Dr Inkster is involved in that, and absolutely there is work. So, 4B is back over at the Beatson at that point, and if I can just tell you a bit about what happened at that time around 4B.

So, 4B is now back at the Beatson, and the debate was around, "What facilities do we need to put in place to bring the patients back?" And around about that Christmas time what we were beginning to do was pull in the regional director and we were getting a team together with HPS, with the Infection Control team, which involved Dr Inkster, with the regional team who managed this process and with the clinicians, and the idea is we get all of these people together so we do a proper risk assessment.

Q I do understand that, Dr Armstrong.

A And so there was absolutely a recognition that in order to bring those patients back there had to be a lot of work, and if I can get the opportunity, I'd like to tell you exactly how that did work.

Q Well, so, I mean-- I think it's important to realise before we go on any further that we can read your statement. You've got a very long statement you've produced. We've had lots of evidence, and I absolutely accept there is a process. We've heard evidence about it. Steps are taken to address 4B. There's an SBAR from HPS, albeit it doesn't-- there's another SBAR a few years later and they eventually move back in 2018.

We'll come to that, but all I was asking the question about was this: is at this point, in November/December 2015, am I right in understanding that, in very broad terms, what Dr Peters and Dr Inkster, who are the sector ICDs at that moment, are saying is right. It's a yes or no question.

A So, what I'm saying to you is, 4B, everybody was aware of that. So that's sort of----

Q I know that, but I'm asking

whether they're right.

A I think in the-- I suppose what I'm trying to say to you is, yeah, they were bringing up good points and I wouldn't say that-- that's absolutely fine. That's true, but there were management teams, clinical teams, Infection Control teams and Estates teams who were trying to address that, and therefore there were a number of teams who are working towards that, and if we get the opportunity, we can talk about 2016 in 4B as well, because there's a lot of work----

Q Because the point that they make, and I need you to respond to it, is that they were the sector-- at that point, despite their best efforts to resign the sessions, they were the sector ICDs for south sector – which means Dr Peters had a responsibility for 2A – regional sector – which means Dr Inkster had a responsibility for 4B – and they were being asked to take responsibility for these two wards, in infection prevention and control terms, and their point was they weren't being told stuff, largely, they would say, I think, by Mr Walsh and Professor Williams.

So they raised this issue with you and, as you say, these are good points, and there is then a process that follows, but I'm just trying to understand that they're not wrong to raise the issues, are they?

A Oh, no, no, no, absolutely. They're not wrong, but can I pick you up on a little bit there? So, 2A at that point was actually Professor Williams. He was doing paediatrics at that point, and Dr Inkster, I think, came back into the 4B debate around about October, roughly October 2015, and what had happened was there had been work done with the contractor, with Professor Williams and with the regional team, and Dr Inkster then took that over.

She expressed concerns with that and she was absolutely right to do so and within her remit to do so. What I was focused on was then-- I think Dr Inkster had asked for HPS support, and then I formalised it because you have to have a formalised----

Q You do, and we end up with an SBAR.

A Well, we end up with an SBAR, but what we also end up with is a multidisciplinary group, because you have to have not just Infection Control, but we have the clinicians who are-- the haemato-oncology clinicians, we have the Estates, we have the Infection Control, and we also have it led by the regional director, Gary Jenkins, and there's an email – I think it's in January – where we set that out, and in fact we discussed that, because you need a risk-based approach and Gary Jenkins was reporting

direct to Grant Archibald because that is the way the governance structure works.

Q Now, the next thing I want to ask you about is, in 2016, Dr Inkster is appointed as lead ICD after Professor Williams moves away, and I wondered what your assessment was of the impact on the IPC team, and therefore the whole hospital acquired infection responsibility that you had, of the arrival of Dr Inkster as Lead ICD. How would you assess the arrival of her at that point in 2016?

A I think in April 2016 she was-- it was a competitive interview for the job and I didn't take part in that.

Q No, I'm not saying you did.

A And she was appointed lead ICD. I think it was April 2016, and we-- she worked with Tom Walsh and with Sandra, and I think it worked reasonably well. And Cruickshank, at that point, I remember emailing me to say, "Should I step back?" I was keen for her to remain a bit longer because I wanted it to bed in, and in fact I don't think she demitted until about August. So, what I would----

Q Well, her evidence is it wasn't actually extended. She just did the six months.

A No, she emailed me to ask me what did I think, because she-- I thought she brought stability to the team. She brought a maturity to it, and I was quite keen-- At that point, we'd also had one of the senior team had gone off sick and was coming back from sick leave, so I was quite keen that we got a bit of stability, and then when Teresa came in, I think it was good because we had an LICD, we had a nurse and we had an Infection Control manager.

There is a series of emails, again, where Anne Cruickshank's coming back to me saying, "Will I go?" and I'm saying, "Well, just give it a little bit more to bed down." So it did bed down, I think, during April/May/June time, and I think it's around about that time that she then demits from that.

Q So, one of the things that happens – I'm not asking you to comment on this because it's just context to bring the story forward – is that Dr Inkster has described how, after she arrives, she is written to by the Infectious Disease consultants and, indeed, a number of other things are sort of bubbling around her head, and she discovers by receiving an email from Mr Powrie about the general ventilation. I wonder if we can look at that.

So, that is the email of 26 May 2016, which is Bundle 20, Document 68, page 1495. Now, this email is not sent to you, but it's an email from Mr Powrie to Dr Inkster and Shona Frew, copied to David Loudon, Anne Harkness and Mr Walsh, and we've looked at it with some

of those witnesses and we've seen that it sets out documentations that to some extent explain why there was a variation in the general ventilation.

Now, this is 26 May. I wonder when you learnt that the general ventilation in the hospital was not 6 air changes an hour, but was 40 litres a second?

A 20 June 2016. Sorry, water went down the wrong way. 20 June 2016.

Q And how did you find out?

A I got-- Well, what happened was I got from-- I got an SBAR and there had been an outbreak of0 I think it was Mycobacterium abscesses in one of the-- I think it was level 7----

Q In the Cystic Fibrosis Ward? It's rather a long SBAR.

A Yeah, yeah. So I got an SBAR and basically said, "We're going to close doors and we're going to put these measures in place," and what I realised from the beginning of the SBAR, it said something about air changes. I didn't know about air changes. I didn't know there was-- that that was an issue, but when I read it I thought, "Oh, gosh, is this an issue?" and I then emailed back. I actually had also spoken to the chief exec and I actually emailed him separately about it, and in that email I did say, "I think there should be a systematic review."

Q Could this be bundle-- I'll come back to this in a moment, if you don't mind.

A Oh, okay.

Q Bundle 4, Document 11, page 52. Is this the SBAR you're talking about? 52, please. 52? Yes. Is this the SBAR you're talking about?

A Yes. So, it was a strange thing because it was an SBAR which was about the infection control measures, but when I read it-- so it seemed to me it was about, "This is what we do," and it was for the staff. When I read it, I-- it was the background bit which I thought-- it the reduced air changes to 3. I didn't actually know that you were supposed to have 6, but it was reduced to 3.

Q Right, so you asked for a systematic review?

A No, I didn't. So, what happened----

Q I must have misheard, sorry. I thought you said that.

A Yeah, yeah, I-- So what happened is – I remember this very clearly – I emailed back to the team. So, it was David Loudon, Anne Harkness, and Teresa, and I emailed back to say, "This seems to be an issue." I didn't know whether it was or not. "This seems to be an issue to me. Can we all meet urgently to discuss this?"

And I do remember I felt a bit-- and I

also spoke to the Board chief executive. I must have spoken to him to that day, because I then emailed him at half-ten at night, and that's when I said, "There seems to be a couple of issues here. There's the air changes issue," and I knew about the negative pressure rooms, I think, at that point. I think I did. And therefore I said, "Should there be a systematic process?" I wasn't looking-- I didn't know what was looking for, but what I was trying to say was, "Should be a systematic process because there's now been issues raised with me," and I've got-- I've got that.

So, what happened was I then spoke to Teresa because I wanted to know-- and I think I said, "Should we get-- you know, is there an impact on patient safety?" and I remember what Teresa said to me to this day. What she said was that the measures that she had put in place would address the problem and that this was, engineering-wise, very difficult to unpick and you would have to rebuild the hospital if that was the case, and therefore that these measures would be appropriate, and indeed I think they did work. I think we-- So, I kind of got the impression that there had been a change somewhere down the line, and I think the other thing that David Loudon was asked to do was go away and look at where this change came from.

So I had then spoken to the chief exec. I actually spoke to director of nursing as well. I had forwarded it to him. I told him all about it, and I kind of felt as though I'd maybe overreacted because everybody was saying, "Well, that's what it is," and we weren't seeing any infections in the hospital. We weren't seeing that, and so therefore I was accepting the advice that was given. I remember it was 20 June.

Q So, one of the things I challenged Dr Inkster about when we asked her about this was do you see how the recommendations are at the bottom of the page? I put it to her that recommendations-- because she mentioned that these have got into SOPs. Now, we've not looked at the SOPs, but she explained that effectively-- I think she accepted that 2 to 7 will have made their way into SOPs to some extent because they're the sort of things you can put into an SOP.

So you can say, for example, number 3:

"[When you do an] aerosol generating procedure 2 hours should be left between patients in the outpatient setting."

You can do that, and that's what her evidence was, but I pressed her on the first one, "Doors to rooms should remain closed." I don't understand how you

could have a risk reduction measure of, “Doors to rooms should remain closed,” without telling the people who’ve got to shut the doors why they’re doing it, because doors are often left open in hospitals. People like to hear the noise of the corridor, at the very least. Do you appreciate that there might be an issue with-- This is a bunch of risk mitigations that Dr Inkster has suggested, but the first one only really works if people know why they’re doing it, and the hospital-- the Board never really talked about this problem at the time, did they?

A So, again, this looked as though there was an operational issue being put in place for these wards, and I-- and that those steps were being taken and that the air change was the air change, and unless-- You know, that was my understanding of it. It might be going off the point a little bit here, but in terms of the CF patients and the Mycobacterium abscessus, what I did to do, and I can’t exactly remember when, was we took all of our-- There was a debate around that, and it was more around the CF patients at that point. There was a debate around the Mycobacterium abscessus internally within GGC, and we can come to that because it was quite a contentious debate. What happened was I then sent all of our data – I think it was Brian Jones

– and we wrote to HPS, and we asked them to look at it because it was quite a new bug. I wasn’t----

Q They produce an SBAR eventually?

A Well, what happened was that they got the respiratory clinicians together from across Scotland, and they then decided that-- I got an email back from Laura Imrie saying that they weren’t going to take it forward, and I can’t remember all the details of it, but it had been looked at by the clinicians because-- and they were taking infection control precautions on that.

So we could dig out the emails on that. I’m not absolutely sure, but I had actually written, I think, to HBS at the time to say, “Has every other hospital got this? Because CFs”-- or not every other, CF was only-- There are adult services, which I think were ourselves and Edinburgh and Aberdeen, because you need to be specialist, and there were specialist children’s services. So what we wanted to know was: what was this new bug? What were other hospitals experiencing, and what do we need to do about it?

That work took place over the ensuing couple years, I think, and we got something back from Laura Imrie saying-- I’ve got some of the trail around that with respiratory doctors coming back saying,

"Well this is"-- I don't want to actually speculate because I need to go back and look at it but, anyway, we did escalate it. We did ask for advice, and we did get advice back from HPS, and it involved the other centres in Scotland.

Q Thank you. Now, we'll ask Mr Loudon about what he then did when you asked him to look into this.

A Well, he did come back with an email.

Q Did he?

A Yeah, I think you've seen it before. It was about the dialysis points or something like that----

Q Oh, yes, no----

A -- I can----

Q -- I'll look at that over the coffee break. But in terms of the context, we have an email which-- You've not seen it. It'll be in your bundle for the day, but I don't think you got it, from Mr Seabourne on 23 June. That's Bundle 12, Document 104, page 813. Bundle 12, Document 104, page 813. That's 23 June 2016. Now, I'm confident that you didn't receive this email at the time because it's not sent to you.

A Yeah.

Q You're shaking your head. I just wondered whether-- It's quite a detailed email. Did you get any detailed response from Mr Loudon to explain the air change rate derogation from him at the time?

A So, again, Mr Loudon was on the same level as me.

Q Of course.

A He reported direct to Robert Calderwood as well, and therefore I had shared it already, and there was an email which was about 30 emails down about when this decision had been made, and I would've expected him to-- He's not reporting to me to tell me about the derogation.

Q No, no, of course not.

A In those days, I wasn't really sure what derogations were, but these were done by the Estates team, so I haven't seen this email before. I am not quite sure what's precipitated it, but----

Q But it occurs to me that your inquiry to Mr Loudon might be what precipitated it. You point out that Mr Loudon doesn't report to you, you're at the same level, but I just wondered whether you received a substantive response from him about why this derogation had happened. If you didn't, that's fine, but----

A The only thing was that in one of the sets of emails – I need to go back check it – in that June of that year, there was an email, way down-- So there was two emails, and I can't remember exactly-- There was one email which was from-- slightly different-- was from Public Health

in 2011 about the negative pressure rooms, which they had actually gone back to the Queen Elizabeth-- gone back to the team in 2011 saying, “We’re going to have negative pressure rooms.”

The second one was around that email that I’ve seen now in the Public Inquiry when I went and dug it out, and that was the email around the dialysis points, and it’s then----

Q I’ll find that over the coffee break.

A Yes, so that was the only thing I had, and I passed all that over, and I didn’t----

Q Right. So, the final question I want to just check is I want to connect a piece of your evidence with a piece of Professor Steele’s evidence. So, I asked Professor Steele whether there had been any formal risk assessment of the ventilation derogation, and he says there’s nothing apart from the documentation that was attached to Mr Powrie’s email. You’re nodding. You’ve obviously seen Dr Inkster’s SBAR and you’ve acted on it in the way you’ve described, and I wondered if you’re aware of any other document that could even with a stretch be described as a risk assessment, other than that SBAR, carried out in respect of the general ventilation issue?

A No.

Q Thank you. Now, I want to just quickly move on to the work-- to the Adult BMT ward. I want to look at the final options appraisal in March 2017 – Bundle 27, Volume 7, document 6, page 158. Now, before we get to this, you have mentioned there has been a process, and we’ve heard evidence about the process. We’ve got documentary evidence about the process, about the Health Board deciding what to do about Ward 4B.

A Mm.

Q The options are being considered and there’s a series of reports, and we’ve asked people who’ve been involved in them about what happened. We’ve got, I think, quite a good chronology of the events that get us to March ‘17, which brings us to this option paper. Now, you’re a member of the Acute Services Committee?

A Yes.

Q Yes. I’m not going to ask you to pick the options or assess the differences because this options paper then results in work, and ultimately the patients move back in 2018. I want to ask you about something that is set out in it, which is on page----

A Can I just----

Q Sorry, carry on.

A Yes, so can I just very briefly-- and it’s just very briefly because actually this is not the paper that went to the

Acute Services Committee, and I can tell you why. So, what happens in 2016-- and I'm just going to very quickly go through that because it is pertinent to the Inquiry. So, in 2016, as you know, we've then got HPS. We've set up that group, which is led by a manager, and we've got HPS. We've got Infection Control. We've got the clinicians, and we've got Estates.

At that point, the clinicians actually write to me, and they say, "In 2016, we wish to go back to the Queen Elizabeth." They give their reasons, and I think this is important because what was happening at that point was, although they were at the Beatson and although the environment may be optimal, up to-- and by the time we got here, it was 46 patients. Patients who have been taken out of their isolation room, because when you give chemotherapy, particularly with bone marrow transplant patients, they can get sick really quickly. So they would have to take the patients out, put them in the back of an ambulance and send----

Q And bring them to the Queen Elizabeth.

A To the Queen Elizabeth, yes. Then they would not be in isolation but, more than that, there would not be the clinical team who would look after them at the Queen Elizabeth. So that was deeply worrying, and if you look at-- You'll see some of it in this paper. At that point, we tried to then get an agreement with HBS, with Infection Control, and the answer at that point was no----

Q Indeed, there's a whole later SBAR.

A Exactly, but if you just bear with me a little bit, so then what happens is – and it was fascinating listening to Sandra Devine's evidence because I hadn't quite understood this – the clinicians come to me, and we are trying really hard. So we've got this team trying to look at all the options, and they say, "Can we go to the 11th floor in the Queen Elizabeth?" That was a non-starter. We then get-- I can't remember the name of the company, to then do-- and I'm not involved at this point because I've handed it back over to the team. So what happens is throughout 2016, from the autumn of 2016, there is then a company that do an appraisal, and what they say is, "Can we move it to Maternity? Can we move it to Neurology?"

Q Yes.

A Because we're not sitting at the Beatson with no risk to the patients.

Q No, I understand that.

A There's considerable risk, and again I'm not involved in that, but I've got an overview now. So, in the December of 2016, back comes the report and the report says, I think, Neurology and Maternity are out. So we're back to

whether it's the Queen Elizabeth or whether it is going to be the Beatson.

Now, they do an option appraisal, and this is what this relates to, and the option appraisal we do all the time in the NHS, but it's not quite the right way of doing this. So the option appraisal says, "What's the clinical impact? What's the infection control impact?" Then what happens is I get this paper, because I remember it very clearly because they're now coming back to me, and the clinicians are saying there is patients who may come to harm unless we get back the QE. You've got HPS and Infection Control saying, "We don't agree because we've got"-- So you've got a really difficult situation on your hands.

Now, if you go to the end of this paper, what you'll see is at the very last-- So I'm reading through it, and at the very last paragraph it says that, "We want to go back to the Queen Elizabeth, and this overrides the advice of Infection Control and HPS." At that point, I'm thinking, "Oh, no, we can't do that."

So what happens on 16 March, I get a group of people together because, on the one hand, you've got-- That's back to what I said: patient safety is-- it's a sliding scale. It's about the groups of the teams you've got there. So what happens is I get everyone into a room, and I had learned, we'd all learned, from bringing patients in 2015.

So what we then agree to do is-- This paper, I think, says the patients will go back to the QE, and so I felt uncomfortable about that. We all did. What we agree to do, and this relates to the HPS thing later on, we agree that we are going to do up the bathrooms or whatever it is, and that's that big SCRIBE debate that you've been debating, and that we will start monitoring the air. Only, and only, if the air is of a decent quality will we then take-- because you've got one side of a risk. You know the clinical risk, but you don't have the other side of the risk.

So this paper is changed. I take it to the Acute Services Committee, and what I'm looking for there is I'm looking for money basically, and what I'm saying to them is, "I cannot give you certainty about the patients going back. I can't. But on the other hand, we've got to do this work, and we've got to make sure."

So what happens then is that goes forward. The SCRIBE gets-- and we can debate that as well, gets delayed. It then goes back to HBS, I think, in October of 2017, and what we say to HBS is two things. One is, "Exactly what does good look like in terms of the particle"-- Now, I'm not involved in this. I've handed it back to the teams, and the second thing we're saying is, "How exactly do you want

us to measure it?" That's the HPS thing that you've shown.

So what then happens is they start doing that, so they do the work and they start monitoring and monitoring and monitoring. I'm not exactly *au fait* with all the issues around air changes.

What I can say to you is once the monitoring takes place-- And, again, I'm happy to talk about what happens in 2018 because in March of 2018 what you see, and I think you've got it somewhere, is that HPS and Infection Control and the clinicians all say, "The monitoring is appropriate." We had a wee blip, a wee shimmy around about April/May time because I'm trying to get a new service in there called CAR-T, but that's beside the point.

So what happens in March and May of 2018 is the monitoring starts to look really good. There was a shimmy in March, and then May in 2018, HPS, who are all there, actually see that the monitoring looks good. Then there's another paper, which actually is the paper that pulls it all together. So what they say is, "Here is what Ward 4B is in Queen Elizabeth. Here is all of the co-located services, and here is the air monitoring," because you have to do it for quite a long time. And then it goes back at the end of June of 2018.

Now, what I can say to you,

because sometimes I think it's a bit missing in this: it's not optimal. I know that, but we go round-- I went round the ward the other week. We do 75 to 80 bone marrow transplants a year now. We have a very low infection rate, and I think the other thing to say is that, when it went back, the clinicians and I then put a bid in for a thing called CAR-T. CAR-T is a life-saving therapy but it makes you very sick, and there's no way we could have done that at the Beatson.

So what they said to me when I saw them about three or four weeks ago was they believe it's exactly the right decision. So all I'm-- the reason for telling that long story is because it's not just about, "Is it 6, 7 or 8 or 9 air changes?" It's about a whole risk assessment and, in the end of the day, if what you're trying to do is to provide a decent service for the patients, I believe we've done that.

Q That's very helpful, Dr Armstrong, because the question I wanted to put to you-- well, there were two of them, and the preliminary one, it's just to note to something in passing because I think it appears to be acknowledgement of a fact which you've put into context, but it's still a fact, potentially, and that's on page 172. So if we look on page 172, and I absolutely accept this is a report that didn't end up going to the committee, and I absolutely

accept that there is a balancing exercise and you've just explained, in great detail and extremely cogently, the nature of these balancing exercises, but do you see how at this point, within that balancing structure, the author of this report is accepting in the first paragraph that 4B at that point didn't meet the standard set out in the guidance----

A Yes.

Q -- and that the Children's Ward didn't either? In the next paragraph:

> "Currently, the BMT Unit in [the children's hospital] does not meet the standard either however, the rooms do have a positive pressure of 10 PA HEPA filtration and have anterooms."

Do you see that?

A Yes, I see it.

Q Now, the question I want to ask you is this-- and actually, your explanation just given is very helpful to put this in context, is you've explained the large amount of work and difficult decisions that were required to address those two facts, in essence, and the balancing exercise that had to be carried out to take account of the clinical risk and the environmental unknown risk. Would you not accept that if the hospital had been built to these standards and procured to those standards, as is set out, I think, in the tender documentation, then you wouldn't have had to do any of this? All that stress and aggravation that you've just described, the difficult decisions that people had to make about balancing risk, would not have been needed because the facility would have been built in compliance with the standard and the issue would never have arisen. Would you accept that?

A I would accept that if what we thought we were getting had-- so I don't know all the standards----

Q No, I understand that.

A -- but having lived through it and having kept patients safe at the same time when you're trying to actually make these decisions, and the decisions are made by multidisciplinary teams based on risk assessment – and that will happen in the NHS, and it will happen and it will continue to happen because treatment advances go on and you have to make decisions – but if somebody had handed a hospital over, then it would have been so much better and so much easier because we had to do a lot of this while we were treating patients, and patients-- the only thing I would say is the overriding thing for us was the patients, that was-- that was it. Therefore, you had to make these judgments because it's easy just to have one side say, "Right, just don't do anything"----

Q No, you've said that.

A -- and then the other side say-- so it's about the patient and getting the best response you can address.

Q Well, I think this is probably, my Lord, an ideal time to have our coffee break, 15 minutes.

THE CHAIR: We'll do that.

THE WITNESS: Okay.

THE CHAIR: And can I ask you to be back for ten to twelve?

THE WITNESS: Okay. Thank you.

(Short break)

THE CHAIR: Mr Mackintosh?

MR MACKINTOSH: Thank you. Thank you, Dr Armstrong. Before we move on, I think I might have found the email which you were discussing that comes from Mr Loudon, but I want to just put it to you and see whether I'm right. Can we look at Bundle 12, Document 105, at page 815? Now, to be fair, the top of this email, it's not sent to you, but it's sent to Mr Loudon and I wonder whether any of this is ringing a bell with you. You see there's an email on 22 June, the bottom half of the page, from Mr Ross of Currie and Brown, explaining how the derogation came about. Is this something you would have been forwarded to you?

A No, it wasn't forwarded. The one I'm thinking of, I think you've already discussed it in the Inquiry. I think you discussed it with Peter Hoffman, I think.

Q Right. Well, we'll have another look. My colleagues next door will react and keep hunting. What I want to do is move on – if we take that off the screen – to the events that occur when Dr Inkster goes off on sick leave because of her lymphoma. In what way did her absence on sick leave affect the IPC team in the Queen Elizabeth Hospital?

A I think that, from memory, Dr Inkster went off on sick leave quite suddenly----

Q Yes.

A ------- and it was something like 13 or 14 June.

Q 2017?

A 2017, yes. She did carry a lot of sessions and I think that that had quite an impact on the team because she was doing a lot of sessions in Infection Control and that's not easy to backfill. So, I think that had an impact undoubtedly, and that's with all clinical services. In the NHS you don't have lots of spare capacity and, therefore, it did cause an impact.

Q I want to look at something that happened while she was off sick about six weeks later, which is Bundle 14, Document 69, page 696, which is an email to you from Dr Peters. So, it's a

long email, and I wonder, if you look on the screen, do you remember receiving this response-- this exchange with Dr Peters?

A Yes, I think there had been an earlier email.

Q There had. If you go onto page 700, we see at the bottom of the first email from Dr Peters, if we go back to 699 and onwards to 698, we see an email from her on 23 August 2017 and then we see a reply from you, top of that page at 698, and over the page on 697 we get her-- you reply on 3 September '17, and she replies back to you.

A Yes.

Q Now, what I want to just-- is check a few things so that I understand we're talking about what we're talking about, so these should be quick questions. So, in essence, the subject of this email is about the approval of work to 4B in Dr Inkster's absence. That's right?

A Correct.

Q Yes, and Dr Peters gave evidence that she emailed you because she'd raised it with Professor Jones and he told her to email you if she had concerns, and then you respond with a detailed answer in which you say she should raise future issues through appropriate channels. Is that roughly right?

A That's what's in the email.

Q Yes. Now, you, I think, have noted in your statement that Dr Peters stopped works going ahead.

A Yes.

Q Was that an appropriate thing to do at that time, as far as you're concerned?

A I think that there-- So, maybe just putting it into context-- No, I don't, but if I can give a bit of context on that. So, around about June of that year-- So, I've already taken you up to the point where the Acute Services Committee meets in, I think, March.

Q When the draft paper we looked at was being thought about?

A Yes, exactly. What happens there is that we all agree, the Acute Services Committee agree, that there needs to be work carried out in Ward 4B. Dr Inkster is also part of that decision-making process. At that point, she goes off sick around about 13 or 14 June, whatever it happens to be. There is then an email, which I actually have from David Loudon, which he forwards it to me because I'm keen the work goes ahead. In fact, the Board's keen, and the reason we're keen is because we know that there are issues with the patient----

Q Which you've described.

A Yes. So, what happens then is that Ian Powrie – who I've met, decent guy – he then puts the Scribe out with, I

think, Lynn Pritchard. I only know this-- I wouldn't know this level of detail, but we're keen to go ahead. At that point, they are then wanting the work to go ahead. Now, I'm not quite sure, but I heard the evidence of Sandra Devine that [redacted] had said that that's okay.

So, what I then found out – and I found this out very, recently because it's actually in your bundle – so the way it would happen-- and I actually get that email and I forward it on to Tom Walsh, because Tom Walsh is the manager. He's the general manager whom Dr Inkster reports into, and that's important.

Q Dr Peters?

A No, Dr Inkster reports into Tom Walsh. So, when you go off sick, what happens is you're supposed to say to your manager-- or your manager is supposed to say, "Jennifer's going off sick. Here's the portfolio of work that she's got," and then with Brian Jones, Professor Jones, they then look at that portfolio of work, and then----

Q So, why is it Professor Jones? Is that because he's the microbiology lead?

A No, Professor Jones had very kindly came across from Royal to cover. So, what I'm trying to----

Q So was he the lead ICD?

A He was stepping into Teresa Inkster's unfilled space.

Q But he was effectively the lead ICD?

A Yeah, he was acting----

Q Right.

A But my point is-- So, I'm just trying to say where I think this all went wrong, and this is actually only recently when I actually looked at this. So, what happens is, if you were following management things, what should have happened-- and I actually forwarded the email from me and Powrie to Tom Walsh about 25 June – I was just looking at – 2017, and what I say to Tom is, "Tom, here is a piece of work that needs to be done by somebody," and he's saying, "Yes, absolutely."

But then Dr Inkster actually emails Dr Peters. Now, Dr Peters is not Dr Inkster's line manager, and that's actually-- I've got it. It's in your bundles, which if you've got it there, we can have a look at it, because I only discovered this. So, what happens is it's emailed on 21 August, and in that email it looks like we've got the old version of The Bone Marrow Transplant discussion. Remember I said at the end of 2016 there was all of this debate about whether we could go back.

So, from what I'm looking at your bundle, I've got the bundle reference if you want it, what happens is she then forwards that on 21 August to Dr Peters.

So, rather than the line management structure being-- it's then forwarded, and it's actually an old version, which looks like it's saying-- is the one – and I can give you the bundle reference – on 16 November 2016, which was the one in which we were having real problems getting the BMT. It doesn't reflect what actually the Acute Services Committee says.

That's then forwarded to Dr Peters, who goes back to her and says, "Please be assured that you've handed over valuable information," and so forth. That then goes into, I think, the 21 August meeting, which they're trying to get the SCRIBE forward and then it stopped.

Q Just a moment. Before we go on, let me just check something.

A Yeah.

Q The information that we have some evidence, some written, is that the reason it stopped is that these clinicians, these ICD session doctors, don't think they have enough information to sign it off. That's their professional judgement. Are you disputing-- that their professional judgment is wrong at the time, given the information they had?

A No, I'm not disputing that. So, that's the bit that I'm-- that's what I said with Sandra Devine's evidence. I don't know enough about that bit, because what Sandra Devine seemed to say was

that [redacted] had said, in an email, "It's okay if Lynn's comments are taken"-- So, that's the bit I'm a bit uncertain about, but it certainly stopped on 21 August and there is-- and the problem is that the emails are coming from from left field into this.

Now, what should have happened is that should have gone to the management team, who then can say, "This is the piece of work that requires to be done. Who's going to do it and what support do they need?" But what happens eventually, and you'll see it in my 3 September response, is that Professor Jones, who is an expert in these matters, was actually very, very good. He stepped into the breach to sign off the HAI-SCRIBE so that work could take place, so that we can do the monitoring, so that we can get the patients back.

My point is, if things go-- if things are passed between people without a formality, then things start to go wrong, rather than going to the general manager who's got responsibility for that service. That's where I thought-- and when I saw the email in the bundle, that made a lot more sense to me because I hadn't seen it before.

Q So, is this in fact not the same issue that is being mentioned in Dr Stewart's review of infection control back

in 2015? One of the issues is that he's been told that some ICDs are not making decisions that they've given the power to make? Are we basically dealing with a scenario where, at this point, something's gone awry in the Infection Control team, and it's the same fundamental management issues that have been around for two years?

A What I'm trying to describe is a bit similar to that, but slightly nuanced. What I was trying to do is piece together what happened here, because I'd been aware of this for a while, and in the public-- when I was looking at my own bundles, I found this just by chance. I then realised-- So, what happens is when you've got parallel lines of communication going on, then things go wrong because rather than going up through the management chain, so the manager then says, "Brian," or whoever it happens to be, whoever it happens to be, "Here is what we need done. Here is what happened in the past," and also giving a consultant, particularly a young consultant, some help and some support, but what happens here is different.

There is communication going on that they are not aware of which is giving the wrong information, from what I can see, and I can take you to the bundle because I've got it here. It gives the wrong information.

Q What bundle is it?

A It's Bundle 14-- bit of an awkward screen, this, but----

Q Bundle 14, Volume 1----

A Bundle 14, Volume 1, page 582.

Q Let me get it on my page. I'll just look at it first.

A There it is. So, I don't know if the Melanie McColgan one was attached to that email or if that's separate, but if it is attached to that email, what you'll see there is that is the-- that's the six months out of date from what we did in March 2017 because, at the end of 2016-- and you'll see that, "… advised… unlikely to provide long term solution for BMT." That's what that says, and what I'm trying to describe to you is a multidisciplinary process which weighed up the evidence in 2017. So, if that was attached, then I can understand why there was a lot of confusion.

Q So, you would understand that the response of Dr Peters and Witness 7 to that email would be to not sign it off? You appreciate that?

A I-- if that's the case – and I'm speculating here because I don't know if that was attached – but if I was in, say, Dr Peters' position and I'm getting that, I would look at the first line there and say, "Unlikely to provide a long term solution for BMT," and therefore I might-- I'm

speculating. I don't know, but it was quite interesting because it happens exactly at the time when they all met on 21 August, and all I'm trying to say to you----

Q Okay. Let's take that off the screen and just wrap this up with a single question. You've described just now, based on looking at your bundles in the last few days, your suggestion about why this went wrong. I just want to check that's right.

A I----

Q You've given an explanation about why this went wrong. You'd accept that?

A I tried in my own mind to think through what happened, and this was an additional piece of evidence which might make the picture fuller.

Q But is there not a similarity between these events in '17, in August '17, and the events in late '15 when Dr Inkster is asked to sign something off? This is what I want to suggest to you, that the management structure that's operating in the Infection Prevention and Control team is not ensuring that information is passed around, that people are being asked to make decisions with either the wrong or limited information.

Now, we can have a conversation about whose fault that is in terms of providing information, but would you accept that people are being asked to make decisions based on either wrong or limited information?

A I think that, if we go back to the 2015 issue that you've just described, my understanding of that is that there had been a piece of work taken forward by Professor Williams and the contractor. I think what happens is that Dr Inkster becomes the regional ICD.

Q Well, I think she's been that for some years, but keep going.

A But-- yes, so she comes into that role and she looks at the work that's been done and she says, "I don't think this is going to pass muster," which is absolutely her right to do, absolutely her right to do. There is also evidence, I think, that shows that there was a lack of information being given from the time the hospital opened, and I think you've described that, which is from the Estates, the validation side, the-- all of these things that people need.

I think the management team of Infection Control, had they had that information, would have been very happy to give it over, but it wasn't their information to give, if you see what I mean. So I think with this particular issue, because it didn't go through the proper management structure, and there's a calm, thoughtful way of doing it, that there was information coming from left field which was not then being put

forward, which made that difficult----

Q So, the question to resolve this is: if there's been a repeated example of information not being given or not being noticed or the wrong information being given, was there something wrong with the management structure operating Infection Prevention and Control at that time?

A I think what I'm trying to say to you is that the Infection Control team that we had, I don't recognise that, because what I saw was that they had senior management team meetings, a lot of them are minuted, and you've got a lot of these in the bundle. We sent them to you. We've got an Acute Infection Control and a Board Infection Control team and there's a lot of information being given there.

The question, I suppose, that I've been grappling with is: could there have been a better way in which that information was then cascaded into different clinical communities? And there was, I think, a microbiology leads meeting, and could there have been a better way in which there was a regular information flow going to them? But I wouldn't accept that the senior management team or, indeed, the Infection Control team were withholding information or not giving information. They were giving the information.

It's really around, in a big system like GGC or indeed in any health board, how you make sure that people get the information that they require in a much more systematic way, and I would accept that. I think, in terms of that, that that could have been improved.

Q Right. Well, I want to leave the topic of Ward 4B now by asking a couple of brief questions. So, patients eventually returned to Ward 4B from the Beatson in June 2018. Was the ward ever accredited by JACIE?

A JACIE? Yes.

Q And when was that?

A It was-- I think it was May of 2020.

Q Okay. Now, the next question is: patients returned to Ward 2A in 2022. Did NHS Assure offer to review, assess, accredit, or any of the-- assure, even, the work done to Ward 2A?

A I wasn't involved in that process, but I'm sure we could provide you with that information. I just don't know that.

Q Are there currently any outstanding issues with water leaks, mould or ventilation faults in any of the specialist ventilation wards – 2A, 2B, 4B, 4C, 5C, and 5D?

A I don't have that information but, again, we can provide you with that. It's not the sort of information that I would

routinely----

Q Okay. Now, I want to move on to the Stage 1 whistleblow. Now, you receive a series of emails from Dr Redding when she's on holiday. You wait till she replies. You ask for an SBAR. Let's look at the SBAR, not to go through it in detail, but to ask just some broad concepts. Bundle 4, Document 20, page 104. Which of the issues in the SBAR were you not already aware of or were new to you?

A That is a good question. I can't-- I'm trying to put myself back in time, and that's quite difficult because I've been reading this a lot.

Q Because I'm just wondering, at a very broad level, would you accept that there are quite a lot of things, not necessarily all of them, not necessarily very few, but quite a lot of things that were probably news to you at the time?

A I wouldn't say quite a lot, but there's bound to be something there.

Q Yes.

A I just-- If you go through it. I did want them to write it down. I wanted to see it all.

Q And would you accept, at the time, the three whistleblowers were acting on their duty, the duties they hold under good medical practice, to advise people of problems that they think they can see?

A I think that----

Q You can take that off the screen.

A Yes. So, I think that I didn't mind them writing to me. I've got a pretty open-door policy. So, for me, yes, I think there were other ways in which it could've been dealt with before it reached me, but I don't-- I want things-- I asked for them to write it down so that I could systematically address it.

Q Okay, all right. So there's a series of things that were given in evidence by Dr Redding and Dr Peters about the meeting on 4 October; I need to put them to you. So the first one is Dr Redding described the meeting as difficult, and she felt intimidated by the large numbers of people who were there. How do you respond to that?

A I think that coming into a meeting like that probably could be because I had got-- What I wanted to do was-- I think I heard one of the KCs-- I suppose what I wanted to do was I wanted to get the directors because a lot of these things are not in my bailiwick, but I wanted to make sure that we were taking it seriously. Therefore, I can see that coming in – and I heard some of the evidence that was given – that that might appear that way, but it was not in any way conducted in that fashion.

Q Okay.

A I walked out with Dr Redding, and I remember it because it was in the QE and the TLC, I think it was, and I walked out with her at the end of the meeting.

Q Yes.

A And it was it was a pretty decent exchange.

Q So Dr Peters gave evidence that you said at the beginning that all comments should be addressed through the chair. Did you do that?

A No. What I was trying to do was, because I was aware that there were going to be-- there had been some interpersonal issues between some of the participants, what I did set out at the beginning was the GMC code of conduct. Therefore, I was trying to get people to be respectful, and I don't recall discussing it through the chair. Maybe I did say that. I don't know, but the meeting was not like that. It was a free-flowing meeting with people talking to each other.

Q Dr Peters gave direct evidence here a few weeks ago that when she introduced herself at the beginning of the meeting as head of department at Queen Elizabeth University Hospital Microbiology, you responded, "You're the head of nothing. Brian is the head of service, just to be clear." Did you say that?

A No. It's Dr Peters not Dr Redding, so----

Q Sorry, Dr Peters, yes.

A No, I-- So, I have just set out that this is a GM-- I'm using the word "GMC" because all doctors understand that. So I'm trying to set out a professional-- I wanted it to be professional. To my mind, I wanted to walk out of that room having addressed-- or not even addressed, but having understood all the issues, documented them, and then I was going to really run with them.

Q Did you at the end of the meeting have any concerns about the behaviour of anyone who was there?

A No.

Q No. So, an action plan is produced, 27-point action plan. To what extent did the action plan set out actions that were not already being carried out by the Board?

A From memory, I think a lot of them were already being carried out by the Board. I just need to-- I can't remember exactly----

Q Well, let's put it on the screen, Bundle 20, Document 48, page 792. Again, I don't want to----

A Go through it----

Q -- go through it line by line, but all I'm in a sense putting to you is that-- Bundle 20, Document 48, page 792. That's not bundle-- I've got the wrong

place. Yes, it is, sorry, three pages on. There we are. I don't want to go through it line by line. I don't think that's necessary. It just-- Am I right in thinking that there will be stuff in here that is to be acted on by the Board that wasn't being acted on by the Board before the SBAR?

A There's not that many. Just quickly, so I think the front page we were pretty much doing. Yes, you can go to 12 now. I've read that. So I think most of that page we were doing, and then, yeah, they raised some decent points. But some of them it's not actions; it's actually increased number of line infections. We were doing that. Yes----

Q So, in broad terms, they were raising----

A So in broad terms, yes, we were doing most of it, but I think they were right to mention a lot of it. I had no problem with that.

Q To what extent might it be the case that many of the things they were raising, because they were microbiologists, they simply wouldn't know about because they weren't in the management structure that was addressing them in the way you've just described this morning?

A I think that's a good point because I think that they had a lead microbiology meeting, and that was the point I was reflecting on. When I looked back and I had a look at the minutes of that meeting, Dr Inkster attended some of them but not all of them, and I did wonder-- I thought, "I wonder if we should've created a report," because in order for committees to function, you've got to create a product that goes routinely to them, and I did think, "Was that a missed opportunity? Should we have created a regular report, rather than them having to ask about it?"

Q So, at this point, it's late 2017. Was five sessions a week enough for the lead ICD for Greater Glasgow's Health Board at this point?

A Again, I think the operational team were managing that so I wasn't detailed-- being involved with that. I think that a lot of the work of the new build contributed that, and we see that coming on----

Q But I'm asking you as medical director because you're the professional-----

A At that point, I suppose what-----

Q Do you think it's enough?

A What I was getting advised by the team was that the sessional commitment was fine. I think that with the additional work of the new build, whether or not we could've increased those sessions, possibly yes, but I do think----

Q So Dr Redding has made the point that she might've been reassured if someone had sat down with them and taken them through what was being done in the action plan in the months after this was produced, and that she might not have even needed to make the Stage 2 whistleblow if she just actually had information about what was being done. How do you react to that?

A I think there are-- In two ways. The first way I would say is that I could've got the action plan to them sooner. I think that's correct. However, what I would say is that – and I was just looking at it last night – there was a series of something like 20 emails that went between-- even just me alone, between late October through to February because we were giving updates. There was three big emails: one in November; one in the January where Ian Powrie comes in and gives a huge amount of information on the ventilation within the Queen Elizabeth; and then there's one when Dr Inkster comes back, which is the patient placement policy in February.

So there was a lot of there was a lot of email traffic going on, but I think we could've done better in terms of providing a report, and we waited for Dr Inkster to come back from-- because it was pressurised. You know, Brian Jones is stepping into the breach, and she came back and she shared-- And I think she did the right thing. It was something like 13 March, because I was copied in, 2018---

Q '18.

A -- with Dr Peters and Dr Redding, and we probably could've done that earlier. I probably should have done it in December.

Q Right. Let's move on to the events in 2018. You've covered the water incident in some detail in your statement – and just for our own notes later, it's question 203 on page 219 to 225 – in quite a lot of detail. You've described how you receive an email from Dr Inkster on 1 March 2018 at the time the Beast from the East storm?

A Yes.

Q You've said that you had no concerns about the water supply before that date. I wondered if I could put this to you. There had been a series of IMTs around bits of the water supply, like the aseptic pharmacy, in previous years before then. Had you not heard of them, or were they not presented to you as being a wider issue?

A So, the way that I would normally hear about-- So there's an-- not an informal way, but there's a way of which I would meet with the Infection Control team, and I met with them regularly because it was a, you know,

significant focus for me. They would tell me about infections. The other way, which is the more formal way, is that the amber and reds here would come up through the-- So not all infections but the ones of which there were IMTs or whatever would come to the Board Infection Control Committee, or I would be aware of something. Sometimes I'll-- You know, there's an example of that in 2017 when I will look very closely at something because I'm worried about it.

But, no, I think that I wouldn't have-- Some of them are PAGs, so I think that aseptic pharmacy was actually a PAG, which I wouldn't have been aware of. I am also assured by the work that was being done by the Infection Control team to test the water when it was required. There was nothing coming up to me that said, "Look, we've got a lot of these infections, and there are positive water samples," not at all.

Q So, from your point of view as medical director, what is the system in the Health Board that is doing the job – because I appreciate it's not your job – of ensuring that the water system, domestic water system, is safe or is at least not being managed in a manners that's high risk for, say, Legionella and Pseudonomus? What's the system that's doing that?

A I think, again, that's not in my

my remit. That would be something which the director of Estates would be better-- So, Tom Steele would be better addressing that question because I'm the medical director, so I don't know all the details, but I know there's been a huge amount of work done by GGC to improve the system.

Q No, but I'm thinking of back at this point because we've seen the Board Water Safety Plan and we have the Water Safety Group co-chaired by the director of facilities and the Infection Control manager. So I'm wondering what information you're getting from the Infection Control manager about Pseudonomus, given your responsibility as HAI executive lead.

A Yes, I mean, I think that a lot of these things would be done by-- if there was an exception report. There was a Pseudonomus risk assessment that came through the BICC, but a lot of these areas would be on the-- If there was something abnormal, somebody would have told me, but I didn't get routine reports from the water group, but there was, I think, a Pseudonomus risk assessment that was signed off by Infection Control, Estates and the lead nurse, I think.

Q I wonder if we can look at two documents, one just to put it in context – I'm not going to ask you more than one question about it – which is the water

incident debrief meeting on 15 May 2018. That's Bundle 14, Volume 2, page 211. Now, do you remember this meeting?

A I don't, but I see I'm there.

Q Well, in that case, I'm not going to ask you about it. I'll ask you about the second document, which is a report that came from it, seemingly. Bundle 27, Volume 5, Document 19, page 46. This is drafted by Dr Inkster and seemingly sent to everyone who attended the meeting. I wonder if you remember seeing this document?

A If I attended it and she sent it to me, fine, but I probably don't. I don't remember seeing it, but I must have seen it.

Q Because the reason I'm asking you this question is if you go to the next page, we see a discussion of the type of the incident and the idea of a contaminated water supply. All I wanted to ask you is this: if we go back to the end of May 2018, if I'd come to you and said, "Dr Armstrong, is there currently some suspicion of a contaminated water supply in the hospital?", how would you have reacted?

A I think at that time-- I think Dr Inkster is right in this. At that time I was absolutely-- Yes, there's something in the water. When I-- It was particularly around when there was the-- middle of March, yes. I mean, I felt at that point, because what I was being advised of was that was the case, the thing that I remember most was that concern with the patients. That was kind of-- because water is, like, everything.

Q Yes.

A So, therefore, where we were coming from was, "What do we need to do quickly to make sure the patients are safe?" So, yes, I bought into what was being said.

Q Do you now have any issue with the suggestion the water system was contaminated?

A I think it would be better for you-- I don't have-- I think it would be better for you to address that question to other people with greater expertise than me because I think I don't have the expertise to really address that.

Q Do you now have a view, based on what you know now, as to whether there is a connection of any sort between the infections that were being seen in Ward 2A in the first eight months of 2018, any of them, and the water supply?

A So, the position, I think, of the Board----

Q I get the position of the Board. It's your position I'm getting at.

A So, yeah, I think at the time we all believed it, and we all put in measures to do that. But with the evidence that

we've got now, and that, I think you heard, there was whole genome sequencing for a number of the organisms but not all, then it would seem to us that we haven't made the connection between whatever was in the water and what was in the patient. In some of the bugs, we've got whole genome sequencing for that which would make it less likely, and in some of the instances we don't have that. But when you look at the, you know, "How did it get into the patient? What's the portal of entry?" then it's uncertain as to how that occurred. I guess the position would be-- or the question would be: is the environment more risky than any other environment in any other hospital in the UK? And we have not found evidence to say that.

Q So you'd like to see comparisons with, say, Leeds or Great Ormond Street or Oxford or Cardiff and Vale, for example, to see what their infection rates are?

A If you look-- Well, again, there's the broader issue of the broader environment but, again, if you look at the minutes in March of 2018, we got an email from HPS saying, "We're going to do a bit of a"-----

Q No, I realise that, but I'm asking you a question.

A Yeah, so what I'm saying to you is I was very, very keen in 2018 that we needed to look at other units in the UK.

Q Right, so would you be interested to know what the comparison is between Ward 2A in 2018 and equivalent wards in other tertiary centres across England and Wales? Would that be a piece of information that would help you understand the issue?

A Yes.

Q Right, okay. Because we'll come back to the epidemiology towards the end because I want to wrap it all up in one series of questions. It seems more efficient in time, but what I wanted to do now was to ask you about a particular point that Dr Inkster made, and I don't think it fully came across in her statement but it came across in her oral evidence, and that was the idea that she says she put this to you in the early part of 2018, that there should be some form of executive control group to parallel the work of the IMT and, in some sense, for it to report to them because, as she put it, she's only the chair of the IMT. She can't make big decisions about resources. Now, do you remember that conversation with her?

A I don't, but I do have emails around that.

Q Do you think that would have helped?

A Yes, I think that I am-- so the email trail I've got is us setting up that executive group, and I think I was emailing the chief operating officer to say that and also that Dr Inkster would be a member. That's the email trail I've got. I do believe that when you have long IMTs with lots of actions, lots of resources and lots of things that need done, to put all that stress onto the IMT is not helpful and, in fact, if you look in the guidance, it says that actually that's good practice. So, yes.

Q So was the group set up?

A I believe it was, but I'm not sure how effective it was. There was a group where Kevin Hill was the-- because I found some emails – I can't remember it – where he actually would give us an update on things. But I'm not sure how effective the----

Q Because even if it wasn't set up, was there, in effect, something similar in that at various points we're going to get to from now on, things that are thought by the IMT to be a good idea, such as fitting chlorine dioxide, are taken forward by executive bits of the Board? Is that something that effectively happened?

A The fitting chlorine dioxide, I think that was the Water Technical Group that did that. I think that was set up at the end of March, and so things like that's a huge engineering feat. So, of course, that's going to be taken off but I-- I mean, I didn't attend the Water Technical Group, but what I understand was that they oversaw that, but it was a significant engineering feat that would be-- certainly not expecting the IMT to do that.

Q Because one of the things that I'm trying to get from you, and I've not quite got it, is that if it was a good idea to have an executive control group, presumably it would have been a good idea for you to be on it and for the IMT chair to be there to report to it. I don't think you're saying it actually happened in that format?

A So, I'm talking about something different then.

Q Yes.

A So what I'm talking about is----

Q But I want to know whether the thing that you talked about happened. Was it set up?

A The thing that we set up-- So I don't-- So, the thing that I was talking about was Kevin Hill updating me and the chief operating officer. So that's not what I'm talking about.

Q No.

A So what I'm talking about, and I'm not sure it happened effectively, is you need operational management, not people like me, but operational managers to take the actions that are required to progress the-- to do stuff and, therefore, if

you take that away from-- so the IMT says, “We need”-- whatever they need, and then the operational management team goes ahead and does it. I think that’s a much more effective way than trying to get 10 teams to then do it and you’re trying to coordinate it all.

Q But there wasn’t a meeting set up on the basis that you and Dr Inkster discussed where you and she and the operational people will be in the same room and it would make decisions?

A No, that was not what I discussed with her, I don’t think. I wouldn’t----

Q Sorry, I misunderstood.

A Yes, yes.

Q So I thought you said that----

A So, I need to go back and check. No, that-- I would not have been on that type of group at all. It would not have been-- it would not have been me to go on that group with lots of operational managers because, again, the governance structure-- I come in and advise people and get involved, but the governance of the operational management team goes up through the regional directorate up to the chief operating officer.

Q So, if you’re having some form of executive scrutiny of the work of an IMT in terms of ensuring that its operational consequences happen, wouldn’t that need to involve someone like the medical director to bring a clinician’s point of view at a senior level to these decisions?

A So, if there was a need-- that would be really, I think, taken forward by the operational management teams.

Q But they’re not clinicians.

A Well, the clinician part comes in in the IMT. The operational management team-- just so I can describe this, and I didn’t really do it particularly well at the beginning, the NHS in Scotland has a general management function. So the general manager will lead-- so I report into the chief exec and the nurse. So that goes all the way down the organisation and the governance route, and that’s really important for patient safety, for money, and for staffing. So the government-- the acute sector has a 2.1 billion budget, 21,000 staff. That’s with the chief operating officer, and then it goes down through the regional route, or Women and Children – we’ve got six divisions – and that governance is very strong.

So that needs to-- so, for example, just to give you an idea, if they needed some capital, for example, then that needs to go through their capital group because you’ve got a certain amount of capital but you don’t have unlimited----

Q No, I understand that, but----

A -- so it wouldn't be appropriate for me to sit on an acute----

Q Okay. Well, we'll come back to that in a moment. Let's just pick up an issue on the way past which is the emergence of the DMA Canyon report. Now, you've described in quite clear terms how you felt when you found out about it.

A Yes.

Q And Dr Inkster has described in quite clear terms how she felt when you told her about it and what she did and how she had to go and get a copy and all that. That's all been described, and I don't think there's any real dispute about the the detail. But one thing that she has said in her evidence is that she felt a measure of disquiet that she would have been sitting, in her case, in Water Safety Group meetings, but also in meetings around the IMT, with the very people who might well have known about the DMA Canyon reports, and she feels they should have told her. Had you been sitting in meetings with people who should have known about the DMA Canyon reports and didn't tell you?

A Not that I'm aware of.

Q So you would never have had meetings about-- where water came up with Mr Gallacher or Mr Powrie or Mr Louden?

A I don't think I would have been in meetings about water with any of that group of people. I might have been in an IMT. I can't remember if I was in any of the IMT-- I probably was, actually. So I would have been in an IMT, I think in March. I think I was in March.

Q So it would have been rare, from your point of view?

A Well, I would go-- yes, it's rare for me to go to the IMT and it's usually at the request of the clinicians or the chair.

Q Okay. So I want to ask one question which slightly threw me, and it may be I'm just misunderstanding. You explained in your statement that you hadn't read the DMA Canyon reports in 2015 and 2017. Is that right?

A Yes.

Q You produced a presentation to the Board about them on 3 July 2018. Are you really telling us you hadn't read them?

Q So I always think, as medical director, you've got to be really careful that you don't assume an expertise that you don't have because then people start listening to you and you don't have that expertise. So I-- the DMA Canyon report, it does stick in my mind to this day. The chief executive came into our office and the reports were there. Now, I have-- I have not got the expertise to understand what the report says, but I do know when I need to-- I do have the expertise to

know when things are relevant. What I gave to the Board the next day is nothing about the actual report. It's about the----

Q Well, let's look at it. It's bundle 27, volume 8----

A -- we found it.

Q -- page 58. So that's the header. Let's look at the second page. This is your presentation. Do you see the second bullet point?

A Yes.

Q And that comes from the IMT, I think, and over the page, the priorities. Are you-- and you see it says, the bottom of page 59:

> "External Contractor reports from 2015 and 2017 identified recently, with considerations around implementation. "

And you're clear you didn't read the reports when you made this presentation?

A No. What we were trying to do then-- I actually can't remember this meeting but I found this presentation so I wanted to give it over. I think at that point we had-- So, I had been talking to the Board about the infections and I'd been reporting through (inaudible). I knew the Board, and I can't exactly remember who said we should do this presentation but what we were trying to do – it's a Board seminar – is make Board members aware that this was an issue. I'm not going through the detail of the report because I wouldn't be the right person to do it, but what we were saying to them is we found this report, and we go on to set up-- sorry.

Q I want to just clarify something now about the decant of Ward 2A in September 2018. Now, we've obviously had evidence at this hearing and at the last hearing, particularly from Mr Redfern, about his options paper. So we know about the different options and we know the difficulty of the decision, and I'm not wanting to ask you about that. What I want to do is simply to understand something that seems to be missing from your statement. Who was it who made the decision to decant the Schiehallion patients from Ward 2A to, ultimately, a ward in the main building?

A So, what I gave you in my statement was minutes of a meeting on 14 September.

A Yes.

A Yes. So, what happens is that when you have a decision of that magnitude, then it is perfectly proper that the IMT members – and you see in 14 September----

Q So this is page 250 of your statement?

A Yeah, sorry.

Q And there's a full executive

meeting on the 14th. We've had evidence about that.

A I've given you the-- I've given you the minutes of it, if you've got them.

Q Yes, I have. I don't need to look at them, but----

A Okay. So, what happens there, from looking at the minute, is senior members of the IMT come and they meet senior members of the executive team and they then set out their rationale as to why they think this should happen. Now, what they're looking for is the executive team to approve that decision.

Q And indeed, at that meeting on the 14th, they don't actually approve it, do they?

A I was thinking about this because you-- in my bundle, there is then a meeting on the 17th of whatever it is, which I can't remember at all but I've gone back to----

Q Well, there's a meet-- there's an IMT. The reason-- I'm trying to cut this short because there's a simple question to ask. You have the meeting on the 14th----

A Yes.

Q -- and on the Monday, the IMT on the 17th, it's reported that the executive team haven't actually made the decision and there's some talk about getting a drainage report done. I'm not going to ask you about that. Then there's an IMT on the 18th, and what there's also is a meeting that's missing from your statement.

So this is Bundle 19, Document 34, page 614, and I wonder if I can show it to you. It's in your document list. Can you help me? We've had some evidence, not from people-- well, we've heard evidence from Mr Walsh, who didn't really remember it, but it's reported-- seems to be reported by Kevin Hill to the IMT when the IMT meets about two hours later, but what is this minute of?

A Yeah, I cannot remember this at all, but I was obviously there. So I went back and I asked, "What was the water review meeting?", first of all, and what the water review meeting was was a twice-weekly meeting which I was not at, and that was to to look at the DMA Canyon report, I think. We seem to have joined this meeting on Tuesday, 18 September because it's only appearing in my diary once, and we've discussed it with that.

My memory of it, and it's a bit vague and you're right, we're a wee bit vague on this, is that we actually had made the decision, I think, by the end of that Friday 14th because it was the afternoon after the IMT, and that we realised-- because if someone comes in to you and says, "The ward is unsafe. We need to decant," then

the executive team are going to do that. What the 14th says is that-- Jane Grant was the chief exec and she's very experienced. She wanted the risk assessment, I think, and some reassurance about that, but you're right. In this, it looks as though in page 2 there's a lot of discussion and debate.

In the end of the day, I actually sent an email to Jane on 18 September because I read the minutes and I was concerned because, at that point, Brenda Gibson says, "I'm in London. I hope people with expertise"-- and I knew we'd made the decision by that point, so I'd emailed James----

Q But had you? Let's look at the IMT minute----

A Yes, we pretty much had.

Q -- for the 17th, which is Bundle 1, Document 39, page 169. So this is an IMT which you are not present at. If we go onto the bottom of page 171, we see report back from Kevin Hill from the executive meeting on the Friday, which is the 14th, and do you see how it's, "Giving consideration to the options," which is Jamie Redfern's report:

> "The executive group will wait until a drainage expert will give a preliminary scope on how to carry out their work and see what they find."

And then Ms Dodd describes her concerns; she's given about that concern. So, it's clear the IMT were told on the 17th that the decision had not been made on the 14th. So, what I wanted to check is: is there any reason for the Inquiry not to conclude that the decision to decant the ward was made at an executive level on the 20th in the water review meeting?

A I can't remember the detail and it's fuzzy. I thought we'd made it on the 14th, but I can't be definite about that. I know that there is an email trail between myself and Jane because she's come back on the 18th, and what I've said there is, "We better let the IMT know," because I'd read the minutes and I'd seen Dr Gibson's comment, and what I say is, "They seem to not realise that we've made the decision. We better make sure that they know," and Grant Archibald then goes to the meeting on 19 September.

Q On the 18th actually.

A Oh, sorry. No----

Q It is the 18th, yes.

A No, it's on the 19th because it's----

Q It's on the 18th. Bundle-- same bundle, if we jump onto page 175. Again, you're not present, and then we go onto the next, onto page 177----

A I was there, you're right. You're right.

Q "Grant Archibald informed the

group…" So, what I want to just check, because I appreciate you don't remember but we need to get this right, is that on the 14th there's an IMT. It's followed up by a meeting in which there is some discussion but no decision is made. On the 17th that is reported to the IMT. The morning of the 18th a decision is made, and that is then reported to the IMT on the 18th. Does that sound right?

A It sounds right but I can't confirm that. I had in my head that we made it after the-- but you've got evidence that suggests otherwise.

Q Because the point overall, I suppose, to take from it, the very high-level point is that this is an example of because of the knock-on consequences – I mean, the patients who had to go, I think, to Gartnavel from the site, from 6A – the decision to decant couldn't actually be made by the IMT. It had to be made by an executive group because it's significant decision for the Health Board.

A So, what I would say is that you're right. We were approving the decision that came from the IMT and you're absolutely right, the IMT could not do that. So, what they said to us was it has to be in the adult acutes. We went through-- if you go through----

Q We remember the discussion, yes.

A So, we were really interested to know, "Right, where do you want to go with this?" and the view, from memory, was that they wanted 4B for the neutropenic transplant children, three or four beds, and then the other ward had to be somewhere within the tower of the Queen Elizabeth.

We then tasked Anne Harkness, who is the director of the South, to find a ward, which is not easy to do that. Then it was back to the IMT, and what you'll find is in the Board meeting that follows this, I report – because we wanted it public – that the IMT had given advice to the executive team and the executive team had accepted that advice.

Q The important point, the one I suppose I'm labouring to get to, is that whilst in the end on the 18th the IMT-- the executive team in the water review meeting did accept that advice and take that decision, it didn't initially do so on the 14th, did it?

A I thought it did.

Q But the minutes suggest it might not have.

A But you're right, I can't defend that because the minutes suggests that, but I was pretty convinced by that point that we were heading towards a decant.

Q So, I want to-- yes, I think you've probably answered that question already. So, before we move onto the rest of the year, at this point – because

it's going to become important, unfortunately – how would you assess your working relationship between you and Dr Inkster in the autumn of 2018?

A I thought it was reasonable.

Q Was there any-- from her point of view, did you see any pressure points with the way she was working or the burden of work or the sort of work she was doing? Thinking back how you thought at the time.

A No.

Q Let's move onto the early months of 2019. Now, I want to look at an IMT which you weren't at and it's an unminuted meeting, but I'm going to put the IMT up on the screen just so we can have something to look at while we talk. So, the IMT of 18 January 2019, which is Bundle 1, Document 61, page 274. So, this is the fifth-- sorry, the seventh Cryptococcus IMT. Now, for context, Dr Armstrong, this is the IMT that approves a short-term decant from Ward 6A to the CDU, the Clinical Decision Unit. Do you remember that happening?

A Yes.

Q Right, and I've had some evidence about this and I need to sort of try and put it to you to see if you can help me out because there's some differences. So, we've had evidence that there's a meeting either later that day or a few days later – there's some uncertainty – in the ward or near the ward at which present is, perhaps unusually, the chief executive. She's come over to have a look. You, Mr Best, Professor Walsh, Sandra Devine-- sorry, not Professor Walsh, Mr Walsh, Sandra Devine and possibly Professor Steele and Dr Inkster. Do you have any memory of such a visit by Ms Grant to the ward?

A Yeah, I've got a memory of that meeting, yeah.

Q Right. So, what's happened at the IMT is there's been a debate, and you can see it in the minutes, where some people on the sort of Estates side, I think possibly supported by some of the Infection Control nurses – it's not quite clear – are of the view that certain building works to rooms can go ahead while the ward is occupied because there are various mitigations that can be put in place. That's one thing that seems to have happened at the IMT. There is a view taken by Dr Inkster, which is perhaps that, "No, that's not safe. We need to get out of the ward while this is happening." Now, in that context, what do you remember the discussion being at the meeting with the chief executive about that decision?

A I don't remember that degree of granularity. What I do remember is that the chief executive quite properly wants to walk the patch and to

understand what's happening, and to be-- and often as an executive you do do that. You don't sit up in your office when things are-- you know, you just don't do that. You go down and look at things, and that was what I think was happening. I don't remember all the debate about patients coming-- where we should-- where the patients-- I suppose from that point of view what we were trying to do was say, "What is the best that we can do for the young patients and where should we put them?" and there was a debate around the addition of 4B but I can't really remember it.

What I do remember is I thought it was a reasonable meeting where you had senior managers who have got experience asking questions, and that's what they need to do. Then at the end of it I did, I think, support Teresa in her in her view, but I don't remember it being-- I just don't remember any more than that.

Q That's very helpful. I now want to move onto the Cryptococcus cases in the winter of '18/'19. I've got four questions, and then some later ones. I think you already could have told me what the answer is going to be to this, but was there a particular reason that you attended the third Cryptococcus IMT on 16 January? Because it's the first one you attend. It's Bundle 1, Document 58, page 261. I just wonder why that would

be the one you attended. If there's no particular reason, that's fine.

A Yeah, just let me just think about this.

Q It's about three meetings in.

A I think it was the Wednesday. I think it relates to that Wednesday, 9th if I'm-- So, yeah, I remember this. I don't remember the meeting, but I'm looking at that and that's what's triggering me there.

So, what happened was the week before that I had looked at the IMT minutes, first of all on the Monday, 7 January, and I was anxious about a couple of things, and at the same time I think Brenda Gibson emailed me because she was extremely anxious as well. Sometimes this does happen, because you've got to sometimes do this. I had asked for a meeting on Wednesday, 9 January. I went down and I thought at that point that Dr Inkster was there, but she'd gone on holiday so she'd chaired the IMT on the Monday, but she'd gone on holiday.

What was making me anxious was that-- and I didn't have the experience of this, but what was making me anxious was, one, the clinicians were anxious; two, there was things in the minutes that I didn't quite like, and so I asked for the Infection Control team. There was two Infection Control doctors there plus-- I can't remember exactly, clinicians and all

the rest of it, and I did wonder about HEPA filters at that point because I thought, “Gosh.”

Now, I remember early in the morning asking Tom Steele, “Can we get HEPA filters?” because in the minutes on the Monday it talked about that and I thought, “Well, why can’t we just deploy them?” What he said to me was, “We’ve got”-- I can’t remember how many but, “We’ve got a lot of HEPA filters,” because we’d already moved them for 4B. So, 4B broke down. We had this big stack of----

Q You had a number of them in storage?

A Yes. So I pull together the meeting on Wednesday, 9 January, and I make sure that there’s Infection Control people there because I’m not-- not appropriate for me to do it. Jen Rodgers was there and there was people from the ward there, and at that point we thought, “Just deploy them.” Now, it’s outwith the IMT, I get that, but we just thought----

Q So this is you effectively coming along to almost report back that you’ve done that and why, effectively.

A Yes. So at that point there was debate about air sampling, about that-- and, again, I don’t know that, but if you’ve got the minutes of that, there was a big debate about where you put the HEPA filters. Now, I’m pretty much out of my comfort zone, but what I’m thinking about is I need to make an intervention. It was out of the IMT focus. So, I think I went along to that because I’m thinking in my own mind that I’ve got to provide continuity so that these people understand what we’ve done last week.

Q That’s helpful. Now, soon after this meeting, I think the executive-- the expert subgroup is set up. You’ve mentioned that in your statement. Dr Inkster’s position is that, in a sense, it was her idea because she wanted not so much to find out whether there was a link between the building and the infections, but to make sure that nothing had been missed in terms of taking steps to mitigate any risk that did exist. What’s your recollection of why the subgroup was set up?

A Yeah, I’ve a reasonably clear recollection of this. So, it was the end of January, the Board Infection Control, something like 29 January, something like that, and we’re discussing this. There is a doctor there who’s extremely experienced and he’s a consultant in infectious diseases and he’s very, very experienced.

As we are talking about the cases, what he says is-- I don’t want to give away any patient details but, anyway, we talked with the cases and we talked about previous-- where they’d been. He then said, “Do you not think it could be

sporadic reactivation?" I knew about-- I'd been-- a position before so I knew about reactivation, and the thing about the Queen Elizabeth is because it's so big and there's five teach-- or three teaching hospitals, that you will get-- I mean, what the Deanery often say to me is that young doctors get very good training there because they see lots of rare things, because you've got-- you know, if we had two Cryptococcus, one in the Western and one in the Royal, nobody would have batted an eyelid, but we had this.

So, he mentioned that and I thought, "Oh, right," and he said, "Are we sure this is not a reactivation?" because reactivation is far commoner than what was on offer. So, at that point, I think we agreed as a committee, and I was quite keen on that, that we get an expert group set up because what you've got-- You've got to know the answer to this because, to give you an idea, there's 435,000 patients a year that go into that campus. It's huge. It's one of the biggest hospitals in the UK, so I was more of the--

So we set it up. We set it up initially with an infectious disease consultant plus the technical side. I think the technical side went on so long that they stopped coming, but that was the reason.

Q I see, and the infectious disease consultant was?

A It was Dr Seaton.

Q But he didn't end up staying on the group?

A I think he gave his opinion, but because they were-- and I don't-- He's got a busy clinical job. I think he gave his-- he went for a few meetings and gave his opinion, but it was all about technical and airflow and all the rest of it.

Q Right. Now, one of the things that seems to have happened-- and the question that of course is live is whether it mattered. One thing that seems to have happened is that some highly immunocompromised patients were being accommodated in un-HEPA-filtered rooms without being able to be given, because of their conditions, prophylactic antimicrobial medication. To what extent do you have any concern that that happened, in that you had such patients in non-HEPA-filtered spaces when, had they been in 2A, they would have possibly been in a 10 air changes, 10 positive pressure, HEPA-filtered isolation room?

A Yeah. I think that's quite a difficult question. I think, from what I can tell, and I probably wasn't aware of all this at the time, to be honest, because I didn't need to be, in a way, but what I can gather is that there are groups of patients who require what I would call the BMT rooms. So, that's HEPA-filtered rooms. Then the old Yorkhill, and indeed across

GGC and other places, there are groups of patients who are accommodated in a normal ward environment, and they could be neutropenic.

That seemed to have been a practice that-- you know, we would have that in hospitals, but I think it's a good question, and I don't know the answer to it, and I've watched that being debated, is: what level do you need and what groups of patients should be in what level of environment? And I can't really answer that because I don't have the wherewithal to do that.

Q Because the question, I suppose, without going to the document which you're not familiar with, is SHTM 03-01, 2009, Appendix 1, contains a ventilation specification for what is described as a neutropenic ward. It's not a neutropenic room. You presumably know that now.

A Yeah.

Q Yes, and so, had the word "neutropenic ward" been interpreted as the whole ward, and we have had discussion about what to do about the dirty cleaning areas and the kitchen and so on-- had the whole ward been HEPA-filtered and 10 air changes an hour and 10 positive pressure to the rest of the hospital, then there is a viewpoint that the patients would have been more greatly protected because there would have been an additional barrier between them and any external air. So, do you feel that there's any issue about the risks that patients might have been exposed to because the hospital wasn't built in such a way that neutropenic wards are interpreted as being the whole ward?

A I think that's a pretty complex question that I'm not sure I can answer. I never heard the term "neutropenic ward." I've heard of bone marrow transplant rooms and then there was the normal ward, and that, I understand, was in place at Yorkhill and then I understand was in place at the new hospital. I'm not sure whether or not-- I think people of more expert (sic) than me need to grapple with that question and answer it.

I think clinical practice is changing. When I talked to the adult haemato-oncologists a couple of weeks ago, what they described to me was something I'd never heard of before. They described doing outpatient bone marrow transplants because of the antifungals were so good now, and they talked about that neutropenic patients can sometimes be treated at home, and I hadn't heard of that.

So I think there's a debate that needs to be had, which I'm not the person to lead evidence in the Public Inquiry, about what are the risks? It's going back to that, you know, "What are

the risks? What do we know? What's the evidence and where's clinical practice going?" And so----

Q Would it have helped if at any point since the hospital was opened, outside Ward 2A, there had been a formal risk assessment of this issue?

A Of the--- ?

Q Of that issue.

A Of the issue of what, sorry?

Q What you just described about where practice is going and whether it's necessary to have a whole ward set up at these high standards or not. Do you feel that's something that should be assessed?

A I think it's something that absolutely should be assessed. I'm not sure that I would go back in time and say-- with what we knew then and what we know now. I think it should be assessed. I think that we have to engage-- again, I go back to this, but clinicians, Infection Control and Estates, and there has to be a balance in what we come up with because if-- How am I going to put this? If you look at our previous Board papers, for example, in August, what you will see there is two----

THE CHAIR: Sorry, did you say a PICU Unit?

A No, previous Board papers.

Q Sorry.

A It's okay. So, if you look at the board papers-- I'm just trying to put it in context here. We are putting forward the institute for renewal. That's the biggest-- 60 per cent of Scotland's served by it. It's got everything in it. And we know-- and I think it's something closing on 800, 900 million, something like that. And then we've got a thing called a Radio-Isotope Unit, which we need 20 million for. That's 60 per cent of Scotland.

Now, the question that we need to think about is we know that there's a certain amount of capital in Scotland to build things, but it's getting less. And we know, for example, when you're running the institute – it's a 1970s building – we need to mitigate that risk over time. Therefore, there is a need for us to understand what is the best-- There's the immunocompromised patients we absolutely need to make sure they're safe, but actually, sitting on a witness stand, I can't give you an answer to that today, because it needs to be a balance of risk across a whole range of patients.

MR MACKINTOSH: I suppose just before lunch, I suppose the only question to follow up on that is that: is that pressure of funding that you're describing not a reason for, when you do spend £800 million on a new hospital, it's probably a good idea to build it in conformity to the guidance that does exist at the time and to do that with your eyes

open?

A As I said before, that could have made-- I just want the patients to have a good care----

Q What's your answer to the question I asked?

A Yeah, I think if it would have avoided all of the issues that we had, that would have been fantastic because the stress that the patients were put under, particularly the 2A patients, was enormous, and the parents. So, absolutely, I think that we should have had that. I guess where you're coming from though is-- Where I'm coming from is we need to look at the evidence. What is the evidence showing us? What does it translate into, and how does that then say how we should build hospitals in the future?

What I'm to you is that if you look across Scotland, there is risks that all health boards run with all sorts of groups of patients, and what we need to do is balance up all those risks within the resources that we've got in order to do that. We have to do up wards at Glasgow Infirmary, for example, for patients. You know, there's a whole panoply of things that the public sector needs to look at. So I wouldn't jump straight into a conclusion there.

Q Okay. Well, my Lord, I think it's probably good idea to break for lunch at this point.

THE CHAIR: Just a small matter of detail. Did I hear you correctly when you said that you hadn't, prior to the involvement in the Inquiry, come across the expression "neutropenic ward" or----

A Yeah.

Q You said that?

A Yes, I said that I hadn't come across it.

Q Right. Thank you. What I take from that is that an experienced doctor, albeit not a specialist in the area, does not recognise that as a generally understood term?

A Yeah, I wouldn't take me as a benchmark because I'm probably not-- but I've never heard anyone talk about neutropenic ward.

Q Right. Well, thank you. We will take the break, and can I ask you to be back for 2 o'clock?

THE WITNESS: Yes, of course.

THE CHAIR: Thank you.

THE WITNESS: Thank you, my Lord.

(Adjourned for a short time)

THE CHAIR: Good afternoon, Dr Armstrong. Mr Mackintosh.

MR MACKINTOSH: Thank, you, my Lord. Dr Armstrong, during the

morning session, we talked about the water incident and you, I think, accepted that it was widely known that there was-- or there was suspected of being contamination in the water system in the early part of 2018. Do you remember that evidence?

A I think what I said—yes, I do, but I think I would-- I don't think I accept-- what I said was I think there needs to be somebody other than me giving evidence around the water.

Q Well, the reason I'm asking you is not whether there is water contamination. It's more that at that time, in early 2018 in March, would you accept there was a widespread understanding amongst the clinicians and Estates people that there was a problem with water contamination, or at least a suspected problem with water contamination?

A What I remember at the time was the email that you talked about, and we all thought at that point that there was a water issue. We didn't really know what it was, but we certainly took it extraordinarily seriously.

Q So, what steps were taken to communicate that to the patients and families in the Schehallion Unit?

A I think that the steps that were taken were really around-- I mean, I wasn't close to that bit. That tended to be done by the clinical team and by the management team, which would have been Jen Rogers, and I think what they were doing was trying to keep the parents and the-- you know, the parents as involved as possible.

So there was a lot of-- Again, the IMT would design what was being said to the parents as well. So I wasn't particularly close to that area, and it might be better that there are other people better placed, but I think people were doing their absolute utmost to speak to the parents. I think one of the issues was, when you're going through that time, it's quite a fast-moving process and you don't have the-- you don't have all the answers, and I think people like Brenda Gibson and Teresa were doing their absolute best to do that.

Q Would you accept that it is at least a good idea, if you're fitting point-of-use filters to taps, to ensure that you give as clear an explanation as possible as to why you're doing that?

A Yes.

Q Right. Let's move back to Cryptococcus in 2019, and I'd like to look at page 277 of your statement. This is where you summarise our set of questions on the Cryptococcus, and you see at the bottom of the page, the last paragraph, you say, "The report," and the context suggests it's Professor Hood's

report:

> "The report was available in draft in 2020 and sets out why the reactivation of a latent infection is the most likely cause."

A Yes.

Q Now, why do you say there was a draft report in 2020?

A I thought there was a draft report in 2020. I thought we'd seen something in 2020, but I would need to go back and check, but I think----

Q Well, the reason I raised it is if you look at Bundle 14, Volume 2, page 455, you have a letter from Professor Hood to Marion Bain, who's then, of course, director of IPC, and she receives-- and on the next page we have a letter from him to her, from Professor-- or Dr Hood then, to Professor Bain, and do you see how – this is February 2020 – at that point he's taking issue with board papers that suggest that certain things have been ruled in or ruled out.

A Yes.

Q And the report's not actually available until 2022, is it?

A You're right on 2022, but I must have had a reason for saying 2020, so I need to go back and check that.

Q But what I'm trying to get across is that, whilst there might have been a document out there, what there does appear to be is a position taken by Professor Hood that at least in February, and I can see that's before-- well, that's the early part of the year, he hadn't reached key conclusions.

A That's what that says.

Q Yes. Now, I'm assuming you're aware that NSS chose not to associate itself with the terms of the report?

A I heard evidence at the beginning of the Inquiry to that effect, yes.

Q Were you aware about that at the time?

A I wasn't close to this group. It went on for quite a long time, so I didn't attend the group. I didn't meet with Professor Hood or any of that, so I wasn't really that close to it at the time, but I did hear later on, and certainly the evidence at this Inquiry.

Q Before lunch, you touched on the idea that Cryptococcus is an unusual infection.

A Yes.

Q We've heard some evidence, which I'm not going to ask you about but just to put it in context, of a debate about whether an infection in 2020 was a Cryptococcus case, and we discussed that with witnesses. Have there been any other Cryptococcus cases, that you're aware of, of patients who've spent time in

this hospital since the report in 2022?

A I don't know.

Q Because I'm wondering whether, if you don't know, there might be an issue about the way that unusual infections are reported. Now, let me explain why. Why would you find out about an unusual infection as medical director?

A Yeah. I mean, I've heard this debate being had. So, the unusual infection would, I think, appear when the microbiologist looks at it and determines that this is something that needs to be investigated and, therefore, would either investigate that with the clinical team or would alert the Infection Control team, and they can then determine whether or not they hold a PAG and then it would come up that way.

I probably wouldn't know about it in my position. I wouldn't really know about it until it reached an IMT or until it reached a BICC or whether there's some major public health implications – I would certainly know about it then.

Q Yes, because it occurs to me, and the question I'm putting to you is-- this question is: if it requires both the microbiologists to notice and the Infection Prevention and Control team to trigger a PAG for an unusual infection to become widely known, given these infections are so rare, does that not create a gap through which concerning, unusual infections might fall?

A It's-- I've thought about this because I've heard it come up a lot in the Inquiry, and I suppose I would answer it as a medical director might answer it. I don't know the answer to that. What I would do is I would get some microbiologists and some epidemiologists and maybe the national surveillance people to actually look at it.

You know, how many times does this happen in Scotland a year? What kind of rare organisms are we talking about? If we design a system, what do we want that system to do, and what's the output that we expect? And it's difficult, I think, on the hoof to understand, well, what would it mean? Because I have no idea whether there's 30 rare infections or 5,000. I don't know, and I think that would be a point that we should look at, but I can't give you an answer about that today. I think it needs some careful thought.

Q Well, I want to ask you about a not dissimilar issue arising from an email to you from Dr Mathers on 4 March, 2019, which is Bundle 4, Document 36, page 151. Now, at the bottom of the page, we have the email from Dr Mathers to you on the 1 March, at 20.26 in the evening. Now, we've read this to be in the form of an SBAR, the way it's

structured. Do you remember receiving this email?

A Yes.

Q Yes, and this SBAR raises concerns about what is described as a microbiology line management issue.

A Yes.

Q And over the page, it discusses some patients and whether-- well, what's the point that's being raised with you?

A I think there are several points to this, because you can see "Issue 1," "Issue 2." So, I think there is the case series. I think there is the escalation process for microbiology, and over the page----

Q The next page, please. Can we go back to page 152, please?

A Yeah, yeah. So, I think there are several issues there that are raised.

Q So, what did you do with this issue?

A So, what I did was I took it to the-- what we call the Monday morning directors' meeting, because I thought there were some really significant issues in this, and so at the directors meeting there's all the executive directors, there's the chief operating officer, and we use it as a kind of meeting where you can raise different issues. So, we bring sometimes papers to it, that kind of thing.

So, what I did was I raised it there because, as I said before, the chief operating officer, there is a governance structure that goes through there and sometimes-- I wanted to know from the rest of the team who should lead on this, and that was really what I was asking, and at that point I think the chief operating officer at that point says, "I'll lead on it because it's an acute issue."

Now, what I would expect is the investigation's done, and normally what happens with that is it will come out the other end and I'll see it or it will come up through the governance structure. So, there was different aspects to this, and that's why I say scope it out.

In this, there was, I think-- there was a line you probably haven't heard about which was also investigated here, and that's that issue I thought you were going to go to, which is the microbiology laboratory issue, and the other two lines you have heard about. So, that went up through the acute division.

Q So, you raised it at the Monday morning meeting.

A Yes.

Q And the operating officer took it on.

A Yes.

Q But is part of the output Professor Jones' August 2020 report as well, or is that coming from a different route?

A No, that-- Is that the one in 2017 you're talking about?

Q Yes.

A Yes. No, that's different.

Q So, how does-- Let's look at that. Bundle 19, page 1371. How does Professor Jones' report come about?

A So that was done on 31 August 2020, so my understanding was that we were doing a lookback. That wasn't to do with Alan's issue. We were doing a lookback over 2017, not a look of cases but a lookback of, "Right, what's happened?" because there was a lot of questions around infection control, around what-- So that naturally-- a lookback to see about what came up, was it properly investigated and what were the results----

Q So what were the questions about infection control?

A It was really to look back and see if there was organisms-- It wasn't around infection control. It was around saying, "What happened in 2017? What PAGs were there? What IMTs were there, and what were the investigations done?"

Q So why is that not about infection control, Dr Armstrong?

A Infection control is part of it, but it's about a kind of whole team approach, so it's about saying, "Right, did we identify the infections? Does it go through the national manual process? Did we follow that process? And then what happened?" In 2017, you will see probably about halfway through it, around April, we really started looking at-- I started looking at some of the issues around that.

Q So what was the issue that you were investigating?

A Well, this report is actually a lookback there, so it was actually at the time in 2017. So, in 2017, I remember it was about April/May time. No, it was May, May, May. Teresa had-- we were discussing-- It was a Rotavirus outbreak in the ward, and because-- Sometimes I do this with different services across the patch. I will have a much closer look at them, and there was a Rotavirus outbreak which was vomiting and diarrhoea. I think it was around April/May time, and then the HAIRT-- I can't remember exactly what it was. I was asking for a bit more information because it lasted nine days, and there was also, I think, two cases of Aspergillus.

So I went back. I can't exactly remember. I've got the email trail around it anyway. There was a HAIRT done, and it had three things in it, and one of them was practice; the second one was cleaning; and the third thing was nurse staffing at the weekends. So, therefore, I was quite keen to really-- I don't do this

all the time, but I was quite keen that we bring together Estates, Staffing, Infection Control, and they do a weekly report because I wanted to see what was happening. So they did do a weekly report. It started in June and it finished in August because, in the Board Infection Control Committee, [redacted] had brought up the issue about nurse staffing at the weekends because infection control is not just about infection control. It's about making sure you've got enough staff on to do all the preparation you need to do at the weekend.

Q So did Dr Mathers' SBAR or Professor Jones' report have anything to do with Stenotrophomonas cases in 2017 in Ward 2A?

A Yes, I think that both will have looked at that, so I think Brian Jones-- I think we don't call it-- Professor Jones reports the Ward 2A. I think that did look at all the infections, and I think also that Dr Mathers' report looked at that as well.

Q Could it be that one of the focuses of Dr Mathers' SBAR was the number of Stenotrophomonas infections in Ward 2A in 2017?

A In the SBAR that you've just showed me?

Q Yes.

A No, it didn't mention that. It was much more a kind of looking back. So I think it just says-- At that point, it

was, I think, that I had spoken to Teresa earlier, and she had mentioned it, and I asked her to go through the sort of due process in the governance channel, which is the chief of medicine (inaudible) and also Dr Gibson. The SBAR was not mentioned there at all. I think if you go back to the SBAR, I can't remember what it says, but it did say----

Q Go back to Bundle 4, please.

A Yes, what does it say?

Q So, just a moment, I can see the unredacted version. So, you're telling us that this report has nothing to do with the Stenotrophomonas case in 2017?

A So what I thought you were talking about was the SBAR from March. I'm getting confused----

Q No, this SBAR from Mathers, does that deal with Stenotrophomonas in 2017? I mean, you can't see it there because it's redacted text, but I'm assuming you've seen the unredacted one because it was sent to you?

A So, from memory, that first case there, that's a different case, from memory.

Q Right. So you don't think this has anything to do with Stenotrophomonas?

A Well, I think it led to that. I think it was a-- That case that's been talked about, from my memory, is a different case, but this was to just do a

lookback.

Q Because all I'm putting to you is that Dr Mathers' intervention was, to some extent, a reaction to a concern that in 2017 the system hadn't spotted a series of cases involving Stenotrophomonas.

A I don't believe that to be the case because I think that the Stenotrophomonas you're talking about in July had been investigated at an IMT and had gone through due process. There may have an earlier one, but again it's looking at the process by which you go in the national manual, if I'm remembering correctly.

Q Okay. So, in her evidence, Dr Inkster has expressed a concern that this discussion-- I think she and you are at cross-purposes over what it's about, but maybe that's not important for this purpose-- expressed a view that there was then a conflict of between your role as both medical director then and HAI executive lead. What do you have to say to that?

A I don't see any conflict of interest because in most boards it's the nurse director-- Somebody has to take on the role, but I don't see any conflict of interest. What I was doing here getting-- well, first of all, by saying to Teresa go and raise it with Dr Mathers and Dr Gibson to raise it and then after that, when it came to the directors meeting, then ensuring that it was taken forward and investigated. So I'm not sure I would see the conflict.

Q You don't see there's a potential issue here in that this incident occurred-- these incidents that are subject to this SBAR, some of them occurred in the period when the lead ICD was off sick, and it would be your responsibility to ensure there was sufficient cover to cover that role?

A There was cover put in place. So, again, the responsibility would actually be the operational team, so the operational team, which is the senior management team, would put cover in place to cover that role.

Q So not you?

A Well, no, not me. I don't have the operational responsibility for the team, but I think they would do that.

Q Okay. I'd like to look at another issue. Well, actually, just a moment, just need to check something for a moment. (After a pause) As I'm sure you appreciate, Dr Armstrong, there are rather lot of bundles.

A Yes.

Q No, so what I want to do is to look at the issue of a meeting that Dr Inkster explains took place on 24 June 2019 with you and Sandra Devine. Did you have the opportunity of watching any

of Dr Inkster's evidence?

A I watched some of it, yes.

Q Right. I don't know whether you saw this bit, but she discussed how-- It's in her statement – and I'll just give the page references for benefit of colleagues, paragraphs 801 and 802 of her statement – that in the meeting she felt that you were very focused on the epidemiology of what would have been gram-negative bacteria at that point in Ward 6A, and there was a background rate that you considered to be acceptable, and that she was told by you that you considered her to be a bit of a lone voice and out on the limb. Do you think that's something you would've said?

A No.

Q Do you remember the meeting?

A I don't remember the meeting, but it's in my diary, so I've certainly been to it. So I've checked my diary since that time and it was one of the routine meetings we had. I would not have said to her she was a lone voice; she was not a lone voice. I know what she said, and I would-- So, do you want me to answer the question about the background rate?

Q Well, no, I want you to answer whether you said that. I'll come to the background rate later.

A The lone voice, I have no recollection of saying that at all.

Q It's just that the point is that this is 24 June. Who were the people who were agreeing with her at that point?

A I think we had been through four investigations at that point, and I felt that-- We had the Cryptococcus subgroup.

Q Yes.

A But the water groups and the Cryptococcus people had agreed, I think, with Teresa. I didn't see-- I mean, we were not agreeing or disagreeing, but there wasn't people saying, "Oh, there's nothing to see here," at all, not at all. People were doing their best to make sure it was as safe as possible. I noticed with the lone voice when I looked at her statement that she seemed to say that was around the Health Improvement Scotland response letter that we gave, but I would not have said "out on a limb" or "lone voice." I didn't feel that she was a lone voice.

Q At that point, what did you think the epidemiology was saying?

A Well----

Q Sorry, this is June 2019.

A Yes. I can't remember the meeting, but I looked back to see, "Right, what happened in the run-up to that meeting?" On 19 June, there's an email which is-- I think it's a-- I think it was after the first IMT, something like that, and it's something like 19 June, and Dr----

Q Is it Bundle 27, Volume 8, page 135?

A Have you got it?

Q Is it the one at the bottom of the page?

A Yeah, if you could go over the page.

Q Of course.

A Is this it? Hang on. Right, so this is it, yes. So if you look down one, two, three, four, "It may represent normal background rates." So, I get that on 19 June and that's about the chelonae cases, but it's----

Q Well, no, that paragraph is about the gram-negative. Go back to the previous page.

A Yes, so that's the gram-negative one.

Q Yes.

A So if you go over the page, then what that says to me is that that was the-- So it's two separate issues here. It's the Mycobacterium chelonae and there's a gram-negative, and that gram-negative, I can't exactly remember how it started because I wasn't there. It either started because there was two cases of Mycobacterium chelonae, a new case and then a case from last year, and then what happened was they, I think, added in the gram-negatives. What that said to me was, "It may represent normal background rates," so of course I'm going to ask about that.

Q Because it's actually quite useful to look at this document because at this point, for gram-negatives, would you accept that, on the basis of this email, Dr Inkster is actually possibly conceding that these particular infections might represent background rates?

A She's mentioned that. I think that it's quite early in the process to determine that because I think there was an IMT the next day, something like that, and therefore what the IMT needs to do-- because it says, "may represent normal background." It doesn't say it does represent. So I think what needs to happen, particularly with the chelonae as well, is there needs to be-- because it's an amber one as well. It's-- Yes.

Q But what I'm trying to get across, Dr Armstrong, is that at that point the one thing you can't accuse Dr Inkster of doing is rejecting the idea that it's possibly-- are some background rates involved----

A Yes.

-- because she's acknowledging that's a possibility.

A Yes.

Q Right. Well, let's also look at the M.chelonae just because it's come up on the screen and I probably need to come back to it. So, this would have been your first information about the

M.chelonae cases?

A Yes.

Q Right, okay. I'd like to turn up to actually the 25 June IMT, which you just mentioned. So, Bundle 1, Document 73, page 325, this is an IMT which I don't think you're at----

A No.

Q -- but it's the one that follows. I wonder if we could just go to page 329. It's the very end. Do you see there's an AOCB?

A Yes.

Q Obviously, there's some issue about water is still a subject in the IMT, and:

> "It was agreed that Dr Armstrong will take this forward about informing the executive management."

Did you receive that not quite instruction but suggestion from Professor Steele?

A No, I didn't. So I followed up on that because I saw it, not at the time but I followed up subsequent to that. So what happened was that there was an email that was sent to me, and I think it was by Sandra Devine, and at the bottom of that email it says the Infection Control manager owns Edinburgh. So I didn't actually know about that until I'd seen the IMT quite recently, but I would say that we had quite a lot of contact with Edinburgh, but also we'd been saying to the Scottish Government – I think Dr Inkster mentioned that – that we should be doing debriefs with----

Q But you didn't actually-- To be fair to you, you didn't volunteer to do it----

A I didn't know about that----

Q -- so I was----

A No, but it was done is what I'm saying. It was done by the Infection Control manager, but it wasn't done by me.

Q Right. Now, I want to move on to August 2019. We've had evidence from Dr Inkster that in August, she thinks, 2019 there was some form of meeting at the Golden Jubilee Hospital involving people who were involved in Infection Prevention and Control. You're nodding.

A Yes.

Q Was there such a meeting?

A Not in August. It was in July.

Q In July.

A And----

Q Who was there?

A So I can tell you a little bit about it because I heard this come up. So, what happens is the CNO had written to the HAI exec----

Q That's the chief nursing officer?

A Yeah, sorry. She had written to the Infection Control managers and the

HAI exec leads from the boards and we were invited to a meeting at the Golden Jubilee, I think it was June, and that was-- and there's a little report from that meeting and what they were asking was HAI exec leads and the Infection Control managers. There was also, I think, from our-- we brought our comms manager because there was an issue about communication. There was issues about learning from this.

There is actually, if you look at the-- I can give you it. There's a-- and I can give you the follow-up from Scottish Government because the follow-up came in August. We did say it would have been better if you had ICDs there as well. So that----

Q But you didn't have Dr Inkster there, did you?

A No, but it wasn't my meeting, so I'd been invited along by CNO.

Q Well, just a moment. You're the HAI inspector lead. You're the medical director. You're leading a team which your Infection Prevention and Control team have spent the best part of a year and a half dealing with some pretty high-profile infection issues. You'd accept that?

A Yes.

Q And the Scottish Government wants a meeting, and you know by this point, June, that there are some tensions in the team. You've already had to arrange the meeting between Professor Steele and Dr Inkster. You know what happened the previous-- what happened in 2017 when Dr Peters and others resigned. You know all that. Why would you not think, "Well, we better tell her"?

A It wasn't-- it wasn't that-- So I would get emails frequently from Scottish Government, from a whole range of different people, from all sorts of different meetings. It wasn't like that. It was about an email that came out from the CNO to-- They often did this. They often would come to the HAI exec leads and say, "We'll have a meeting. We'll have this, that and the next thing." So, from my point of view, I wasn't making the link that you're making now. I would get frequent emails, loads of emails every day, and this email came in and said, "We want to"-- it wasn't about Glasgow, I don't think. It was a-- or maybe it was about learning from all of the different boards, and they would do that at board level.

Q Yes, but it's learning-- you've got a massive learning experience. You've just told me you've had a series of IMTs where everyone's working together, lots of difficult issues, and you don't tell the leading Infection Control doctor, and she finds out because she's there for a personal matter. It's not going to help team relationships, is it?

A I don't know whether we told her or not.

Q Well, she says you didn't.

A Right, so we can look back on that, but I guess I didn't think about it in the way you're thinking about it, but now you're making the point then maybe we should have done, because we did----

Q Because the other-- Sorry, carry on.

A Sorry, and it's actually the bottom of the minute of the meeting, we all said we could do another meeting with Infection Control doctors. That's----

Q Because the other point is that you-- This is June-- July.

A June.

Q There's lots of points that are coming up. It's a busy time, and she's going to find out, I suspect, and if she doesn't find out until later, it's not going to be a good thing, is it?

A I didn't know that Dr Inkster had found out, as you put it, or was upset about it until I heard her give it in evidence, and I'd kind of almost forgotten about the meeting, but I can see how she felt.

Q Yes, because the other thing is that you're the Healthcare Acquired Infection executive lead at this point, and you've explained to us many times how you have no expertise In Infection Prevention and Control. Shouldn't you take someone to such a meeting with a microbiology perspective who's chairing your IMTs if one of the issues is communication?

A The invite, which I can show you, from the CNO was the invite to the HAI exec. It was not my meeting, and certainly it was pointed out at the end of the meeting that we should do another one with the ICDs, but it wasn't my meeting to invite anybody to.

Q Well, obviously, we'd like to receive a copy and we'll look at it, but it just does occur to me that if you were being invited to a meeting, one of which you just said its purpose was to discuss communication, given what evidence you've given, you have no knowledge about communication. So wouldn't it be a good idea at least to get a briefing from Dr Inkster so that you can be informed and attend the meeting in value?

A The communication aspect on the meeting, from where I can remember, was not-- it was more kind of at a board level, and we can get you the slides from it and show you the slides. It wasn't, from memory, at-- it was-- I think what she was trying to say was, "How do we get communication between boards?" One of the recommendations, for example, was, "Should we get a learning thing for Scotland if there's major incidents like that?" and she was taking it, I think, at

board level first to say, “Glasgow have had this problem. Edinburgh’s had that problem. Should we have something”-- you know, that was one of the issues, for example, so we’ve kind of at that level.

Q Well, I’d like to move on to the 1 August IMT. So that’s Bundle 1, Document 75, page 334, and I’m going to deal with this for two different purposes, but the first purpose is to talk about Mycobacterium chelonae, and I wonder if we can go to page 261 of your statement? This is where you answer our questions about Mycobacterium chelonae. Do you see in the answer to 318, you say, “I was not directly involved…” and then:

> “I reported on one case to the Board via the HAIRT… It may be worth noting that this was not an ‘outbreak’ as described in the question above and indeed this is one of the 2 cases which we have linked to the water.”

Now, the question I wanted to press you on was this: it might well be that it wasn’t categorised as an outbreak in the GGC system, but given the definition of an outbreak in the National Infection Protection and Control Manual, surely it should have been, because there were two cases within 13 months of each other in the same cohort of patients.

A So, the reason I put that there was because my understanding of it, if I remember correctly, was that the first case had been diagnosed in 2018----

Q In May 2018, yes.

A May 2018, and the second case, I think, was more recent, 2019.

Q It was June 2019.

A So, when they looked back, they found the first case and they then-- from memory, I think that Dr Inkster then did DNA sampling and it went to St Andrews, I think. It came back that they believed that one case was linked to the water supply pre-filters, so it was probably-- we had the filters in the ward and this case had probably-- they did a patient pathway to see where the case-- the patient had actually got chelonae.

Q That was the 2018 case?

A That was 2019 case.

Q Well, because there’s also material that the 2018 case has a pathway the same?

A Yeah, so with-- so, I’m talking about 20-- not-- I’m gabbling a bit. So 2019, from memory, was the case where we thought it was directly linked to the water.

Q Yes.

A Therefore, that was directly linked to the 2018 case. When they took the sample of that case, they did not link it to the water, and indeed-- I mean, I’m

just telling you what I was told, and therefore that case was excluded from the investigation. So, at that point, there was one case of M.chelonae which we thought was linked to the water but not the case in 2019----

Q So if there's subsequent evidence, or indeed other evidence that Dr Inkster went and examined the water pipes in Ward 2A and found M.chelonae in the water pipes in 2A, would that presumably change this to an outbreak because there were two cases?

A No. At that point-- so going back to what was happening at that point. So, at that point, what-- because it has to go through a very strict process, this. It's-- at that point, what I was being told-- otherwise, I'd have put the second case in HAIRT, and the HAIRT's written for me. So what was happening was there was two cases, and I think it was something like 3 or 6 July, something like that, the cases were both sent to the same laboratory with the environmental samples and one of them was linked and the other was not. Then there was, I think, water testing done in 2A, and I can see that in the minutes----

Q Yes.

A -- see something in the minutes, and that was the water testing was done in 2019, and that was true. But the issue, from what I understood, was in 2018 there had not been water testing done at the time that the case was on the ward. That was agreed between Dr Inkster and between HPS, and I think the reason for that was because they didn't want to take off the point-of-use filters to test the water. So what we didn't have was a contemporaneous water testing in 2018 with the same case.

Q Well, can we look at the National Infection Prevention and Control Manual? So that's page-- Bundle 27, Volume 4, Document 16 at page 178. Now, we have, in the middle of the page, paragraph 3.1, "Definitions of Healthcare Infection… Outbreak..." This is a later version, I accept. I don't think this piece has changed. Do you see, after the first hyperlink in the paragraph, we have, "A healthcare associated infection outbreak"?

A Yes.

Q And then:

> "Two or more linked cases with the same infectious agent associated with the same healthcare setting over a specified time period."

Now, so you're effectively saying that because it hadn't been linked between the 2018 case and the water supply in 2A, it's not an outbreak. Is that your basic point?

A What I'm saying is what I was

told at the time. So what I'm saying-- and-- what I'm saying is that the hypothesis was that these two cases were either linked to each other or linked to the water supply. By the DNA testing that was done in St Andrews, what happened was back came to me that one case had been linked to 2019, but the other case wasn't and, therefore, we were thought to just have linked one case. So that was what was told to me, and the other case was excluded.

But on further evidence, I think it would be reasonable-- and this was when I had some dialogue with the family that the water hadn't actually been tested in 2018. But at this point I didn't realise that.

Q The Inquiry has provided the BSI infection database the Board has provided to its own experts, and Dr Mumford has discovered, within the early months of 2016, a third Mycobacterium chelonae case. Now, is that something you're aware of?

A I'm only aware of it in terms of the information that we've given to the Inquiry on that case, and the case-- details of the case have been handed over to the Inquiry because that was in 2016, I think.

Q Yes.

A Yes, so that's the only reason I'm aware of it.

Q Because could this be an example of the system not making connections fast enough, in the sense if the 2016 case had been considered in a PAG, perhaps, maybe steps might have been taken that would have prevented the 2018 and 2019 cases?

A I think that-- so what-- I'm not sure about that, because that's making the supposition that there was a causative agent from the environment, and I think what we showed was in 2019, absolutely, but that was after the chlorine dioxide had started in the December beforehand. Now, I'm not an expert in this, but we do know that that does select out Mycobacterium chelonae. So it's a very complex area.

But your point, I think, is right in that we should be developing, not just in GGC, but across NH-- and that's why I'm saying it needs some careful thought. We should be developing a system that enables us to pick up these more clearly, because there's always-- Forearmed is forewarned. So I agree with that, but your second point I'm not sure I do agree with.

Q You don't feel that, as HAI executive lead, that it was your job to make sure the system existed back in 2016 that would have caught it?

A We do have a system in Scotland and as-- I think as Sandra

Devine said, we had a forensic (inaudible) looking at Glasgow's system. So we report everything via the manual and we also add these infections on to the-- you know, when infections come up and the lead Infection Control doctor wants it added into the alert system that then alerts the labs, then we do that.

What I'm suggesting to you, though, is that there is-- there needs-- you need to make things systematic in the NHS because if it's not systematic, then people either don't do it or we overreact to things. So, therefore, I'm suggesting that there needs to be a national look at-- as I said to you before, I don't know how many unusual organisms there is. Is it pathogenic ones? You know, there's a whole range of things, and then we set up a system for it so that we do it every time.

Q Thank you. Well, let's move on to-- Well, we'll stay with 1 August actually. Can we move to page 257 of your statement, please? When you're discussing the 1 August IMT, o you see in the middle of the page you say:

> "Ward 6A was closed to new admissions and newly diagnosed children were diverted to either Edinburgh or Aberdeen causing great distress and increasing risk to other units and children. Children were also started on prophylaxis, which the lead clincian later described as causing vomiting and diarrhoea. "

Am I right in saying that this is you criticising the decision to closing the ward to new admissions?

A No, not at all, really not at all.

Q Sorry, it reads like that.

A It shouldn't read like that. It does-- I don't think it reads like that. What I'm saying is that, at that time, we had quite a significant-- we had a very significant issue, and what I'm trying to say is I'm trying to describe some of the impact of what was happening at that time.

Q What was the significant issue at 1 August then?

A Oh, lots. I mean, the issue was, for me, around-- there was-- you heard evidence on it actually last year. We're now on our fifth investigation and we have-- I think the way it was described was "clinicians at breaking point." I can't remember how they described it, but this cohort of patients is such high-risk with their parents and we are now on our fifth investigation, and therefore there is a lack of confidence in the environment, in the ward. There is also great anxiety and distress, just as I'm saying there. So that is not-- that's just a statement.

Q So, you're not here-- well, I wanted to check what your position was.

You're not here criticising that decision to close the ward to new admissions at that point?

A Not at all because that that's what people felt they needed to do.

Q Well, that's fine. I just wanted to be clear because it was a little bit unclear, and we can move on quickly if you're not doing that. What I want to do is to move on to-- Well, firstly, can I just check one thing? The origin of your reportage of increased risk to other units and children, am I right in thinking that must come from an email from Jamie Redfern in September? I think he reports that as----

A He does report it in September but I was, from memory, also talking to colleagues in, particularly, Edinburgh. We have a very good relationship because often we'll-- because we'll help Edinburgh out, they'll help us out on a series of issues, and certainly Jamie was doing the formalised-- I think there was a meeting at 5 o'clock when they discussed the patients, but also I will be talking to Edinburgh quite a lot about a whole range of things, and I'm checking with them that it's okay and I think there was----

Q So it might have come from your Edinburgh colleagues earlier?

A Yeah, yeah, could've done.

Q Okay. What I want to do is move on to-- well, it's page 267 of your statement. We're going to get to this in some detail. You describe in the second paragraph on page 267 that the unit was closed and you describe the erosion of confidence – you've just discussed that – and then you say this:

> "Following concerns which were raised by IMT members, a new chair was appointed. "

Now, there's a lot to get into here. It's not just a one question thing, but which IMT members raised concerns about the IMT in early August 2019?

A So, I think there was concerns-- or not concerns, but there was unease – and I think I say that in my statement – raised with me. Now, just to set this into context because I've heard----

Q No, I'm sorry, Dr Armstrong, we've only got another hour and a half. Which IMT members raised concerns with you?

A The IMT members would have probably been I think Tom Steele. It would have probably been-- I can't remember if Scott was, but I remember it was also Kevin Hill. A number of people, but I just can't remember exactly the names, and Sandra Devine.

Q Thank you. Now, I want to look at an email of 16 August 2019, which is Bundle 14, Volume 2, Document 144, page 568. So, this is an invitation to a

meeting sent by Dr de Caestecker's assistant on 20 August, and I'm wondering what role you played in arranging for this meeting to take place.

A So, I did write the email and I did have-- I did want the meeting to take place and I do want to say this: at the time we had children wards closed; we had debate around what the hypothesis was; we had an uncertainty around it; and we also had extreme stress from staff and parents. It's also not an easy for us to not provide treatment for our own population.

So, when that is going on, as a medical director, I'm afraid you have to step in because you have to be able to put things back on track. That is what most medical directors do. There is high clinical risk here. There is a lack of understanding of what the actual hypothesis is, and there is also now we've got-- the stakes are high for patients. Therefore, when IMT concerns are raised, we have to investigate them.

Now, the email that's caused so much debate here, I actually was trying to write that carefully, not in any way to stop anyone coming to the meeting, but actually I was certainly not going to write an email to say, "Come and discuss the IMT chair," because at that point it was about the functioning of the IMT.

Q You could have just, I don't know, used the letters "IMT" somewhere in the email. You didn't have to mention the chair, but you didn't mention it at all, Dr Armstrong.

A I find this a little bit-- I could have, but what I was trying to do was to write an email which didn't prejudge anything. I didn't give it the thought that it's been given today and I didn't say, "I'm not going to mention the IMT because I don't want anyone to know it's about the IMT." What I'm trying to say there is exactly what it is: what is the current position and what additional support to address current issues. So, I'm not going to write about IMTs or chairs or anything else. What I'm trying to do there is I'm looking at a risk, I'm looking at the IMT is not functioning, I'm looking at a very fragile population, and I'm the medical director of GGC and I need to do something about this.

Q Well, what steps did you take to consult the clinicians who were treating the patients?

A Again, I would say to you that this was about us sorting out the IMT that the clinicians could attend. The clinicians are under extreme stress at that point and they said that in the evidence last year. They are delivering care to the children. The Board needs to make sure that this IMT of which they're taking part is functioning properly. This is not about

trying to put even more pressure on them to say, “Come on and let’s discuss.” You know----

Q Well, no, I’m not suggesting they necessarily need to come, but the question – I’m assuming the answer to this question is no – that you didn’t even make contact with any of the clinicians just to check in with them, saying, “Any feedback? Any thoughts? What do you want us to do?” I’m not saying they had to come to the meeting because I suspect they were probably busy at that time, but you didn’t check in with them, did you?

A Well, the feedback coming up from-- was through the—mainly nursing, you’re absolutely correct in that. I didn’t-- it didn’t really-- You’re correct in what you say but not in the way of which I think the inference is coming across. For me, it is about a Board needs to step in, get an IMT functioning again. I wasn’t presupposing what was going to come out of it. All I know is there’s big clinical risk over here----

Q So, you see this as a sort of executive decision-- discussion process to make a tough executive decision.

A I see it as, over the years that I’ve been medical director, sometimes in life you’ve got to step in when you think things are going wrong. You can’t duck that. So, that’s how I saw it.

Q Okay. Well, let’s look at the minute. Let’s look at the minute. Bundle 6, Document 22, page 70. So, this is the minute, and I appreciate it wasn’t your meeting. It was being chaired by Dr de Caestecker. When did you ask her to chair it?

A I don’t remember. It would have been quite-- I think I was-- what I was hoping to do was do it by due process. I always like using due process and so, therefore, it seemed to me-- She was the director of Public Health. It would have been quickly because my view was it was-- and you can see it actually in the independent report. What they say is there was so much pressure on Dr Inkster; should the Board have acted earlier?

Q Yes, but the problem with the independent report, Dr Armstrong – this is Dr Inkster’s evidence – is that she’s extremely dissatisfied with her interactions with them. So----

A Well, that’s not my problem with the-- I think actually they describe it very well, and so----

Q Let’s look at the meeting ourselves. Could you explain to me what Dr Kennedy is doing at the meeting?

A No, I can’t.

Q Because the way-- It’s a bit odd, this meeting, and I’d like to put it to you. I recognise you might not agree with me, but you’ve got some people here

who meet the definition of an executive decision to deal with a difficult problem, and that's something you just explained, but Dr Kennedy is a member of the IMT. He's one of the Public Health consultants. If he's there, why are not other people there? I realise that you've explained very, very forcefully that you think it's important the decision needed to be addressed, and we hear that. But would you accept that this process was carried out in such a way – maybe not deliberately – as it would have created an enhanced sense of suspicion on the part of, at the very least, Dr Inkster by the end of the process?

A I think that I really regret that Dr Inkster was hurt by this, because I regret that. I think that she was invited to the meeting, and I wanted it to be a meeting where we could come to a decision with her about how to put the IMT back on its feet again. But I do understand that this could have been handled a lot better. I do accept that, but what I'm not accepting is that actually it is our responsibility at the Board to act to put an IMT back online to get the answers that we need for that ward, and if you look at what happened, we did actually achieve that. The children did go back into 6A, and it has low infection rates until we move them in 2022.

Q Let's look at the minute, and

what I'm looking for is discussion of this point about the risk, the balance of risk. So, the opening background doesn't mention the idea that balance of risk was calling for action, and the rest of that page doesn't. Over the page, it discusses behaviour and culture, and the way forward doesn't. I'm just wondering why it is that after what's probably an important meeting, the minute doesn't actually discuss this idea that, "We needed to act because of the risk." What the minute discusses is, "We need to act because it's not working well, the behaviour is off," those sort of things. Do you see-- would you accept the minute doesn't actually set out the point that you are using to justify the calling of the meeting?

A So, the meeting was called because people were coming to say there was concerns about the 14th, the big-- that meeting. That's why it was called. What I've said to you is I've been completely-- I had concerns beforehand, and I did think we should have acted before. That was around that balance of risk question. When this was called, a lot of things were put on the table which were about the IMT not functioning, and there's a few things that you can see there, and it's kind of hinted a bit at that when it says, "someone with the relevant knowledge, experience"----

Q Which paragraph, sorry?

A Sorry, “Potential Way Forward.”

Q So that’s after the first heading, yes.

A Yes, so what you’ll see there is, “relevant knowledge, experience and skills, clinical management, noting the way forward.” That’s hinting at that.

Q Is it?

A I think it is. I read it as that, but what I’m trying to do is not-- you’re trying to give what was said at the meeting, but what I’m saying to you is the reason that we were acting was because of this but because we were also a bit concerned about where this was going, because the IMT was not making progress.

Q Because there is an alternative perspective, which is something like this, which is that there were people who didn’t like the IMT, but they came from-- they were executive staff who were challenging the microbiologists’ perspective on whether there was in fact an outbreak. They pushed back, didn’t like the response from-- the microbiologists pushed back and the executive members didn’t like the response, and so they came to you and said, “We need to change the chair because…” and that’s why it happened, isn’t it?

A No, I would-- I’m sorry, but I would take issue with that. IMT is right across Scotland, and I think when an IMT-- when it becomes much bigger and the consequences of what happens in an IMT is big, mainly for patients, it becomes-- every board in Scotland would be looking at-- or I imagine would be looking at sending senior clinical leaders in there. You heard evidence last year, for example, where I think there was a Pseudomonas outbreak in Western General, and actually the chair of the IMT was the director of nursing. So, this view about—

Now, where I think we did go wrong, and I think this is true, is that it needs to be far clearer about why people are there. I agree with that, but I would expect a clinical leader who-- If you look at Dr Davidson, he was the acute medical director. An IMT of this significance, of this risk to patients, then yes, he should be there. I think also that they should be testing the evidence because if you don’t test the evidence-- You need to understand what are the consequences of what we’re about to do here because I think, in your exchange with Dr Inkster, her view was that she would have decanted the children into, I think, a mobile-- whatever it happens to be. So, therefore you have got to have people that are allowed to say, “I want to test”--

in the way you're doing now. "I want to test the evidence about why we want to take this decision," and it's so true of a lot of things we do. It's to have a balance of risk.

Q So, two things about that. This IMT, I think everyone agrees, came off the rails to some degree.

A Yes.

Q But you've just accepted that the other ones didn't. They worked fine. So, what was different between the water incident IMT or the decant IMT, as they're-- or even the Cryptococcus IMT, and this one? Why is it this one got into the mess it got into? Because it's the same chair and it's the same number of people, because I went and checked. I thought maybe there's a theory. Maybe all these extra members are turning up from the executive board and I'll need to challenge Dr Armstrong over that, so I got someone to count. There isn't an increase in size. They're just big the whole way through '18/'19. So, what's changed?

A At the time, going through 2018, I wonder-- and this is me looking back. I wonder if there was actually enough questioning at some of the IMTs we did have because, when you look back, you can begin to see, I think, we were going off a little bit in 2018, and I can give you----

Q So, what? The decant didn't need to happen?

A No, I think the decant did actually because I think we we had lost-- I think that's a good question. I've asked myself that a lot. We needed to build a new unit for these children. I believe that, because at that point everybody-- the unit had not been built right. We had done a lot of modification to it, but actually I think, to restore confidence in it, we needed to do that and that was a reasonable thing to do.

I think what happens as you go through and you get into your fourth or fifth, there were people beginning to ask-- and they were-- you know, initially Dr Kennedy was a lone voice, was beginning to ask questions about, "What are we actually seeing here? What's actually happening?"

Q So, before we get onto the epidemiology, I'm thinking about the interventions that were done in 2018, because in one sense they're a measurable output from an IMT.

A Yeah.

Q So, was fitting the filters the wrong thing to do? I'm assuming that wasn't the wrong thing to do.

A No, it wasn't, and that wasn't what I was getting from----

Q So, what were you thinking was done that shouldn't have been done

or done that wasn't justified?

A Sorry, I didn't mean to interrupt you.

THE CHAIR: Perhaps you'd be careful not to speak over----

MR MACKINTOSH: Yes, I know. It's a habit one gets into.

THE CHAIR: -- the witness.

MR MACKINTOSH: I'm sorry, Dr Armstrong.

A Sorry, I think I spoke over as well.

Q We spoke over each other. So, what are the things that you think in 2018 maybe either shouldn't have happened, or weren't properly argued through, or weren't properly justified?

A I think that the actions we needed to take, we needed to take, because people-- everybody wants to keep our patients safe. So I have no problem with that, but if you-- And I've spent a lot of time thinking about that because when something like that happens, you go back and you look at it. So, if you look at some of the minutes, for example, in June of 2018, then you begin to see hypotheses that have been put forward which, in retrospect, possibly aren't the correct ones.

Q What, the ones about the drains, for example?

A The drains as well, but if you look at it closely, so June-----think it's 8 June 2018, if you've got it.

Q Keep going.

A Okay. So, on 8 June 2018, what you will see there is there is nine Stenotrophomonas cases, and what you see is the-- and I wasn't at the IMT, but what you see is nine Stenotrophomonas cases, and at that point Dr Inkster says, "I'm not sure they're water related. Meropenem prescribing was up in the first quarter of the year." Now, what happens then is that then disappears when you get to 13 June, and that's-- Suddenly, these cases become water related.

Q So, wait a minute. You're not an expert in any of this, are you?

A No, I'm not an expert, but you've asked me the question, and what I'm saying to you is, when you look back, you can begin to see that, because I'm then reporting it publicly in the HAIRT. That's why I'm looking to see what happened. So, if you look back, you can begin to see that actually-- And again, you're right. I'm not an expert, but you asked me for my view.

Q Mm-hmm.

A And therefore, if you look at the drain issue, if you look at-- We all thought there was aerosolisation, all of these issues. But at that point we were all-- because I think there'd been problems with the building, we were all

anxious about it, and therefore I think we did the right thing because we did everything we could. But actually, if you go back and you look at it, that's a retrospective thing.

When we reached 2019, what I think was happening was that if you asked questions, then that was being seen as a challenge, and I've seen the word "challenge" used a lot here. People-- There is no doctor that is too big for you to ask a question of. You know, I-- Medicine is a multidisciplinary team. We've got better cancer outcomes because people get together and they debate the case, and that needs to happen here, and it didn't.

Q I suppose the point that I think-- to wrap this section up, to take one example, is that Professor Steele was quite cross that Dr Peters gestured zero with her hands when she was explaining there were no cases of a particular-- that there were no gram-negative cases in Great Ormond Street.

Now, she may or may not have been right. That's not my point. It's that he's the director of Estates. Is there not a connection between-- Remember Dr Stewart's report? The professional opinions of microbiologists being ignored by Infection Prevention and Control? Is this not potentially the same thing happening?

A Sorry, I thought you were going to go in a different direction there. No, I don't believe so. I think that in the report it was-- and I can't remember all of it, but what needs to come together in an IMT is the expertise of everyone around the table. It's not just because you're a microbiologist, or because you're Infection Control, or because you're Estates that your view rules the world, because unless you do that, you don't get a proper appreciation of the risk.

So, if you look at someone like Professor Steele, who's very, very experienced, you've got to be able to put that picture together. If you have one voice that is then dominating everybody else, that's when not good things happen, and that's why when you get someone like Dr Crighton who's extremely experienced and has lots of knowledge in chairing, then you can begin to to allow other voices to come through. Because in the end of the day, what you've got to do as a board is make risk-based decisions with only one purpose in mind. That is the patient.

Q Well, let's look at the bottom of page----

A It's not about professional-- anything else.

Q Let's look at the bottom of page 293 of your statement, the answer to question 416(d). We've discussed

most of this paragraph already, I think, about the IMT and what issues were raised with you, but do you see the last sentence?

> "There was a view, and this is set out in the external review, that it had become... about proving themselves right than a focus on the children."

Do you subscribe to that view?

A I think that the focus had been lost, and I think it had become more about the debate, and that's why we put it back on. I'm hesitant-- I'm hesitating because I'm thinking that I worked with Dr Inkster for a long period, and I think she was very well-meaning and she worked hard and she did a lot of good, and therefore I'm slightly anxious about doing that, but I do think that it became about the environmental hypothesis over-- rather than the focus on children.

Q So, are you taking the view that she wasn't putting the focus on the patient?

A I don't know. This----

Q This is quite a big thing for a medical director to say.

A It's a good question. I think people were focused on the patient, but I think what happened was people became over-identified with certain hypotheses rather than actually looking in a much broader way.

Q Now, I think we've probably done the meeting of 20 August enough. There's two questions that arise from it. One is we know there's evidence that Sandra Devine communicated with NSS about the principle of whether you could have a Public Health doctor chairing the IMT. We know that. Do you think it was a mistake not to brief HPS, ARHAI, in advance that this was going to happen and have it come out in the meeting the way that it did?

A Yeah. Just in terms of your first comment, my understanding is it was actually the director of nursing from Greater Glasgow and Clyde who texted----

Q Yes. That's the evidence, yes.

A -- it. So, that's Mags McGuire. She texted, I think, Jacqui Riley, and to be fair to Jacqui Riley, she didn't say what it was about. She just said, "We would like to change a chair. Could it be…" So, that's one thing. Sorry, I've forgotten your----

Q The question is would it have been a good idea to actually----

A Oh, sorry.

Q -- tell Jacqui Riley what you were going to do before Annette Rankin turned up on the 23rd to ask the question she asked, which is recorded in the minutes and we've had evidence about?

A Yes, you're right in terms of the way that that was handled was poor, and I would say that I had actually told NSS, because if you look at 21 August, I'd actually spoke to their medical director. I say in my statement I told them about that meeting, but I probably hadn't gone into detail, but you're absolutely right. The way it was handled-- And actually it was Dr Crighton who had to-- She went in to try and sort things out and she did well, and probably we should have done that better. Probably myself, Linda, we should have done that better. Me, rather, me.

Q Because actually, it's not-- I mean, I think to preempt a question I'm inevitably going to get from counsel for NSS in a moment if I don't ask this: the NSS weren't actually told that you were going to replace the chair? You didn't tell them they were actually going to replace Dr Inkster by somebody else on the 31st?

A I don't believe so.

Q No, right. Just taking the whole thing as a broadly. So, in terms of the way the clinicians found out about it, the way Dr Inkster found out about it, the way NSS found out about at it, would you concede that, for whatever the reasons you thought you were doing it, it was not being done the most effective way possible because it was going to create distress of various levels amongst those people then to be surprised?

A I would certainly concede that with one little nuance. I was keen that the IMT went ahead on Friday because we hadn't had one since the 14th, and the problem was, I think as Sandra Devine told you, she had been trying to get in touch with Dr Inkster but in the note it said, "Do not contact me." I think that that went wrong. I wonder now should we have put it off until Monday, but to me that seemed-- We had-- We had clinical risk here.

So, yeah, it was handled badly. The clinicians found out at the time, but I'm not sure I'd have put that IMT off to the Monday, because the problem about doing that is you lose four or five days in that. So, but it could have been handled a lot better.

Q Right. Can I ask you just to look at one email on Bundle 27, Volume 8, page 147. This is an email from Dr Crighton to you. I don't think we put it to her, actually, but on the 23rd at 6.53 in the evening. Had you discussed this-- You've been in personal email exchange-- You'd seen the email before on 22 August. Do you see the one from de Caestecker, "Sandra, Emilia is able to chair the meeting…"?

A Yes.

Q Before that email, had you been in contact in any way with Dr

Crighton about this IMT?

A No, I wanted her to go in-- I wanted her to be fresh. I wanted her to go in, form a view of it, and I certainly didn't contact her. I was really looking to try and get a chair at that point, but I didn't contact her. She would have contacted me in the Friday night. I didn't expect her to but she did. I would have wanted to know how that meeting went, but also she was looking for-- I think they wanted more transplant beds. That was 4B.

Q So there's no suggestion that you would have briefed her about what needed to be done in advance?

A No, I wouldn't because I wanted-- Well, I didn't have time to anyway, because it was all quite rushed, but I wouldn't have-- I didn't want to preempt my view or anybody else's view. I want the evidence looked at.

Q Well, let's look at what happened next. So, on 2 September, Dr Inkster resigns as lead ICD, which is Bundle 14, Volume 2, page 579. We have that letter and we have your reply, which is page 581. Now, we can read both documents, and we have read them, Dr Armstrong, but what I wanted to do was ask you some things you said in your statement about the issues raised by Dr Inkster, and so that's page 302 of your statement.

I think if we go to 301 to put it into context, because you've broken into bullet points at this point, which is always confusing for us when we refer to things. You see the answer to question 441, we ask you some questions about resources. You've answered those at the bottom of page 301. Do you see that?

A So, "Were there resource…" Yeah, sorry.

Q I'm not going to ask you about it because we can read that.

A Okay.

Q Over the page on 302, resources continues as a topic.

A Yeah.

Q Second bullet point, which you said:

> "There was some surprise from the Chief of Medicine Diagnostics... that Dr Inkster had applied for an additional training role [in March 2019 as Training Programme Director]."

The Inquiry understands that she'd been training programme director since 2014.

A Yeah, there is an email trail around this. So, I don't-- I know that she had a training programme director roll, but-- and I will show you the email. Basically, it does come from Dr Green to me, and it has an SLA with it, so it looked

to me new, but----

Q Could it be that it's actually just the same thing repackaged?

A It says in the email that it was an additional role, but if it is the repackaged one then I would apologise for that----

Q Because when she resigned or offered to resign in March in 2018, she mentions it as one of the reasons.

A Yes, she does.

Q Yes.

A Yes, but the email I've got doesn't say that. What it says is that there was an additional-- additionality in that, and that was why I put it in, and it wasn't discussed----

Q Right, so if it's not additional, you withdraw that?

A Yes.

Q Right, okay. Let's look onto the question we've asked you at 442, which I suppose is about cultural issues, and you say, "It may be helpful [middle paragraph] if I set out my awareness of the issues." Now, we can read that, and I want to explore one of them with you, which is under the heading, "Lack of respect/behavioural." You say that:

> "On the 31st of January 2019, Anne Gow… phoned me to alert me to a serious concern that Dr Teresa Inkster had accused another member of staff of telling her not to put anything in writing."

Do you see that there?

A Yes.

Q Did you happen to hear Professor Steele's evidence to the Inquiry last week?

A Yes.

Q So, I got the impression that what he wanted us to hear was that he may well have said something about putting things in emails, but he meant it as a joke.

A I heard the evidence. I wasn't at the meeting but I heard Professor Steele's evidence around that, and I'm sure that's correct.

Q I mean, the reason is that you've set this out in quite a lot of detail, but the points you make here and all the meetings that happened, it turns out at the end of the day that whilst it may be, from Professor Steele's perspective, that Dr Inkster has misinterpreted what he said, he has actually said, "Don't put things in writing," albeit that he meant it as some form of poor taste joke about the press. Would you accept that's a slightly different version than accusing another member of staff of serious concerns?

A So, maybe if I-- So, there's a formalised process with Health Improvement Scotland. So when they do any kind of-- This was an HAI inspection.

If something comes up, they have to alert the Board----

Q They do, and that's what happens in this case, isn't it?

A Yes, and so what I'm suggesting there, what I'm telling you there, is that when Anne Gow phoned me – and I've got a note of that, I think – she said, "There's a serious concern because our inspector was told that one of your team had told someone to not put things in writing." So, at that point, I'm not making anything about whether it was a joke or not, but that's what I was told, and what----

Q But you're putting it in your statement.

A Yes.

Q So what I'm what I'm simply putting to you is that, whilst all these events that you describe in the next bullet points all took place – all the emails received, all the meetings took place – the underlying fact is to some extent correct, that to some extent Professor Steele did say, "Don't put something in writing," albeit he means it as a joke. So does that not rather reduce the weight of this point which you're trying to make, I'm assuming?

A No, what I'm doing is I'm going back to 31 January 2019 when you get a call from Health Improvement Scotland that says, "We are"-- I can't remember

what they're called, some alert process, and, "Here's what she said, and that's what she said." She didn't know it was a joke or whatever. She just-- She's reporting something, and I'm telling you what happened on 31 January.

Q I don't think Dr Inkster thinks it's a joke, but that's not the point.

A No.

Q She told HPS.

A Yes. No, she told the inspector, and the inspector then alerts the director of nursing of HIS, and then they have an alert system where they have to raise concerns to me----

Q With you.

A What that is is what she said to me on 31 January.

Q So what I'm trying to get across here is that, whilst probably we will never know whether Professor Steele's jocular remark was delivered in a jocular tone or Dr Inkster was right or wrong to interpret it as she interpreted it, the fact remains, to some extent, she was reporting something accurately, in that she had had someone say to her, albeit he maintains it's a joke, not to put things in writing, in the context of tense moments around the time of a health and safety inspection, I seem to remember.

A I think that context and tone is everything, and if you say something as a joke-- and I know Tom well. I think he's a

great colleague, so I'll put that conflict out there, but if I'm saying something to you as a joke and then you go to the GMC, for example, and say, "Jennifer said something to me," then that's quite serious.

Q Yes, I agree.

A So it is that, so it's all about you can't just say-- You know, because the GMC will come back to me, and I'll say it was a joke, and suddenly, you know-- It's just not----

Q But equally, everything in its context, the way that Dr Inkster describes her relationships with, at the time, Professor Steele, and over the whole four years back to the appointment as regional ICD in 2015, is of people not telling her things. So it might be, I put it to you, that when she hears this remark, in her context, it's a serious problem. Do you see that's a possibility from her perspective?

A I'm not quite sure what you're getting at.

Q What I'm getting at is that, in some senses, the cultural situation in the Infection Prevention and Control team, you see it one way; Professor Steele sees it one way; but Dr Inkster sees it in a different way, and so when his remark is made, she sees it as a problem. She sees it as a threat, and that doesn't mean she's maliciously reporting him to the

HPS inspector. She's raising a valid point. Do you see that?

A I don't, and I'll tell you why, because if she'd seen it that way, and I don't know which way-- let's take it-- If somebody sees it that way, then what I would expect them to do is to go through the policies that the Board has, which are actually pretty good, about how you raise matters if you've got an issue with a colleague. You would say to your line manager or to whoever it happens to be, "I had a meeting the other day and I felt that this was not appropriate." Then the Board has policies, as indeed the NHS do, where you raise those matters and you get an investigation, if it goes that far, or we have a thing called Civility Saves Lives. We have that for doctors – in fact, clinical staff – in GGC, and that has an informal what we call cup of coffee up to something like that.

So the reason that you do that is because you want things investigated, and if somebody is behaving inappropriately, then it should be dealt with, or you give the person the chance of a response. But when you-- and you can raise-- People are free to raise things the way they like, but if it was me, for example, it would be better to go through that process, rather than go straight out and say something when you've not raised it as an issue before, either with

the person that you're upset by or using the processes that the Board has.

Q So there's, I suppose, two questions about that. One is Dr Inkster's version of events is that she doesn't seek out the inspector. The inspector is there and she's the only ICD in the building. Is she not supposed to mention it at that point?

A I think that the HAI-- Staff should be feel-- Everybody should be free to mention what they like, but there's----

Q Well, exactly.

A There's a fairness that's-- So if I had an issue with somebody or somebody had an issue with me, you would hope, if it was any of us here, that that would be mentioned as a meeting between people to try and sort it out. You would hope that, but if it goes straight into the inspector's report, which it did, and then it appears on the front page of lots of newspapers – it was even debated, I think, on some parliamentary debate – then that causes a lot of anxiety.

One of the things which I think she mentions, being a lone voice, we did write back to Health Improvement Scotland, and what happened was it went into the media and it said, "Senior Infection Control people don't like senior Estates people." Now, we've got 10,000 people working on that site----

Q Do you think it was Dr Inkster who went to the press?

A No.

Q Right.

A No, no, because HAI, they actually published a report and they said it in the report, so the----

Q Because I don't quite get what your point is. I absolutely appreciate you have a process. I understand that. You don't need to repeat that. I heard what you said. I think you're saying that you should tell the truth to an inspector.

A Oh, absolutely.

Q So she's told her understanding of events to the inspector. Somehow, out of her control, it's leaked. You've arranged a meeting with her and Professor Steele about this very point. He hasn't at that point said, "It's a joke and this is what I said." It's not until four years, three years later-- four years later that he says it here last week. Do you not give her any credit for being, to some extent, right about the facts?

A What I wish for is that she would feel that she could engage with HR or engage with Sandra Devine, who was her line manager, to alert her to her concerns and have them properly dealt with and explored.

Q As she explained in her letter, she didn't feel she could.

A Well, this was back in the

December 2018, and I think that-- I do believe firmly, and I have done for a long time, that it's absolutely-- inspectors need to come in and get an absolute picture of what's going on. Staff should exactly say what they want to say because by that-- we keep things safe that way. I think it's a different matter when you're replaying a meeting that took place four or five days prior to that.

I think it would've been better to have dealt with that either informally or, if it was serious, through formal processes because it also gives the other person a chance to be-- What happened with that was there was reports in the press about senior Infection Control don't like senior Estates. When you've got 10,000 people on the site, the reason why we went back to Health Improvement Scotland and we said it was an individual comment was because what happens is people say, "Is that me they're talking about?" or is-- You know, you've got to-- There's a wider staff issue there, and I think that's what happened.

Q Yes, but you'd accept that in broad terms she's factually accurate? He did say something to her about not putting something in writing.

A He used those words, but I think it's absolutely-- it's vital to know what context the words are used in.

Q Right, okay. What I want to do now is to ask you about an observation you make on the bottom of page 446. I think it's relevant at this point as we're sort of wrapping up. Sorry, question 446. It's page 306. So, what we're looking at here is a question that starts on the previous page in the context of key issues within the-- two pages before actually on 304, if you go to 304. You see there's a synopsis of key issues, and then over the page we get to page 446, and we ask you a question about the resignations in 2015.

A Yes.

Q Okay? Then over the page you describe other resignations that have taken place, and you say about Dr Inkster, I think, the last sentence of the paragraph before 447:

> "Her 3rd one is described above. In each case, there seemed to be little attempt to utilise well recognised channels to raise issues and indeed be part of resolving the issues."

What are the opportunities that she missed to use well-recognised channels?

A I think that, for me, what I was getting out there was they came out of the blue for me.

Q Do you think the resignation of Dr Inkster came out of the blue?

A No, sorry, not the September

one. No, no, actually no.

Q No, right, okay.

A Sorry, I should've made that----

Q The other ones came out the blue?

A Yes, yes.

Q So the one when she returned from her sick leave to discover that she'd been restructured in the management system, that came out the blue?

A It did actually, for me, because I had thought that she'd been involved in that, and I had sympathy for both sides, and I've said that in my statement. What I was getting at there was, when you have an issue at work, it's better to try and explore that issue, rather than just go straight to resignation.

Q In the context of the early part of 2018, when could Dr Inkster have explored the issue while it was being dealt with? Because she was on sick leave.

A Because there is an email I've got when they were hoping to meet her on 20 December to discuss that issue with her.

Q But she was on sick leave at that point.

A No, but it says in the email that I've got when they were discussing about the change-- So this was trying to get the structure more solid, and there's an email I've got that says that, "We hope to meet with Teresa on 20 December." So I kind of thought she'd been met on 20 December. I didn't know she hadn't been. I suppose what I'm saying is I would've rather she came back to work. I wanted Teresa to come back to work. Teresa's got a lot of very good points and was very, very good at her work. So rather than just go straight to resignation, I would have wanted a little bit of, you know, step one, step two, rather than straight into resignation. And I remember, at the time, I went and spoke to the team, and Professor Jones had been great because he had filled in, he had been working at the Royal, working over here, and also I spoke to Teresa. At the end of the day, actually, everybody had-- it was much better because I spoke to both of them. So the team were upset because they felt as though they'd been trying to work really hard, and then Teresa was upset, and I could understand that, because you can't really change someone's job role without----

Q Well, indeed, and that's what I'm trying to say----

A -- but both----

A -- and that resignation, there was so little time, and you're not criticising her for what she thought.

A No, I'm not.

Q What's the criticism you're making about that resignation?

A I would have wanted it to not go straight to resignation. I would have wanted-- because I think it was within a couple of days of her returning.

Q Yes, that's what she describes.

A I would have wanted there to be a step before that so that we-- because when people resign, it's kind of-- and there is, "Oh, this resignation"-- you're not, you're changing your job plan, but it would have been better, rather than resign, which is quite a big act and a big impact, you had a team there, Sandra, Brian, and Tom, who had been working extraordinarily hard over a very, very pressurised 2017, and then someone comes back and resigns. I could understand both sides. That's what I said. I could understand both sides.

Q Okay. So let's go back to the first resignation. So the way that seems to have come out is that she had a meeting with Dr Cruickshank and Professor Jones and then was asked to put her reasons for demitting the sessions in writing. In what way was she not following recognised channels then?

A I didn't see that. I actually didn't see that----

Q I'm just wondering why you said this, Dr Armstrong, because there are three resignations and you haven't seen the first one. You've conceded the second one was understandable, and the third one you've conceded didn't come out the blue. So when has she not used the recognised channel?

A I didn't say that for the first one. The recognised channels was a different issue. That was around the issue around if you've got an issue with somebody, using channels there. In terms of the resignation in July, then I was concerned about that. I didn't understand what was behind it.

Q The July '15 one?

A Yes.

Q But you didn't-- you hadn't seen the letters, so how could you understand?

A Exactly, and that's why I wanted an investigation into it because there was all sorts of issues going on there. I was keen----

Q Before we leave the investigation, the investigation wasn't into the patient safety issues, was it, Dr Armstrong?

A It wasn't, and it should have been, and I asked-- my issue----

Q So Dr Stewart was very, very clear, because I pressed him. I challenged him on why he didn't investigate the patient safety issues because Dr Peters and Dr Inkster were very annoyed with him for not doing that, and he was extremely clear the reason he only investigated the cultural issues is

because that's what you told him to do.

A So, he's been away from the workplace for a while and maybe doesn't have access to emails, but I do, and I can tell you that on 8 July I've got an email, and also one later on. It might have been a misunderstanding, I don't know, but I was pretty clear it was the reasons for the resignation.

Q Well, can you produce that, please?

A Yes.

Q Because the-- no point going over that. Let's move on because we've got to get through the-- before the end of the meeting. Do you consider that Dr Inkster's September '19 resignation was inevitable, given what had happened in the previous three weeks?

A I don't know, actually. I don't know. I didn't see it as inevitable. I didn't, and when I got the letter I was-- I didn't see the letter as inevitable. I didn't, but I could understand when I read the letter why she wanted to resign, but I didn't see it as inevitable. Maybe that was naive on my part, but I didn't.

Q What I want to do is to-- You didn't attend any of the following IMTs?

A Not that I'm aware of.

Q No, but you did receive a letter from the haematology consultants expressing some concerns?

A Yes.

Q And then meetings were arranged with them?

A Yes, I can tell you exactly what happened there.

Q Well, it's in the statement, so I just want----

A I've also got-- I've got more to add to that.

Q Right. Well, what we want to do now is move on to the meeting itself. So that's Bundle 27, Volume 8, Document 43, page 149. So we'd like to just understand-- this is 14 September.

A That's not-- that's not----

Q That's not it?

A No, the meeting with the consultants actually isn't minuted, but I've got-- So I can just recap.

Q So what did they-- All I'm keen to find out, Dr Armstrong, is what epidemiology information they were given, that's all.

A Okay. So, very briefly, consultants wrote-- because you don't have this information, I'll give it to you. Consultants wrote to us on 30 August, to Jane and myself, quite understandably. We respond and we meet them on 9 September.

Q 9 September.

A On 9 September, we have a discussion with them, and I think at that point-- I can't be absolutely certain, but Brian Jones comes and I think presents

epidemiology. Then, on 10 September, we were asked to give a briefing note to the Cabinet Secretary. In that briefing note-- and there's also a note from the Board to the Scottish Government. So what happens at the meeting is that we want to get an external review and we're chasing somebody in Great Ormond Street. They come back to us on that weekend of the 9th and say no, and then we chase someone in Belfast. So we write a briefing note.

Q So sorry, you're going rather fast, because his Lordship has to make note.

A Sorry. Sorry.

Q So, after the 9th and 10th, you chase someone in Great Ormond Street for doing a review?

A So on the 10th-- yes, on the 9th of-- I think-- no, before that, on the 9th, we meet the consultants. On the 10th, we give a briefing note to the Cabinet Secretary, and we've got all of that, with details of the review we want to do. We also-- the CNO comes back to us that day or shortly thereafter and says, "I think this is not for GGC to"-- or she asks us more questions about the review. We then go back to her later that night and we give her a pre-see-- and I'd forgotten about this but it's there, a pre-see of what we discussed with the consultants, and that that was around that we wanted to-- from memory, we wanted to HEPA filter the bathrooms. They wanted SOPs, I think, on environmental screening----

Q SOPs?

A -- standard operating procedures, and also there was something about four cases, and I've forgotten the fourth one, but I'll give it to you. At that point, the CNO comes back to us and says, "I'm not sure about Glasgow getting this," because my understanding was we wanted a clinician, maybe with an epidemiologist, to come and see, "Have we got it wrong in Glasgow?" because we were coming out of, "It's all the environment," into something more-- different. At that point, we then go to a stakeholder meeting on 25 September, I think----

Q So, just to recap, so the question I'm keen to get to, and I think you've given it to me, is that when you meet the consultants, it's Professor Jones who reports on epidemiology?

A I can't be sure about that. I have that in my head, but I don't have it in writing and I don't have it in-- I don't actually even have him in the invite list. He was very good and very clear. I think it was him, but I couldn't be sure. He could----

Q The way that perhaps we can deal with this is to look at a presentation that happens a little bit later on the 20th. I

recognise I'm not going to ask you about the epidemiology, because you're not qualified.

A Phew, I've thought-- Yes, I can do a wee bit---

Q Which is Bundle 27, Volume 13, Document 13, page 77, and I'm just going to step forward through this and then I'm going to ask you whether there's-- something about it. So, if we just go on the next page. Are you recognising this as the presentation?

A Yes, I think that's the CNO meeting, though, at Atlantic Quay. That was not the consultant meeting that I was at.

Q Because it's dated-- because it says in the-- in the header we have for it is it's presented at an IMT meeting on 20 September 2019.

A Right. So, that's an IMT meeting. I'm talking about a meeting when Jane and I went to meet the consultants in the RHC. It wasn't an IMT-----

Q But what I'm trying to get from you because, ultimately, we're going to have to nail down – there's so many documents and so many presentations – that you've looked at this document. Have you had this in your document list?

A I'm sure I've seen it before.

Q Well, just step through the next page. So the CLABSI, there's more central line infection data on page 79. Next page. There's some bed occupancy data on page 80, which I recognise from Dr Kennedy's work earlier in the year. Next page. There's an epi curve for selected gram-negative isolates on page 81. Next page. Another one on page 82. Keep going. Now, I'm just going to walk-- get my colleague to just walk through to the end of this presentation and let you look at it. 84, 85, 86. That's the end. If we take that off the screen.

I'm not going to ask you to explain what's going on but, from your perspective, is the Inquiry-- is it all right for the Inquiry to work on the basis that this document from 20 September is going to contain the same epidemiology as the presentations to the consultants, the presentations on Atlantic Quay, all at the same time? There's not an extra piece of work out there somewhere that we've not seen?

A I couldn't answer that with certainty because I don't know the answer to that. So, yeah, we have got other epidemiology that we've looked at that is not part of the Inquiry, but-----

Q But this stuff, it's-- I'm looking at September '19. That presentation, is that the presentation that is used by the IMT and by the Board to decide to reopen the ward to new admissions?

A No. So where I think-- where I

think was-- what happens is the CNO says to us, and you can see it in the minutes of that meeting we had at Atlantic Quay, that she will-- and it came out as GGC commissioning, but she's going to commission HPS to do a review of the epidemiology with Strathclyde University.

Q Right. Well, could I ask us to see whether this is a document----

A Yeah, the one that was then published in November of 2019-- because initially the draft comes to the consultants, comes to me----

Q Let's look at it, because----

A Sorry.

Q -- if we keep talking without knowing what we're looking at, we're just going to get into a mess. Let's go to Bundle 7, page 214. So I think this is the one that's published in November. Is that what right?

A Yes. No, that's the October. I think there's a----

Q That's the October draft.

A There's a November. That's maybe a confidential one, but yes.

Q It is the confidential one, and without the redactions which makes it so much easier to understand. If we go to page 250, is this the November one that's published? So that's the HPS piece of work.

A Yeah. So, the first draft, there

was debate within our team and by the consultants. It's interesting because there's an email trail where I'm saying very similar things to them. The first draft doesn't say whether we reopen the ward, and what we said to them was, "We wanted other people to do it. You're now doing it," but the November draft, that's the bit where it says, "There's no reason"-- If you go to November, something like, "There's no reason to keep this ward closed," or something like that----

Q Yes, so because what----

A -- and that was a crucial bit----

Q -- happens chronologically is that----

A Yes.

Q -- the two reports are, in terms of the figures and the tables, they're broadly the same, but there's a difference in text.

A Yes.

Q And it's after the November public one that the decision is made to reopen the ward.

A What happened was the CNO made the decision roughly around, I don't know, 15/16 November. At that point, the Cabinet Secretary said, "I want to make the decision," and then there is an announcement in Parliament, I think roughly on 21 November, and if you go back to that announcement, she then announces that the ward will open.

Q Yes, but in terms of the data that she's using, the epidemiology, this, the published version with the different text, is to some extent, at that point, the last word?

A Yes.

Q Right. Now, at page 258 of your statement, you say that-- Well, let's find the right page. On 26 November, at the bottom of the page, "HPS publish epidemiology review and advise the ward is safe." Are you sure that's right?

A I can't remember the exact wording, but you're probably right. That's me kind of-- they said-- they put it in a strange way. They said-- I'm guessing here. Whatever they said, they said that the ward is-- there's no reason for the ward to remain closed because that was the debate we had with them in October around that previous version, and that was the same view of the consultants as well.

Q Well, what we'll do is we'll go and find the summary page, which is page-- going back to Bundle 7, page 272. Do you see, in the fourth bullet point from the bottom, they say:

> "NHS GGC should consider current control measures around restrictions on services for newly diagnosed patients as there is no evidence from the HPS review of the data that supports the continued restriction of services."

Q That's what you're referring to?

A Yes. Yes.

Q Right, okay. That's right. Now, can we take that off the screen, please? I appreciate you're not an expert. You've been very clear about that, and I've not been asking you questions as if you're an expert, but you're the user or a user of experts' opinions, and I think it's important that we make sure, in the last few minutes of the afternoon, that you and I exactly understand other on what you think of the factors that you were using at the time. So, this is September to November 2019. I'm asking you about your views then. So, you had the HPS report. That's one source. Have I got that right?

A Later on, but yes.

Q Yes. So, you've got the draft and the final version and you can read that. You've got the presentation by Dr Kennedy and Dr Rogers, which seems to have gone to the IMT on 20 September, and you've got that.

A I wasn't at the IMT but, yes, I think so.

Q Yes, and you'll have the different version that went to Atlantic Quay, and you might have a similar version that went to the consultants in early September. You've got all that

piece of work.

A I think there was a briefing note that went to the consultants. I've seen that.

Q Yes, I think there is, but you've got all of those bits of information. You've also got what Professor Leanord is saying at the time about whole genome sequencing. You've got that as a piece of evidence. You've also got the experience of what's happened in terms of the interventions and the history of when particular microorganisms were found and when they weren't, and you've got that.

A Yes.

Q Is there anything else that you had in terms of evidence that you were using to concur, or even take the decision to reopen the ward?

A I think it was-- so I can see exactly what you're saying and I appreciate it, but it was more than that.

Q Right, what else was it?

A Yes, it was a-- it was a thorough process where we'd gone through----

Q Would this be the root cause analysis? I just mentioned that.

A It was root cause analysis, absolutely, and that became the clinic-- and that was very important because rather than one individual's view of it, we brought in the clinical-- it was called-- I think Sandra called it a clinical review of each case. We had in place a whole series of things, and you can see there is a full timeline that was given by the chief exec of Glasgow to NHS NSS.

So, we had thoroughly reviewed all of the different evidence. We had looked at all of the things that we'd put in place. We had looked at the epidemiology. We couldn't see an increase, and we also had strengthened all sorts of bits of the service. Therefore, it took time, I think, to rebuild people's confidence in it. So it wasn't quite, "Here's the evidence. We're just doing"-- It took time for people to move from-- you've seen the letter on 30 August-- to move from what they'd been told for quite a long time into, "Actually, this looks fine."

Q So, given that, there is an alternative perspective of complicated epidemiology which I'm not going to put to you, but there's a very simple point which goes like this. If we just look at the Schiehallion cohort, and we don't look at the rest of the hospital, the point when infection rates really drop away to very, very low rates is when the ward reopens after being rebuilt, 2A/2B. It's a very impressive facility. That being the case, what do you say to those who say, "Well, it never went down to really low levels until they reopened the new ward." It must have been the environment that

was causing the problem. What do you say to that?

A I think that if you look at 2A/2B, you will see spikes in infection. That's the nature of the issue. I'm not sure that you can say that that proves causality of the environment. What I saw was a lot of things done as well as we could possibly do. What you see is-- I remember being there, and I've described that to you, in the April/May of '17, there was a lot of work done, and it came right down. Then we had an increase in late '17 and then '18. There was a real spike in '18. That's when it went through-- that's concerning. There's debate around what caused that. Then what you see is it coming right down, and you see it continuing to go right down, and that's when I'm looking at that decant bit.

So, there's a whole series of things that have been done a lot better. It's a bit like, I don't know, (inaudible) cycling. You have to do lots of things really, really well, and all of these things come together. Also, I think, as we've said before, there will be infections that come from the environment. There is in every hospital up and down Scotland and the UK, and therefore you can't avoid that, but what you have to do is do everything as well as you possibly can, and trying to pick out exactly what that was is quite difficult. So, I don't know if that answers your question, but----

Q It does, helpfully, and there's one thing that comes from it, which is a small thing. You discussed the role of the root cause analysis and the clinical team exercise. You seem to put some weight on that. Why is that?

A Because if you look at, again this is when you go back and look at things, when you have a single voice determining that this infection has come from that drain or whatever, then what happens is you don't get that rounded view about whether it's-- and I'm not an expert in this, but whether it's a gut translocation or whatever.

So, what you see when you look back is you see a lack of pushback in the IMT, and the reason I say that is when I was in the forerunner to HPS, when I trained ages ago, I would go out with top flight people, specialists, into some sort of complex IMT like that who realised not when there was an issue, but they also realised when there wasn't an issue.

So, you didn't get that pushback coming into our IMTs and therefore, when you bring together a group of individuals who are experts – clinical, infection control – then they look at the whole case, the whole child, and they then determine what is the most likely, because everything in medicine is a balance of probability. They then

determine it rather than someone saying, “There’s an infection. There’s an infection in the drain, ergo, put the two together.” That’s where I think-- and it’s so interesting, because I had to write to the medical director in NSS because, at that point, there’s a wee bit of grit happening in the IMT in September/October time, and we weren’t exactly sure what it was that they were saying.

So, I like writing things, and I wrote to the medical director who’s very experienced in NSS. She writes back to me, and it’s actually Laura Imrie’s work, with, “You need to do these things.” One of them was that you should not have one person deciding whether it’s an issue or not.

Q That process that you’ve described and its merits, isn’t that what the case notes review did? Because we had a consultant microbiologist, two of them, and we had a lead Infection Control-- a senior Infection Control nurse working together to analyse all the information, to bring all the data in, to consider all the circumstances, and rather than just one voice, multiple voices, and they reached some conclusions. Isn’t it broadly the same process?

A No, I don’t believe so. I think with the case note review, there are issues around what they choose-- they said that 70 per cent of the cases were possibly or probably related to the environment. I’m not clear how they reached that. They didn’t have a comparator hospital, and then they talk about that the issues are in clustering making it more likely to be a probable-- So they were looking at it as not from, “Here’s a child. Here’s a case. Let’s look at all the different factors.” They’re looking at it as a tool to determine whether it’s related to the environment or not. I always have, as I think----

Q So, that’s not what they say in their report. You realise that, Dr Armstrong?

A Well, that’s the way it appears to me because I think they’ve made quite a lot of assumptions that if there is an infection here, or an infection in the environment, therefore the infection must have been in the patient. What we’re trying to say is that the clinical review will look at methods of infection, they’ll look at routes, they’ll look at portal of entry, they’ll look at all of that, whereas what I saw in the case note review was not that. It was an uncertain methodology. We didn’t really understand it. It was also not comparing like with like, and it was also making the assumption-- So, for example they they would have said that-- they said there was a Steno-- and I’m not an expert so----

Q Stenotrophomonas?

A No, I know how to pronounce that. Yes, Stenotrophomonas. What I'm saying is my personal opinion, so you take it with that, but what they say in the case note review is you're more likely to become "probable" if the infection is a cluster and, therefore, you're more likely to be released in the environment. They particularly say Stenotrophomonas in the June of that year because there was a cluster. What I'm saying is if you look back in the IMT minutes, initially it was a Meropenem increase, you know, a month or so beforehand. So I'm not clear what their methodology is. I don't think they were using causality. I don't believe in that it is-- and that's just my personal opinion.

Q Well, we'll be asking them in two weeks' time, so we'll do that. I want just to look at one more issue before we have our traditional break for 10 minutes to see if I missed anything out and if my colleagues have questions. I wonder if can we look at the document-- Let me just make sure I get the right page up on the screen. So, the document I'm going to put up is a positioning paper produced for the Health Board, and I want to make sure that I've got the right page. I'm not going to put the whole document to you. So, I'd like to go to page 1282 of Bundle 25. Now, so the context here, Dr Armstrong, is that the counsel for the Health Board has lodged this submission and it sets out a lot of other detail, but in the final paragraph 69 it describes conduct by-- I have no idea why we have redacted the word "whistleblowers" in this in this sentence, but it describes:

> "... conduct by 'whistleblowers'… in the examples cited at (j) to (k) below… which undermined the efforts taken to manage infection control, and protect patient safety…"

Have you read this document?

A Yes.

Q Now, do you agree with the description of the conduct of any of the whistleblowers that's described in paragraph 69(a) to (o)?

A I do.

Q Which ones?

A I think that there is a mix of all of them, but not-- I find it-- I find this awkward because I don't really like kind of, you know-- but I think----

Q Well, we wouldn't be doing it if it hadn't be lodged, so why----

A I know, I know. So, what I would say is there is a mix from different people that we're describing with these points and from (a) to (o).

Q Now, I've understood this document to describe behaviour that took

place in a period of time from 2015 to 2019, possibly into 2020, but certainly not much later. I'm wondering what steps you took at the time to address these serious issues with those doctors.

A I think that if you look at the 2015 review, which was done by David Stewart, it mentions some of this. I kind of regret that we didn't have that meeting. I think that-- because you'll see he'd looked at that and it probably should have been shared at that point in a delicate way. But following that, there has been, particularly within the latter stages of, I think, '17/'18, there was work done, I think, with Dr Green. Again, that's not within my----

Q Sorry, with Dr Green?

A Yes, Dr Green with Dr Peters. In terms of Dr Inkster, there was-- I had hoped-- I'd hoped that in sort of January/February/March of 2019, that trying to get more support there and trying to have these discussions with her and trying the mentoring route may help, but I'm not sure it did and I just wonder if we did do enough. I don't know that we did, actually.

Q So, at paragraph (j), are you saying that either Dr Peters or Dr Inkster provided inaccurate information to patients and families regarding infections?

A I think there was-- again, it wasn't directly linked to myself, but I think there was evidence given by the Board on a specific-- on some specific cases.

Q So, would this have been an incident involving a Serratia case in 2018?

A It could have been.

Q Right, so you are aware that the following IMT minute contradicts entirely what's said in this paper? We've had evidence about it.

A I wasn't aware of that.

Q No. Because the reason is that, without getting into the nitty gritty of this, these are quite serious allegations, aren't they?

A Yes.

Q You're the responsible officer for the Health Board. You're nodding.

A Yes, I mean, I think that we-- so I'm the responsible officer of the Health Board and we do do revalidation and appraisal and there is a good appraisal record. I think some of these are more difficult to show, and they are behavioural patterns that come in place over a number of years, and that can be very difficult to address.

Q Well, what I'm putting to you in simple terms is that, whilst that may be true, no one's actually addressed them with Dr Inkster. I'll come to Dr Peters in a moment. There hasn't been any point where you've turned around to her and

raised these issues with her in the format of being a conduct that amounts to providing inaccurate information to patients and families.

A I think that that would-- that that came from something that was submitted by the Board there, and there was evidence that I saw, but if you've got alternative evidence, then absolutely.

Q So----

A But I think for some of the others there has been, over the years, an attempt to do so, but the problem is when you don't have a formal process, it can be very difficult.

Q But there is a formal process, isn't there? If you've got a problem, you've got a disciplinary system; you should have used it.

A I don't think there's-- What I mean by that is I'm not sure there is enough for disciplinaries, because these are quite-- like respecting professional boundaries. I do wonder, and it is a genuine look back, is what could we've done differently and could have we done more? I do wonder that.

Q Just a moment, you're agreeing with the third line of paragraph 69 that these doctors have undermined efforts taken to manage Infection Control and protect patient safety and welfare, and you're saying that's not something you should have taken up as a matter of grievance or, frankly, have reported the General Medical Council?

A I think that what you have to do is investigate that. I think the undermining the Infection Control team, there is some evidence of that and that was addressed at the time by Dr Green, and I can talk through that incident if you wish. So, what people try and do is they try and use processes which is not going straight to the GMC because that-- we just wouldn't do that for that kind of thing.

You have to use a graded acuity, a graded process where you try and start off with, "This happened. This did not go well." There's a reflection on it, and then you hope to put in place behaviours that change that, and that takes time to do, but when you see behaviours recurring then it can become quite tricky. But some of these I will have personal experience of, but a lot of them I don't, and that will be other people. So, it's not just my name. There's other people there, so I can't talk to all of them.

Q So, if we look at (m), "Making false allegations against colleagues…" I'm assuming that's in the context of Professor Steele and the joke.

A No, actually, I think that that has been shown, I think, back in about 2016. There is a case around that when I think one of the individuals did make false allegations against three colleagues, and

it was do with a particular case, and certainly-- I think you've actually even got it in your bundle there. So, that was disproved at that time, and it was against a doctor and two other nurses. There was an investigation done and it was disproved, and they were asked to redact-- not redact, to take back that statement.

But what that does to people though is, when you're working in that environment and somebody's made an allegation – and yes, you investigate it and you do all these things – it makes people anxious. It makes them very anxious because they think, "Oh, goodness, they were about to report me." It actually says, "Professional misconduct." In fact, I've got----

Q Because the broad point I'm making, Dr Armstrong, I suppose I'm putting to you, is this: this document appears in December a year and a half ago. It might be used – I don't know how it's going to be used – to suggest that we shouldn't listen to the views expressed by these doctors. I'm just wondering when it is that Dr Peters and Dr Inkster are first wrong about the flaws in the built environment of the water and ventilation systems of the Queen Elizabeth Hospital.

A So, there's two issues I think you've raised in that. One is I don't-- I think you should listen to those two doctors, absolutely you should. I think that-- And that was not the purpose of this. This is a positioning paper from the Board that was put forward by the Board's legal team, and it's taken a number of different opinions into account. That's what we were doing through this process.

I think in terms of the issues around the Queen Elizabeth, I think there was significant issues, and you will have absolutely picked them up, but they were picked-- And I think-- I wouldn't-- I think Dr Inkster and Dr Peters did pick up many of those issues, and that's what I'm saying. There is a balance here. It's not all good or all not good, but many other people did a lot of work and did pick up these things and did do a lot of work to actually go ahead and fix them, including Dr Inkster.

So, to me, it's not mutually exclusive to say, "We've got this list and this has come from a whole range of individuals. We've put it forward through the legal process for this Public Inquiry. You absolutely – you absolutely – should listen to their opinions because you're the Hospital Inquiry. You need to do that," but I'm not equating it then to-- in the way in which you are.

THE CHAIR: Sorry, I just missed the last sentence there.

A Yeah, I probably tripped myself

up there. So, what I'm saying is that, yes, they did pick up issues, but that doesn't stop some of these issues being put forward. But many other colleagues picked up issues in the Queen Elizabeth and did fix them in the best way----

MR MACKINTOSH: Because there is a response to that which is that-- and I tried to make it to Dr de Caestecker but I'm not sure she got the analogy, that this note, and the position you've explained, your sort of nuance on it, is a good example of sort of playing the man not the ball, of making-- of undermining the messenger by pointing out some failures in their conduct, rather than focusing on the actual issue that they brought the about. How do you respond to that?

A I would absolutely reject that. I believe that my-- People in my team, clinical team, the people at the Board, we all were focused on fixing the issues within the Queen-- We got a hospital handed over to us which had issues with it, and we've spent the last nine years trying to address them for the good of patients, and you've heard me talk about that. So, absolutely, for us, I can't remember if it was the man or the ball, but the ball was the big thing. That was the big thing, to get that in a fit state for patients.

Over here, there are a series of behaviours that have been quite

damaging to many of the teams in GGC, and therefore we have to raise some of these issues because the danger is you're too anxious to raise some these issues. What you heard from Sandra is that some of them do continue, and they are quite detrimental. So I wouldn't accept that.

Q I suppose my final question before we have the break is: when did the Board start to try and work out how it was that this hospital was delivered to it with these flaws?

A I probably-- I probably don't know the full answer to that because a lot of the discussion and debate, I think, with the contractors was taking place away from me. Maybe in the earlier years – 2015/16/17. I don't actually know what the project director was doing there. What I do know though is that when Professor Steele came in and Jane Grant came in, they went then and asked for the econ report. That's what I would suggest is that was the report which was to look at the totality of everything, do that review and that, I think, was about 2017.

Q Well, it's 2018----

A 2017.

Q -- because that's when Dr Steele arrives.

A I think it was started-- Yeah. I think-- Yes. Yes, you're right. Sorry.

Q So, the thing that I wanted just

to check out with you, but I'm just slightly flailing around for a page reference because I'll be a lot more coherent when I have the page in front of me. Yes. Just thinking of yourself, because obviously we can only answer for our own conduct – that's the nature of life – do you think as the Board member responsible for ensuring patient safety, as medical director, that you could have done more to press for answers about the lessons that are required to be learned from the procurement? Because that was Dr Redding's Stage 2 whistleblow. That's one of her points.

A Right.

Q Could you have done more yourself?

A I think in terms of patient safety, for me as the medical director, my whole thing was around trying to fix the hospital while keeping patients safe and keeping treatment going and doing that in that area, and I've described that to you. I'm quite out of-- I'm a bit of a fish out of water when you talk to me about procurement because I'm not quite sure how to do that.

I certainly know that we were raising issues with the hospital and trying to address them, trying to get bone marrow transplants done, trying to keep things going while you're fixing the problems and that's-- I think we did that reasonably well.

Q No, you did react. I understand that, but I suppose the point I'm making and I'm putting to you, and giving you an opportunity to respond, is that Professor Steele turns up and he's the first person, as far as we can tell, who has the perspective or the thought to go, "We need to work out what happened," and he asks for his review. He does that. So, before he arrived, no one else had thought of that. Everybody else in the management team, unless I misunderstood, is not a doctor. You're the medical director, and although it's not your field, is it not your responsibility to ask the question? That's what I'm putting to you.

A I think we were but not in a systematic way.

Q Right.

A So, there is evidence. You can see in some of the Board discussions, there is people saying, "Wait a minute. There's quite a lot of things coming up," but I think it was as systematic as it became in the econ report.

Q Thank you. I think, my Lord, this would be a good point to have our 10-minute break to see if there are any questions in the room.

THE CHAIR: As Mr Mackintosh has explained, I need to find out if there are

any further questions in the room. I would like to think we can do that within 10 minutes. So, can I invite you to return to the witness room, and I hope to can ask you back in 10 minutes.

THE WITNESS: Thank you, your Lord.

(Short break)

THE CHAIR: Mr Mackintosh?

MR MACKINTOSH: I have two topics, probably with, I think, three questions in each. Thank you, my Lord.

(The witness re-entered the room)

THE CHAIR: A few more questions, Dr Armstrong.

THE WITNESS: Okay.

MR MACKINTOSH: I wonder if we go back to the bottom of page 293 of your statement, in which you say, in the context of issues around the IMT:

> "There was a view, and this is set out in the external review, that it had become more about proving themselves right than a focus on the children."

I appreciate that you say it's well described in the external review, but I have three questions for you. Are you saying that, for Dr Inkster, her behaviour in IMTs became more about proving herself right than a focus on the children, and if so, why?

A I think with Dr Inkster that my view is that she became very identified with the hypothesis of the environment, and that drove the IMT potentially away from other areas that it should explore. I wonder-- I don't know, but I wonder, I think, and with Dr Peters----

Q Well, let's just stick with Dr Inkster at the moment.

A Sorry, sorry, yes, and I think that that led to a loss of perspective on where we should go with the IMT, and the danger of that is that you end up, if it's normal – and we think it was – but that-- I'm putting myself back there. What I wanted to know is I wanted the evidence to be looked at because if it is normal background, then what happens is you start to take more abnormal reactions, which have a greater impact on children.

Q Well, so that's great, but that wasn't the question I asked you, which was----

A Yes, so----

Q -- do you think that Dr Inkster had a focus on proving herself right rather than a focus on the children? Yes, no?

A I'm not going to give you a yes/no. What I'm trying----

Q Well, I'm asking you for a

yes/no because you've written it there in your statement.

A Yes, I can't give you a yes/no though.

Q Well, then would you like to remove that sentence from your statement?

A No, I want to give-- I want to say that I think the focus had become about the environment, and I think that led to a lack of focus on the children. I wouldn't go as far as to say that Dr Inkster wasn't focused on patients, but I think the actions of which she took led to a lack of focus on the children.

Q So you're accepting that she remained focused on the children but there was more of a focus on the environment?

A I think the focus on the environment took away from the focus on the children.

Q What's her duty as a doctor?

A Her duty of----

Q She's required to act in the best interest of her patients, isn't she?

A Yes, so I guess we're maybe not being able to reach a conclusion here. My position is that the IMT focus degenerated, and it became about a focus on the environmental issue at the expense of an IMT looking at a broader spectrum of things, which it should do in order to ensure that you get the best outcome for patients.

Q So----

A So that became skewed, and therefore-- So I'm not sure I can quite answer the question----

Q Well, look, I'll ask it again. Did Dr Inkster make her focus the primary interest-- I'll start again. Was the focus of Dr Inkster the best interest of her patients?

A I think that she would believe that, and I think she did-- she was focused on patients, I believe that, but I think the actions that she took there did not lead to that outcome. So I'm kind of half agreeing with you, but I'm trying to put-- I'm trying to put the best----

Q I'm not expressing an opinion. I'm asking you, because it's a very serious suggestion you're making----

A Well, that's my opinion. Yes.

Q -- that a clinician, while in a serious position in your organisation, who you've kept in post for two, three years was focused on proving herself right rather than focused on the children. I'm giving you the opportunity to back that up.

A So I'm saying that the IMT, the way it went, was not focused on the best outcome for children, but I wouldn't go as far as to say that she was not focused on patients.

Q Thank you, and we'll turn to Dr Peters. Now, conscious of course that

this is a question about the IMTs, and the number of IMTs that she was attending is relatively low at this point because she's not doing any ICD sessions. So to what extent does this sentence refer the conduct of Dr Peters at IMTs?

A From what I'm aware-- I haven't been at the IMTs. From what I can tell, there was one IMT, which was the 14 August one, which seemed the focus was on their hypothesis and on the environmental issue, rather than a wider focus on children. So I don't believe at that point that the focus was on the-- getting the best for patients. It was more about-- The focus was on the argument, more than actually on what it should've been.

Q So are you saying, yes or no, that at that point in the IMT on 14 Augus-- Did Dr Peters have as her primary focus the interest of the patients, yes or no?

A I can't answer that because you'd need to ask her that.

Q Well, but you've said it in your statement. You've said that there was a view that it had become more about proving themselves right than a focus on the children. Given that she's only at one IMT at that point, you weren't there----

A I think----

Q -- do you feel you can say that about Dr Peters?

A I think her primary focus at that point was on what she was brought there to do, so her primary focus, I think, was to-- Again, I've not read all the minutes of it, but her primary focus was there to put her point of view forward to say that there was an issue with the environment, and I think the patient got left behind somewhere, so yes.

Q How do you know that?

A Because that was part of the issue with the IMT, where it became quite dysfunctional. You're right, I'm making an inference. I can't know that, but that's the way it appeared to me.

Q Are you relying on Dr de Caestecker's investigation or just what people told you when they came back to the executive offices that afternoon?

A I'm relying on years of experience of working in the NHS and years of experience in my post, in that my job is to-- I am not there on every single instance where things are going awry, but I know when I see it, and I saw it there. Now, I can't say to you----

Q So you say you saw it there, but you weren't there.

A No, but I knew what was coming out of the IMT. I knew it was becoming very dysfunctional, and----

Q Who reported the IMT to you, Dr Armstrong?

A Well, we've been through this, I think, in the last----

Q I know. The chair didn't report that IMT to you, did she?

A No, but other people did.

Q Professor Gibson didn't report that IMT to you, did she?

A I'm not sure where this is going. What I'm saying to you is, when you have these issues coming up, whether it's all of the names, you can go through the IMT membership and name them all and I can say yes, no, yes, no----

Q Well, you know----

A What I've got is I have got a view, which is becoming more solidified over time, that we have a problem with this IMT----

Q I'm not asking you about time, Dr Armstrong. I'm asking a single question about one IMT on 14 August, the only one that Dr Peters is attending at that point, which you're not present at. You have reports from three people, Professor Steele, Scott Davidson----

A I didn't say Scott.

Q So you didn't say Scott. Who were the three?

A I can't remember them all. I had an impression up until that time, not just at that IMT. My concerns had been building----

Q But I'm not asking you about them. I'm asking you about Dr Peters at the IMT on the 14th, and your sources do not include the chair of the IMT or the clinicians, do they?

A Oh, about Dr Peters?

Q About Dr Peters.

A You're correct.

Q Right. So you are drawing your conclusions from what source about Dr Peters' behaviour?

A That's not just on that issue. I think that----

Q Well, no, it is. We asked you a question. Let's look at it. "What was your understanding of the issues raised surrounding the IMTs?" So we're not talking about anything else, and you've given an answer, and you said:

> "The behavioural issues related to Dr Peters who had apparently been very intimidating at the meeting on the 13/08/2018…"

Now, you've got the date wrong, but I suppose that's just a mistake. The next sentence appears to be you saying that she had the focus on proving herself right rather than the focus on the children, and you're continuing to say that. I'm saying: tell me your sources for that information. It's about the 14th, nothing else.

A The sources were the reports that came through that 20 August meeting. It was a variety of opinions that were expressed during that meeting. That was my sources, listening to all of the comments that came in----

Q Do you think that's enough----

A I think----

Q -- for you to say this? Do you think that's enough for you to say this, given the way the media are now reporting your remarks this afternoon?

A I didn't-- I wasn't aware of that. I think that there-- I think that IMT was going the wrong way. I'm not sure that I can say that they weren't focused on children. I think there was the issue that the IMT became focused on the argument, rather than what it was there to do.

Q Okay. What I'd like to do now is move on, move back to the other topic I was asked to raise, which is the DMA Canyon report and your presentation to the Board. If we can go back to that, it's Bundle 27, Volume 8, Document 7.1, page 58. So we looked at this before. I want to just look at it again. So, you're reporting this presentation to the Board and it has, I think, two substantive slides. That's the first slide, "Review of the commissioning and maintenance of water systems [at the hospital]." It's by you, and over the page, and we have a background which lists the IMT: "Testing identified higher than normal bacterial counts in the water system." The HPS has been commissioned to act. Then the external contractor report from 2015 "identified recently, with considerations around implementation." Then we go over the page, and you have the, "Immediate Priorities": "Ensure ongoing safety of the water supply" and a project team to be established.

Now, you told us that you hadn't read the report before making this presentation. Is that correct?

A I'd only seen it briefly.

Q What does that tell us about the way the Board deal with your presentations, Dr Armstrong? Because this is what I've been asked to put to you: if you don't feel it's necessary to read the report, does it not tend to suggest the Board aren't going to ask you any hard questions? You don't need to know what the report says because they're just going to accept this and it'll go through on the nod.

A No, this accompanied-- There was a briefing note, but it also accompanied-- I don't know if it's in the presentation, but what happened was there was a group set up-- I think it was that project team set up, and it was under the leadership, I think, of Jonathan Best. The idea was they were to take-- because this only came out the day before, I think, the DMA Canyon report, or I was only aware of it, I think, the day before this. So the idea was a project team were set up to look at the report and to look at all the other water related

things, and it says, I think, in that briefing note that they would then report back to the Board on that, and that was being led by the chief operating officer.

Q You also explained in your evidence elsewhere that the Board needs to do crisis management. Do you remember that?

A I'm not sure where that is in my-- Is it in my evidence?

Q Well, I think you might have said in oral evidence that one of the jobs of the Board is to manage crises. That's what boards do. Would you accept that?

A I'm not sure which bit of the evidence you're-- Yeah, boards have to manage major incidents.

Q Yes, so you're an executive member of the Board. How can the Board receive this presentation and go about its task of reacting in a substantive and thoughtful manner if you've not read the report?

A I was really only-- Because I think at that point we had no director of Estates. We had an interim director of Estates, and I don't know why I ended up doing it, but I think we were keen to let the Board know, and I can't remember exactly why I did it. I was probably letting them know about the infections, but we were also letting them know about the report. It's not within my remit to talk about what's in the DMA Canyon report.

I don't have the expertise for that at all, but what we were doing was seeing there is a report, as well as setting a project team in place to actually look at the report and then report back to the Board, and I think there is a briefing note with it that actually says that.

Q So, if you go back to page 59, sorry, the considerations around implementation, what would you have known about those considerations around implementation?

A Whereabouts, sorry? I'm on----

Q Bottom bullet point, page 59.

A Yes, so I think what that's saying is that there was a contractor report identified and there needs to be – and there was – a process that then looked at those reports and then looked at the actions that had maybe not been done and then made sure that they were all done, but that was----

Q But that process hadn't happened yet, had it?

A But what it says there is, "External contract reports identified recently, with considerations around implementation." What I would read out of that was-- again in the briefing note, and there would've discussion with the Board about, "Here's a report. Here's what happened, and we need to actually go away now and make sure that this is

properly implemented."

Q I wonder-- one other thing you could just help me, because I realise I should've asked this when we were discussing this before. Mr Walsh gave evidence that he ended up effectively running the project to react to the DMA Canyon report. Have I understood that right?

A Again, it's in the briefing note. What happened was that there was a project team put together, and it was led by the chief operating officer, and I think there was Estates in it, and I think also that Mr Walsh went into that team in order to support it. I wasn't involved in that team, but it was set up to do that, as well as, I think, to look at the other documents, but it's not something I was involved in.

Q Just he gave the impression that he was running it. He received all the information and then he organised it all. That's the way I heard his evidence.

A I don't know the answer to that.

Q Okay.

A I think he was supporting it. I'm not sure he was running it.

Q Thank you. I may have misunderstood. Thank you very much, my Lord. No further question from me, unless the room is reacting badly to my questions.

THE CHAIR: Sorry?

MR MACKINTOSH: Unless the room reacts badly to your-- the next question.

THE CHAIR: Right. I'm not seeing any bad reactions. I'm seeing some consultation, but I'm also seeing a laptop being closed. Dr Armstrong, thank you for your oral evidence today and thank you for the written statement, which is also part of your evidence. I appreciate that that written statement would've involved a great deal of work on your part, so can I recognise that and thank you for your attendance and thank you for that preparation work? You're now free to go. Thank you.

THE WITNESS: Thank you. Thank you very much. Thank you.

(<u>The witness withdrew</u>)

THE CHAIR: Now, as people will be aware, we're not sitting tomorrow.

MR MACKINTOSH: We're not sitting for nine days until 22 October.

THE CHAIR: Right. So we will plan to see each other again a week on Tuesday.

MR MACKINTOSH: Can I just make a sort of request to the core participants that, because the week of the 22nd has been largely set aside for

communications issues, it would be a great assistance if my colleague, Mr Connall, could receive any Rule 9s for the whole week together rather than during the week because a lot of the issues apply to multiple witnesses.

THE CHAIR: Right. Well, legal representatives will have heard that and I'm sure will be anxious to cooperate. Enjoy your evening. Thank you very much.

(Session ends)

16.42