SCOTTISH HOSPITALS INQUIRY

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Hearings Commencing
19 August 2024

Day 29
Friday, 4 October 2024
Professor Thomas Steele
Dr Anne Cruickshank

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10.02

THE CHAIR: Good morning. Mr Mackintosh?

MR MACKINTOSH: Good morning. This morning's witness, my Lord, is Professor Thomas Steele.

(The witness entered the room)

THE CHAIR: Good morning, Professor Steele. As you appreciate, you're about to be asked questions by Mr Mackintosh, but before then, I understand that you're prepared to take the oath.

THE WITNESS: Yes, my Lord.

Professor THOMAS STEELE
Sworn

THE CHAIR: Thank you, Professor Steele. Now, your evidence is scheduled for the morning. It might slip into the afternoon, but we will take a break at about half past eleven. However, if you want to take a break at any other time, just give me an indication and we can take that break.

THE WITNESS: Thank you.

THE CHAIR: Mr Mackintosh?

MR MACKINTOSH: Thank you, my Lord.

Questioned by Mr MACKINTOSH

MR MACKINTOSH: Good morning, Professor.

A Good morning.

Q I wonder if I can take your full name and your occupation.

A My name is Thomas Steele. I'm the director of Estates and Facilities for NHS Greater Glasgow and Clyde.

Q Thank you, and just for completeness, when did you start being Director of Estates and Facilities?

A 1 October 2018.

Q Thank you. Now, you produced a statement for the Inquiry in response to our written questions.

A Yes.

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

A I am.

Q Right. Well, what I'm going to do is I'm going to ask you a series of questions arising partly from that, partly from some documents and then partly from some evidence of other witnesses. As his Lordship says, if there is any particular reason you need to take a break, just indicate and we'll accommodate that.

I understand that before you became director of Estates and Facilities you were a director of Health Facilities Scotland.

A Yes.

Q Yes, and when did you leave that organisation?

A September 2018.

Q Thank you. All right. We have seen, I don't know whether we need to look at them, and we can if we have to, but two minutes of meetings you attended. One was on 17 March – seems to have been a briefing for experts of some sort – and the other was on an IMT on 27 March 2018. Do you remember these two meetings?

A I remember being at them, yes.

Q Well, the reason I ask that is I just wanted to understand what your involvement was with HFS in respect of these, the water incident in general in the early part of 2018.

A I think I had been contacted by colleagues within HPS to potentially provide some technical support, i.e. the HFS team would provide technical support to NHS Greater Glasgow and Clyde. My role was to go to the meeting and assess whether we had resource available and that's what happened. I went there primarily to listen and offer some support if I could.

Q What did you understand that in March 2018 was the issue that the Health Board were dealing with?

A My understanding, they had an issue around their domestic water system and, on the face of it, I was led to believe the system had been compromised or contaminated.

Q Had the system been contaminated?

A I don't know at that time. I didn't know at that time.

Q Well-- you didn't know at that time, okay. Were you still involved in working in respect of the relationship between HFS and the Health Board later on, after March? Did you stay involved or did you have any further involvement in the Glasgow case?

A I don't recall. I may have attended other meetings. Certainly, my colleagues within the team who had specific expertise, particularly in engineering systems----

Q That was Mr Storrar, largely?

A Ian, Ian Storrar, yes, and Mr McLaughlan, who's previously given evidence, I think, was involved in some of the meetings also.

Q The reason I ask is because, as I'm sure you're now aware, that in the very early-- late in June or early July 2018, the existence of a Legionella risk assessment by DMA Canyon carried out in 2015 became aware-- it became something that the medical director became aware of and, in her statement, she's described passing it to Dr Inkster.

There seems to be some suggestion that it was recovered from GGC by Mr Storrar or Mr McLaughlin in possibly April.

Now, what I wondered is, at the time – because of course you may have learnt this since you were working at Greater Glasgow-- but at the time when you were at HFS, did you have any awareness of them discovering this piece of material before it got to back to Greater Glasgow?

A Well, Mr Storrar was asked to review-- As part of his review of the systems at the Queen Elizabeth, because he was unaware of the design philosophy of the site, was seeking documentation from colleagues within Glasgow. So he was getting large volumes of information – technical information, drawings, specifications, etc. – sent and within that package, there was the two DMA reports of 2015-2017. They were sent to him.

THE CHAIR: Sorry, 2015-2017? What do you mean by that?

A The two risk assessments that were sent----

THE CHAIR: The two risk assessments? So two documents?

A Two documents were sent from colleagues within Glasgow as part of it. It was a big data dump that was sent. They were by no means lost within this data dump, but they were part of a----

MR MACKINTOSH: They had to be found, anyway.

A Yes.

Q Right, and so did you find out about them at that time?

A Yes, Ian brought them to my attention and said, you know, “I’ve been sent two risk assessments. They were voluminous," particularly the 2015 report. It had many, many recommendations within it and, on the face of it, some of them were significant.

When we looked at the 2017 report, there was some repetition in there which would suggest that, at face value, they were broadly the same and would potentially lead to believe that perhaps not that much had been done between the two reports.

Q Do you know whether Mr Storrar or you or Mr McLaughlan brought these reports, as it were, back to the attention of other people in Greater Glasgow Health Board at that point?

A I do, I personally did.

Q All right, so who did you draw it to?

A I went to see Mrs Grant, who is the chief executive of Greater Glasgow and Clyde.

Q When would that have been?

A It was in June.

Q I'm assuming you just didn't leave her on her desk.

A No, no, I----

Q What did you tell her about

that?

A Absolutely not. I asked if I could come and see her and that we'd been shared some information. To be fair, Mrs Grant would have no understanding, certainly at that time, of what a pre-occupation risk assessment was.

I said we'd been given the documents by the team, we'd asked for action plans and they couldn't be provided, so, potentially, the documents had not been actioned, and I shared that information with her and talked about the need for a pre-occupation risk assessment and what it was about, basically.

So Mrs Grant was unaware of, I guess, the technical requirement. She was concerned about the narrative within both documents. I know Mrs Grant well and I'm sure that and she did deal with them very swiftly in terms of getting----

Q Well, we do have evidence of a swift reaction at that point.

A Yes.

Q What I wanted just to check in with you is a couple of questions that arose at the very beginning of the Inquiry about pre-occupation risk assessments. Do you have a view – and it may be it's a matter of what the contract says, and I appreciate you might not have read the contract at that point – but did you have a view at that point about who, in general terms, would be responsible for carrying out a pre-occupation risk assessment for a hospital?

Q The responsibility of the Board.

Q Right.

A I think the complexity of this particular risk assessment was, in my review of the documentation, that the building actually didn't appear to be ready to have a pre-occupation risk assessment prior to handover. Therefore, it was----

THE CHAIR: Sorry, I missed that. The building didn't seem----?

A It was ready. There was evidence in 2014, December '14, that the systems were still being balanced by the construction team, therefore DMA couldn't actually undertake the pre-occupation risk assessment.

THE CHAIR: Right, and we are talking about-- I mean, I think it's obvious from context, that's the water systems.

A Yes.

THE CHAIR: Right, thank you.

MR MACKINTOSH: I just wonder if you can help me out with the perhaps unfair or obviously not true, but the connection: you go and see Mrs Grant, the chief executive, in June, and two months later, you're the new director of Estates. Did you seek any reassurance or mandate or particular, well, assurance that you would be able to fix this? Or did

they ask for assurance from you that you'd be able to fix this when they decided to hire you and you decided to take the job?

A I didn't seek any reassurance. I knew that Mrs Grant had brought together expertise from within the Board. I knew that there were previous colleagues working within the Board who did have significant experience of dealing with risk assessments and closing out action plans, and----

Q Who would they have been? We might have spoken to them, that's all.

A That was Mr Leiper. Jim Leiper was working for the Board at that time and in that very short period of time prior to me taking up post, Mr Leiper had done quite significant work in terms of improving governance and understanding relevant training competence of those who were on the site and put the appropriate scheme of delegation in place for managing the water system.

Q So, from your point of view, there was a change, at least in management, style and plans and systems between the June and the October, through the work of Mr Leiper?

A There was more than a change in management. There would be-- there was demonstrable action done to put in effect-- either close out observations within the risk assessments that weren't valid, or close out any technical aspects of that. So there was, even in that short period of time, works done to the system, effectively, to close out any outstanding actions.

Q I suppose one of the works that were done on the periphery of the system would have been the fitting of the point-of-use filters in high-risk areas?

A That had already been done, I think, earlier in the year as part of the IMT.

Q Then when, in your mind, does the decision to fit the chlorine dioxide dosing system-- is that decision made before you arrive or is it finally made after you arrive?

A Both, actually.

Q Right.

A In attending the IMT meetings or seeing minutes, I was aware that, as part of the refurbishment works to Ward 2A, there was a localised ClO2 plant, chlorine dioxide plant, going in specifically for Ward 2A and there was dialogue ongoing. Colleagues from HFS, external experts and, indeed, within the Board were meeting to discuss a secondary means of managing the system beyond thermal control.

Q Would that eventually become the system that-- the chlorine dioxide system that's in the basin plant room?

A Yes, so I think that started to

be installed maybe November time.

Q Now, you've explained in your statement, if we look at page 556 of the-- I think you've already covered this, but I want to just make sure I've covered it off completely. So, page 556, at E, so the top of the page. If you go to the previous page, if we just put this in context, you explain in the answer to question 44 that you discussed it with a chief executive.

If we go to the top of page 556, I'm taking it that's the meeting you just described where you go and see her and, as it were, tell her about it? You're nodding. There's a person doing a transcript. They find it terribly hard to hear the nodding, so if you could say yes when you mean yes and no when----

A Yes. Yes, no problem.

Q Yes, thanks. Now, what I want to do is take that off the screen. I want to think about other things that had happened before you arrived, which you comment on in your statement. The first thing is about-- if we go to question 36 in your statement, which is page 552, you are asked a series of questions about documents, paperwork and processes in place as of 26 January 2015. Now, I'm assuming that these questions are as a result of the work you've and investigations you've done as chief-- as director since you arrived?

A Yes.

Q Yes, right. Well, let's look at the answer to question 37 because it seems to say quite important things. I want to check it says what it seems to say. So you're asked what your understanding is of what contractual documentation was in place at handover and your views of the adequacy of that, and your first sentence: "From my review records, there is commissioning information." Now, I suppose that prompts the question, this in the context of this question, is to do with the commissioning of the water and the ventilation systems?

A All systems.

Q All systems? Are they complete, the commissioning information, as far as you can see it?

A Yes.

Q Right.

Q But where required, there is no validation records, and there's just a couple of questions in there. We've had some evidence that validation – and I want to check it's the same sort of validation you mean – is required within SHTM 03-01 in respect of ventilation systems.

A That's correct.

Q Is that the validation you mean?

A Yes.

Q Yes, right, and so I want to be

clear that there's no validation records at all for the ventilation system?

A No. Not that I'm aware of.

Q Not that you're aware of. Thank you, and then, "… as built drawings are not universally available". Now, we've had some evidence that they're hard to find on the Zutec system and, when you look, you find that things are missing from members of your team. Is that what effectively you're saying, or are you able to help with more detail than the broad brush?

A The contract was a design and build contract and where we have found issues is there's a difference between-- if we go to specifications, for example, we would expect that to be robust and exactly what is onsite. Sometimes that doesn't necessarily align with what we see on the site or what we find on the site. So there hasn't been a mop-up at the end of the project to update the original design intentions or specifications to that which was actually built in some cases.

Q So, am I taking it from that sentence, you're saying there would have been a clinical output specification document for a particular ward, and you're seeing that being imported into the employer's requirements and then there's not been a process at the end of the process because that's not what you see on the ground?

A In terms of the built environment fabric, yes.

Q So would there be an absence of drawings for some of these areas?

A Yes.

Q Can we take it that that would include, for example, the ventilation in Ward 2A, ventilation in Ward 4B, those sorts of places where it's become an issue and required further work?

A So there are drawings of ventilation systems. What we have found in some places, when we have had-- you know, if we stick with Ward 2A, for example, then if we go to the schematics or went to the schematics at that time, what we found when we went down to Ward 2A and took ceilings down and all the other infrastructure that was below the ductwork, for example, the ductwork wasn't necessarily in accordance with that of the original design.

Q You mean it wasn't according to the drawings----

THE CHAIR: Help me with the word "schematics" in this context. Are we talking about drawings or are we talking about something else?

A Drawings.

THE CHAIR: Drawings. Thank you.

MR MACKINTOSH: So the drawings don't match what's there?

A In some cases.

Q In some cases, right. Now, I appreciate that this is the subject of a dispute, so I'm going to keep it quite high level. The only question I think I probably need to ask is, what's the nature of your investigation? How rigorous have you been in looking for this stuff?

A When you say-- sorry, could you repeat that?

Q So, when it comes to the absence of any ventilation (inaudible) material, documentation and the gaps that you are suggesting are there in the drawings, how did you ensure-- how have you verified that? Has there been a systematic examination of every single document or what?

A No, so we have encountered inconsistencies in our records when we are dealing with specific matters associated with a litigation, for example. If there's an inconsistency between specification and what we find on the site, then that's a subject area of focus and we will seek to understand whether that's prevalent throughout the whole site or localised. It's very difficult given the size of the site to get a real feel for that, of what a reasonable sample would be, and that's across a number of----

Q So it's effectively a focused sampling exercise?

A Yes.

Q Right. I don't know whether this is a question that you have sought to obtain the answer, but if you have, it would help us: clearly, the hospital was signed for, effectively?

A Could you repeat that, sorry?

Q The hospital was signed for and taken over----

A Yes.

Q -- on 26 January 2015. Do you know whether any attempt was made before that date to look for this information by the GGC project team?

A I don't know.

Q Have you asked?

A Those that would be able to answer that-- and there's a paucity of information around those natural questions that one would ask around assurance. There isn't a manual that says everything is fine, operate the hospital. That's not in existence.

Q So there is one particular decision that we need to ask you what you know about it, and that is the derogation, if that's the right word, from SHTM 03-01 2009 draft in respect to the air change rate in the general wards. Now, probably the easiest way to make sure we're talking about the right thing is to show you an email, which is not one that you received. It's in bundle 20, at page 1495. So if we could zoom into the middle of the screen for that.

So this is an email we've talked about with the people who've received this and sent it to Dr Inkster on 20 May 2016, and she'd been in post a couple of months at this point as lead ICD, and there are various attachments which the Inquiry had most of, but have you seen this before?

A Yes.

Q Yes? So I read this – and tell me if I got this wrong – as Mr Powrie reporting to Dr Inkster that the decision to supply the single room with-- and its en suite with air at 40 litres per second, equating to 3.19 air changes an hour, and the extract derived by the suite at 40 litres-- 45 litres per second and moving away from the requirement in SHTM 03-01 of six air changes an hour was agreed by the Board prior to formal contract award.

Now, we have a date in December 2009, but I just wondered, have you ever been provided with a more detailed explanation for why that was done, other than the two documents in addition to the drawing that are attached here? That is the ventilation strategy, design strategy paper, and the extract from the actual M&E log. Have you been given a more detailed explanation of why this was done?

A No. I have seen a table that was shared by Brookfield Multiplex and their designers to the Board, which was their offer to the Board pre-contract and their response to----

Q I might be able to put that on the screen, just so we can check it's the same thing. So, this is a large bundle, so it'll take a moment to come up on my screen. (After a pause) No, not there. So it's in bundle 17. (After a pause) I think I'll come back to that because I think I'm taking time. I'll come back after the coffee break, but effectively it's a table that lists a proposal from Brookfield, a response from the Board and a conclusion.

A And the conclusion is agreed. The word "agreed" is in there and there's an explanation by the designer about how the three air changes meets the building standards requirement for fresh air.

Q Yes, no, I think we are talking about the same thing, but I'll just check-- I will (inaudible) the coffee break and check we're talking about the same document. Now, the question is-- so you haven't had any better explanation for that from anyone?

A No.

THE CHAIR: Just to make sure that I've heard what you said. There is, in that document, explanation by the designer why mechanical ventilation at 3.1 does, in fact, meet the guidance. Is that what you said?

A I think it was the design philosophy provided 40 litres per second, which was in excess of the minimum building standards requirement, which was 30 litres per second for three occupants in the room or thereabouts.

MR MACKINTOSH: I think it's at page 824 in bundle 17. Is this it, or at least a version of it? It has "accepted" rather than "agreed," this one. Do you think there might be another one out there somewhere?

A Yes, I've seen a table where the word "agreed"----

Q Well, we'll find it over the coffee break and we'll come back to it.

A That looks as though it's the same thing. It's identified in yellow, but I don't know (inaudible).

Q Right. Well, I will get that checked over the coffee break and then we'll come back to that. If we take that off the screen. In your statement, you discuss that you were instructed to carry out a more in-depth review to the hospital. Now, was that soon after you arrived?

A Very soon.

Q Right. What was the scope of that review?

A Prior to taking up post, I was aware there was clearly the ongoing issues associated with Ward 2A. Anecdotally, I heard of issues with glazing failure on the site----

Q Yes.

A -- spontaneous glazing failure. And HFS were supporting the Board in issues to deal with cladding matters on the campus post Grenfell. So I was aware of at least three issues prior to taking up post.

When I took up post, I think it was maybe three weeks in or thereby, I met with the chair of the Board, Professor Brown. It was my first real formal introduction to him and we spoke at length about the hospitals.

Mrs Grant joined after a period of time and we discussed what a report or an in-depth report would look like in trying to understand why these things were happening, the extent of defects, because there were other defects that I was certainly unsighted on that the operational team were dealing with.

So my mandate was, effectively, get some support to undertake a written branch review of the contract, construction specification, what we got and, at the end of the day, whether anybody could be held accountable or not.

Q This review, I wanted really just to understand what the scope of it was in respect of the things that the Inquiry is investigating, and so what I'm going to do is just go through a little list,

and I think some of them you've already mentioned, but I want to just find out whether you brought them within the scope of the review.

A Yes.

Q So, was the domestic hot and cold water system of the hospital in the review?

A Yes.

Q Were any aspects of the ventilation system within the review?

A Ward 4B and Ward 2A. The general air systems were also asked to be reviewed, and I think that's the extent of ventilation.

Q One of the issues that we will come to the detail of and your interactions with the topic is chilled beams.

A Yes.

Q I wondered if, at this point, your review would have covered the decision to use chilled beams and what that meant and what you could do about it.

A No, I wasn't aware of chilled beams being in place in the hospital. It's a technology I had never been familiar with.

Q So you carried out a report that is-- covered water, 2A, 2B, general ventilation, cladding, failure of glazing panels. Anything else that we should know about that stands out as an important topic?

A There were, at that time, issues with cooling system, chilled water. There were about nine or ten issues, I think.

Q But chilled water was in it?

A Yes.

Q Right. Now, one of the things-- I want just to basically ask you whether I'm entitled to reach this inference. So, effectively, we obviously – and because I think the Health Board put it on its website – have read the summons in your litigation, and one of the things that we note is that the merits or otherwise or the consequences of the decision to derogate to below six air changes an hour is not one of the things in that litigation. You're nodding. One of the things I want to just check is that would we be entitled to infer that one of the reasons it's not there is because the Board agreed to it?

A The Board, in documentation that you showed a few minutes ago, it has been, in effect, agreed by the Board before the contract was signed. Therefore, it was not considered a course of action through the litigation process.

Q Obviously, one thing that this Inquiry has to look at in its next hearing in April of next year is governance, and we have yet to recover documentation that, as it were, explains the decision tree around that “agreed” or “accepted,”

depending which one you look at, in the M&E clarification log. Are there reports to boards, subcommittees, papers discussing this option that we will find if we ask for them?

A Not that I have seen.

Q Right, so it's not like there's a board subcommittee that made the decision?

A Not that I'm aware of, no.

Q Right. Now, I want to work through some events, which I think are in order. It's quite hard to do this in order, so bear with me. I will get to most of the sub-topics that are important. I think the first thing that comes up in the sequence after you've been appointed that we need to ask you about is Ward 4C.

A 4C?

Q 4C.

A Yes.

Q You cover this in question-- in the answer to question 196 in your statement, which is on page 616. Now, if we could pop the bottom half of the page on the screen, that would be really helpful. Now, I absolutely appreciate that you've explained in here that you didn't-- don't consider you had a difficult relationship with Dr Inkster, and you absolutely reject any suggestion of bullying by her.

A Yes.

Q We might come to why you say that in a moment, but I want to just deal with the substance that might lie behind this disagreement, if that's the right word. So if we take that off the screen, am I right in thinking that something like 10 December 2018, you would have had a meeting with Dr Inkster where one of the main topics on the meeting was Ward 4C, or it came up in the meeting, and she had some concerns about the ventilation system of Ward 4C?

A Yes, I recall the meeting well, yes.

Q Yes, because she's explained that this-- your meeting happened during the process that ultimately results in an SBAR produced by her in July of 2019. Have you come across that SBAR?

A Yes.

Q Yes. Just for our records, that's in bundle 4, document 38, but I'm not going to put it on the screen. Now, and she's also given evidence that she'd spoken to the clinicians in the ward. She'd learnt that they had neutropenic patients in the ward, and I understand from the written material that, at that time, there was a health and safety executive investigation of some sort going on in respect of Ward 4C. Have I got that right?

A The HSE involvement with 4C, I think, would be early in the following year.

Q Oh, right, so I haven't. Now, in that case, that's----

A There was HSE following----

Q But it wasn't at that point?

A The HSE discussion that we had at that meeting was in relation to Ward 5D, I think.

Q Right. If we----

THE CHAIR: Right, just so I've got the answers, you said the HSE involvement was the following year, so that's 2020?

MR MACKINTOSH: 2019, my Lord.

A 2019, my Lord.

THE CHAIR: 20-- right. Okay. 2019 (inaudible).

MR MACKINTOSH: So this is December '18. This meeting is 10 December '18?

A Yes.

Q Yes.

THE CHAIR: Right.

MR MACKINTOSH: And you're correcting me that the HSE involvement is not until the following January?

A In regards to Ward 4C, yes.

Q In regard to 4C, yes. Right. Now, with that context sort of set up, I want to put to you what Dr Inkster has said and see what your response is. So one of the things she has explained about that meeting was that she indicated that she was going to write an SBAR, that she was going to email it to you. You responded that she shouldn't email it to you and she should just print it out and give it to you. Did you say something like that to her?

A I did.

Q What did you say?

A If I maybe just give you the context of the meetings.

Q Of course.

Q I was pretty much based at the Queen Elizabeth, and meeting with Dr Inkster and other colleagues was, if not every day, every other day. This particular meeting, I think three other colleagues as well as Dr Inkster were present, and Dr Inkster said she had some concerns about-- the meeting started with her concerns around Ward 5D.

Q Right.

A The Health and Safety Executive had been in Ward 5D, and I think it was associated with a member of staff's concerns about face fitting of masks and, my reading would be, his dissatisfaction, and he subsequently went to the HSE, they came in and Dr Inkster had got involved with that somehow, probably through the clinical team.

Q Are you aware that there'd been a-- she'd done an SBAR with the clinical team about ventilation in that ward about a year and a half before?

A No.

Q No? Right.

A So she talked briefly about Ward 5D. She asked me at that meeting, was I aware of air change rate or pressure flow? And my immediate answer was no.

Q Right.

A I would not be aware of such matters and I found it strange that she was asking me if I knew that. Nevertheless, I didn't say that to her. She also said she had some concerns about similar issues around the air change rate, air flow, in other wards, levels: Level 4, Level 5, as we've discussed, and Level 7. And depending on how-- the patient requirement, a positive or negative environment, she needed to know whether that was air flows, basically, and I said I would organise that. She also then went on to talk about and she was very concerned about Ward 4C. By that time, we had had a desktop report done by Mr Lambert into Ward 2A.

Q Yes.

A And it showed the eight specialist ventilation rooms and also the ventilation system was, effectively, a general air system from the balance of Ward 2A. By that time, we had discussed the potential of change within Ward 2A to improve the environment in there in terms of----

Q Yes. I mean, indeed, she mentions that as well in the context of that meeting.

A Yes. So, in effect, Dr Inkster was looking for a similar outcome in Ward 4C and she said that she would send me a report. And I said in a very quick, jocular manner, I said, "Don't send me anything more or we might as well put this in the media tomorrow."

And to give you some context around that, so I was probably in around week 10 of my new role and what struck me markedly in those 10 weeks was the astonishing amount of information that left the organisation uncontrolled and ended up in the media. Sensitive information in some types and I had never experienced anything like that in my career anywhere.

So my want of Dr Inkster was, "Let's discuss it further, understand the facts about what's needed in Ward 4C and then we'll commission a study into it." And that was the end the conversation. I never heard anything more about it. It did not dissuade Dr Inkster in any way from sending me emails or reports. She did so, as she had previously done, and there were many. The next I was aware of that statement being repeated was in the following year.

Q In a meeting in March?

A No, it was actually after this had been in early in 2019.

Q Right.

A I understand that Dr Inkster had either been asked or had spoken to one of the inspectors.

Q She explained she was the only person in and they spoke to her, but yes, you're right, yes.

A I know not that-- and post that meeting-- So the report from HIS mentioned me in all but name----

Q I see.

A -- around having sought to suppress information and also the potential of bullying. I was pretty shocked by that and actually offended by that. I never really had-- never had any opportunity to discuss that with the inspectors, and those statements, again, in all but name, ended up in the media pretty soon after that. We then had the meeting you're referring to in March.

Q Well, I'll come back to that meeting in a moment, but I want to just explore what you've just explained because it strikes me I need to put something to you, which is that you arrived in October?

A Yes.

Q You'd had some, I accept, relatively limited contact with the IMT the previous year, about the water incident when you were at HFS, but I'm assuming you didn't have a deep knowledge of what had been going on in this hospital for the previous four years?

A No.

Q No, so can I-- I mean, this is just me because it's not Dr Inkster saying this; this is just wondering whether this might be true. Might it be the case that if Dr Inkster was of the view that she had not been given information on various topics around ventilation consistently for the previous couple of years, if not longer, and she was feeling under-informed and unappreciated, in a sense, that in that scenario, you making that remark would simply confirm that you're just one of the-- you're behaving the same as all the other people who she's worried about?

A So I've heard others give statements. I've read statements about that-- don't put anything in writing, potentially a culture of bullying, intimidation, etc., and I found myself being treated-- And whether these matters happened previously or not, I don't know.

Q Yes.

A But I was effectively being considered as similar to others.

Q You would absolutely reject that?

A Absolutely.

Q Right, but in any event, she does send you documentation.

A She does.

Q I think I have to ask, in the context of this and the March meeting, did you think it was Dr Inkster who was releasing stuff to the media?

A I had concerns about information that was being released because it was very specific, and very few people would know the detail of that information, whether it was Dr Inkster or the other-- few others, I don't know.

Q Because I'm just wondering whether at that point-- I get the impression – and I may be wrong, and I'm sure people will tell me if I've got it wrong – that at that point there has been a Stage 2 whistleblow by Dr Redding, who's retired, and Dr Peters has assisted in that, taken part in that.

A Yes.

Q The other Stage 1 whistleblower is not whistleblowing anymore. Those who resigned their ICD sessions in 2017, well, that's two years ago at this point, and so I think Dr Inkster was quite adamant that, at this point, she wasn't operating in concert, in respect to whistleblowing, with Dr Peters. That's her position.

A Mm.

Q So I suppose, moving on from this topic, could it be that, to some extent, you've blundered into something you didn't really understand and said something out of place which has resulted in this unfortunate report in HIS?

A I'm not too sure the term "blundered" would be the correct term to use----

Q Or "stumbled" is the right one.

A So I made a quick remark, and I'm sure my colleagues who were at the meeting would corroborate it was a quick remark and said in a jocular manner. As I say, the organisation was experiencing very significant media interest in matters that would otherwise be either confidential or private matters.

Q Okay. Well, what I want to do now is to move on to the meeting in March.

A Okay.

Q So you pasted most of the minutes into your statement.

A I did.

Q I'm actually going to look at the minute, which I have in an email provided by Dr Inkster, which is bundle 14, volume 2, document 121, page 400. Here we are, and then over the page is the minute. Over the next page. There we are.

Now, this is Dr Inkster's version with her comments on it, and I think the Inquiry doesn't need to go into exactly what happened at that meeting, but you've already explained that, in a sense, you had some concerns that there were leaks of information, you were very concerned that you'd been accused of

bullying and you presumably wanted to address these in the meeting.

A So I didn't ask for the meeting to take place.

Q Because Dr Inkster maintains that she didn't ask for the meeting either.

A So I was asked to go along to the meeting.

Q Right.

A In the interest-- I think Dr Armstrong perhaps, she certainly-- Dr Armstrong, was aware of my concern and disquiet about that accusation, and she potentially thought this would be the most appropriate way to allow us an opportunity to discuss concerns between us, and Dr de Caestecker chaired that meeting.

Q Now, at the very end of the meeting, page 404, do we have an unedited sentence that:

> "Both agreed there was no further action on either side and this was a constructive meeting with a helpful way forward. Both clarified there was no bullying culture to be addressed."

A Yes.

Q Yes?

A That was said at the meeting, yes.

Q Yes, and I notice that it's not been edited by Dr Inkster in her edits. Now, what I want to do, however, is to pick up something from this, which seems to also be an issue. She discusses in the meeting – we'll take this off the screen – a reflective note that she'd written soon after the 10 December meeting.

A Yes.

Q Now, you've explained in your statement that she never sent it to you.

A I had not seen that note until the last seven, ten days.

Q Because I just want to show you bundle 14, volume 2, page 409, which bears to be an email from her to you in June – now, albeit that's another three months later after the minute came out – and an email reply from you. Do you see, it says-- starts off with, "Teresa, Thanks for the email and also the personal note." Now, she insists that the personal note is the reflective piece. You received it in an attachment to this email.

A I have absolutely no recollection of reading that note. I have seen this email, and I can't actually find that email either in my system. I've read the email, but I don't have it and had not seen either of them. The first sentence makes reference to a personal note. I'm not sure whether it's a reflective note or not.

Q Well, I'm not sure we can take it much further than that.

A Mm-hmm.

Q What I want to do is take that off the screen. I want to understand where we stand in Ward 4C now.

A Okay.

Q So, am I right in thinking that the Health and Safety Executive did eventually serve an enforcement notice?

A They did.

Q And that was challenged by the Health Board?

A It has been, yes.

Q And those proceedings are currently assisted?

A They are.

Q So, effectively, the ventilation system in the ward is as it was built?

A With some improvement.

Q What are the improvements?

A Similar to those improvements that were made in Ward 6A, and that is the installation of ceiling-mounted HEPA filtration units in the en suites in 4C.

Q So that the air coming into this en suite comes through a HEPA filter?

A Not coming in, so the HEPA filter in the en suite scrubs the air that is already in the room.

Q Right, so these aren't the same as the floor-mounted ones we see in the corridor of that ward? They're the same technology but just on the ceiling?

A It's the same technology: one floor-standing and one ceiling-mounted.

Q Is there any other changes that have been made in the ward?

A As part of that improvement notice, we went into the ward to improve-- We rebalanced the air handling system to maximise pressure flow.

Q Did you get a small positive pressure differential?

A It had-- it was a positive that was required there and to optimise air change rate, which is normally still at around three air changes, we also did some works to further sealing of the fabric around joints and ceilings, IPS panels, etc., repairs to the floor, but beyond that, it's essentially a general ward.

Q What I want to understand is in respect of this whole general ward ventilation issue. Now, I absolutely understand that you've explained very candidly that there's no documentation other than the M&E clarification log itself to explain why the Health Board agreed to the derogation. You're nodding again.

A Yes.

Q Yes, and we would have to go and speak to the people in the project team, some of whom don't work for you anymore.

A That's correct.

Q Right, and that's part of our plan for the next hearing. Are you aware of the Health Board carrying out a formal risk assessment of whether it is

appropriate to run this hospital at half the general air change rate set out in SHTM 03-01?

A For the whole hospital, no----

Q For the whole hospital.

A There's a risk assessment done as part of the HSE investigation in 4C, in particular, for that cohort of patients.

Q There's a 4C one, yes, and we've seen, obviously, a risk assessment process carried out of some sort in respect to the refitting of 4B and the refitting of----

A 2A?

Q 2A, and there's lots debate about whether it's good enough, but we know that there's a process.

A Yes.

Q But the Inquiry issued a Section 21 notice to the Health Board asking about risk assessments for the whole system, and we've so far not had a response.

A I am not aware of a site-wide risk assessment.

Q Can you explain why that hasn't been done?

A It hasn't been done in my time on the Board. My thoughts around it are about, actually, is it a risk? What we have in the general air systems is really high-quality air. We have theatre-quality air in the whole hospital, which is unusual.

Q But it just doesn't change very often?

A Beg your pardon?

Q It just doesn't change very often?

A Well, it changes normally at three air changes per hour, and what I don't see or am aware of is any issues associated with airborne infection that would suggest that there's a problem with three air changes. Three air changes is better and, in some cases, significantly better than other hospitals we have throughout the Board in terms of air turnover and also the quality of the air.

Q No, I appreciate that that's a view that has been expressed to the Inquiry. Indeed, contrary reviews have been expressed and we have to reach a conclusion on that, but in terms of doing it formally as a formal risk assessment in compliance with your obligations, there hasn't been a formal risk assessment that goes----

A No.

Q -- "Let's look at this in a systemic way, reach some conclusions and decide where we stand." That hasn't been done?

A No.

Q No, and I'd like to move on to Cryptococcus.

A Okay.

Q Can we go back to your statement? It is at page 610.

A Which question number?

Q 177, and actually I'm going to focus on your answer to (d). Now, I've got a series of questions and I think what's going to happen almost certainly is you're going to want to tell me lots of things. I'm very happy to encourage that, but I'll try and structure it in this. So, in your answer to (d) over on page 611, you mention at the final end of this paragraph:

> "I stated it was most unlikely that there would be any opportunity for access when the systems are running as they are sealed."

Now, am I right in thinking that this is the observation that all the air handling units are sealed units and the only air coming into them comes in from the outside?

A Yes.

Q Right. Am I right to think that you would therefore work on the principle that if there were pigeons and their detritus in a plant room, you would take the view they couldn't get into the handling unit because the input is through the external vent?

A That's correct, but the first question that was asked by Dr Inkster, I think after that first Cryptococcus meeting, was whether I thought, one, there could be the potential for birds to access the system, or could there have been a bird trapped in the system whilst the project was being built.

Q This was in the ductwork?

A Yes.

Q Yes, and was there a discussion between the two of you about possibly using HPV cleaning in the ductwork?

A There was. I'm not sure whether it was at that time, but Dr Inkster suggested that the ductwork had to be decontaminated.

Q Right, and you were looking for an external supplier who might be able to do that?

A Yes, we-- I'd had no personal experience of HPV as a technology until about two months prior, where we used it at an incident we were dealing with at our CDU. It's a process to decontaminate. It's a toxic process and needs to be done in a highly controlled manner.

Dr Inkster asked me if I could look at the potential of putting HPV through the ductwork, and I said I had no experience of that, "Leave it with me and we'll look into it." I met with, I think it was Mr Powrie. I'm not sure whether Andy Wilson was there or not, but I remember having a conference call with the supplier. I think the supplier were actually from overseas, and we were

discussing with the supplier the potential of this product going through the system.

In my head, well, I was thinking that we would need to be incredibly confident about, one, where the ductwork's actually going, bearing in mind that the air handling units serve multiple wards, and the spaces would need to be vacant or the ductwork would need to be sealed to not dump in on patients. These questions were posed back to me by the supplier.

Q Yes.

A "Was I confident?" And the answer to that: no, I wasn't confident. By the time we had the next meeting-- so we were still considering how we might deploy HPV in the ductwork, but by the time we next met, Dr Inkster had spoken to Mr Hoffman----

Q Right.

A -- about using HPV and he suggested that would not be appropriate, and the most appropriate thing was to provide more air through the system, i.e. dilute the system, which we'd already been doing, as the plant runs at optimal capacity all the time anyway.

Q Because the plant can't run any faster than it's built to.

A Correct.

Q I just wondered-- sorry to leap out of Cryptococcus and back to our previous conversation about risk, but isn't one of the problems with your hospital's general ward ventilation system is that there is no spare capacity for the wards?

A That is an issue that is part of our ongoing litigation, that there is no above-100-per-cent operation in the air handling units available.

Q So I want to just focus back to Cryptococcus and the air handling units. You explain they were sealed systems. You're aware, I take it, of the one-inch hole found on the air handling unit intake damper on a suction side of a fan?

A Very aware, yes.

Q Yes, so that would be a non-- that would be a point where there wasn't a seal?

A So the one-inch hole is an aperture by design.

Q Right.

A Within that hole, there is a spindle that operates clockwise and counter-clockwise to open and shut----

Q Because the damper is effectively a panel that moves within the duct.

A Yes.

Q Right.

A And that chamber is sealed before it goes into the ductwork. So, in effect, that hole, whilst-- So it's a 20 mm hole and it has a square rod within it, so-- But there are gaps, elliptical gaps, four of, but they go into a sealed space behind it

before it goes into the ductwork.

Q So you don't think that's a breach in the seal?

A No.

Q No. I just wondered if there wasn't a-- why did you carry out a smoke test?

A Dr Peters asked for it to be done.

Q Right, well, that's a good answer, I think. Now, I want to look at your evidence on page 601, paragraph 167(s), which-- I don't know why I've said (s). Give me a moment to get the right place. (d), sorry. That you weren't aware of roosting in the plant rooms.

A No.

Q There had been birds in the plant rooms; you've seen images. Now, one of the points that's being made, we need to actually nail down what was there because one of the things the Inquiry's done is it's instructed Mr Bennett to comment both on the evidence there is, and also on the report by Dr Hood, and I need to make sure Mr Bennett has the maximum amount of evidence in order to decide things.

If we think purely about the 12th floor for the purposes of this conversation – because that seems to be the area where there seems to be some dispute – what had there been in terms of pigeons, their detritus, whether just waste or nesting or guano or anything, in those plant rooms before this IMT started that you were aware of?

A I wasn't aware of any. I've seen pictures for the first time as part of the Inquiry. I saw pictures in December '18 – I think Plant Room 123, as you allude to – and there was minimal guano on the floor, a few feathers. I'm not sure whether there was a dead bird or not, I can't recall, but certainly the pictures that I have seen as part of other evidence-giving, I haven't seen them before.

Q Because one of the suggestions that's made is that whatever photographs there are were taken after the plant rooms were cleaned. Are you able to help me about whether that's the case?

A So I understand that when plant rooms are cleaned – and we use a third-party supplier to do that, GP Environmental I think they're called – they will take images that would corroborate the actions that support, effectively, their invoice to us and the process they go through. So, if there are images, then they'll capture them and they'll be part of their report.

There may be images captured by the local Estates teams or any of the IPC teams who happen to be in plant rooms, but the general repository of photographs we have would be generated by those

that were cleaning up spaces.

Q Because the Inquiry recovered from GP Environmental all their records for a number of years, and not all their reports have photographs attached to them. In fact, a lot of them seem to be pro forma handwritten reports with handwriting on them and no space for photographs. Some of them are more formal and they do have photographs, I accept.

So do you think it's possible, or do you have any knowledge about, whether the plant rooms were cleaned before, as it were, you learnt the state of them, i.e. could it be that you don't know and, indeed, no one can ever know what the plant room was like before it was cleaned by GP Environmental?

A There's a potential for that. I think records that Ms Connelly, when she was giving her evidence-- I think she had been dealing with issues around plant rooms or general pest control for some time prior to the incident in 2018, so it wasn't a new thing around dealing with pigeons.

Q Well, indeed, I wanted to show you two documents, one of which is from 16 August 2019, which is bundle 14, volume 2, page 445, which is-- If you go up to the previous page, we can get the context because the context is slightly odd.

So, if we start at the top, it's an email from Dr Hood to Dr Inkster in August '19, and it's a followed-on thread. Then, at the bottom, we have an email from Karen Caldow on 15 August. If we go over the page, we see the email and we have some dates. Now, from 6 and 7 December, we have:

> "Plant room 123: removed bird fouling, three feral pigeon carcasses. Proofed apparent access point in plant room wall. Applied biocide in areas where bird fouling has been removed. "

Then, 19 to 21 December:

> "Plant room 123 has been deep cleaned, sanitised and bird proofed where access points have been identified,"

There's more detail about 123. Then:

> "Plant rooms 121 and 124 were given a general clean with used duct filters cleaned from all the plant rooms. "

Then examples from items are listed, and then there's another discussion of cleaning on 23 December, but it doesn't mention pigeons. If we go onto the next page, we have the top row-- Effectively, I think we've got-- the table repeats what we've just been looking at, but do you see there is discussion about,

if we look at the Sunday, 23 December 2018 entry, it's:

> "Emergency response to remove debris and contaminated air handling filters plus compilation of a pest activity/housekeeping report."

Do you see why that might cause some anxiety when you're reading it four years later, that someone's removing contaminated air handling filters as part of a pest activity housekeeping report?

A I think the filters in question on the previous page were used filters that were left in the plant room.

Q I absolutely appreciate that; that's what they do say. The other thing that's worth just saying, if we just walk through these pictures in black and white-- I think the colours are somewhere else, but I'm not going to want them. If we just go on to-- yes, keep going, keep going.

We just have a few, as it were, and what I'm suggesting is that this may be all the information-- this sort of information is all we really have. Would you accept that there's not somebody other than Karen Connelly who can speak to the number of callouts to these plant rooms over a period of time and assessing how clean they were and what the risks were?

A I don't believe there are any maintenance records, for example, of plant walk-through inspections by the Estates team.

Q Right.

A There are now.

Q Well, indeed. I mean, that's one of the things I want to ask. So you've obviously reacted to this, and is putting in the record system one of the reactions you've taken?

A Yes.

Q We'll take you to a second document, which is bundle 14, volume 2, document 104, page 270. Well, before I do that – let's take that off the screen – go to bundle 24, volume 1, document 50, page 115. Yes. So this is an email from 8 January, a report from GP Environmental to Karen Connelly, and I wondered if you'd seen this at the time?

A No. I've seen it as part of the bundle.

Q Yes, because if you look at that "Survey recommendations," it's pretty damning, isn't it?

A It-- I don't know about damning. It refers to a high pigeon population. They're endemic in all large buildings. I guess in reading that-- so GP Environmental are a business that make their living from dealing with pest control and they provide a service to us. So whether there's a large population or-- I've no idea what the metric is around that.

Q The reason I ask you this is because there's been evidence from Karen Connelly and others that there was no system to notice whether the callouts to GP Environmental were indicative of a pest control problem that might have a health and safety/Infection Prevention and Control implication, and draw that to the attention of the Infection Prevention and Control team. Are you aware of that absence back in 2018/19?

A I am aware of that.

Q Is there one now?

A There's very regular communication around pest control of any type. I think those who occupy the site or who visit the site or who work in the site are very much attuned to pigeons or their potential harm. They're just about to redo the netting, for example, in some of the Level 4 areas.

Q But what I mean is, is there a system now to-- where somebody actually looks at all the returns from the contractor and flags that to Infection Prevention and Control if it goes over a certain level? Are there thresholds?

A There's no threshold, so we will deal with it as an environmental matter if we have an issue. So, for example, at the moment, we have an issue with the netting that was put up five years ago. It's come to the end of its life and we are getting birds trapped, which is a normal thing, or birds are involved with the air ambulance when it comes in. So the engagement of GP Environmental is a reactive engagement. If we have an issue, we'll involve them or any other third party.

Q Well, that's the point because the evidence was that in 2018/19, from your Facilities and Estates colleagues, is that it was a reactive service, that pretty much anybody could contact GP Environmental in the Estates team and say, "Just a problem with pigeons or something else in this location, come in and sort it out," and they would come in and they would sort it out and they would provide a report, sometimes with photographs, sometimes not.

But what there wasn't was somebody thinking, "Oh, that's interesting. We've got a problem of pigeons in a plant room, or we've got a problem with pigeons near a particular event or in the children's play area." There wasn't then somebody whose job it was to notice these things and draw them to the attention of infection Prevention and Control. Is there now?

A In terms of controlling access to third-party contractors, there's a single-- not a single, then our-- Back in 2018, as you've mentioned there, the responsibilities were split between Karen Connelly, who's heading up our Soft FM

team. In the case of cleaning up plant rooms, which are the domain of the Estates team, then there would be someone from within the Estates team commissioning the report. So there's a disconnect there, as you say.

Q Yes.

A There is a connection now about a single point of contact for dealing with GP Environmental.

Q But is that person instructed to think about whether they need to draw it to the attention of Infection Prevention and Control?

A I can't think. I would anticipate that everyone's sensitivity to the potential of issues associated with pigeons on that site is such that if there was a bird in the building or any plant room, then they would absolutely be concerned about that and involve other colleagues.

Q Because the evidence from a range of witnesses but including, I think strikingly, Dr Inkster in her written statement, I think others of-- some of the nurses as well in Infection Prevention and Control was that they just didn't know that there was a problem with pigeons on the site and that it all came as a bit of a shock with these photographs and the stories about-- and they hadn't been in the plant rooms and they didn't know there was a problem.

So do you have a system for ensuring that whatever the next problem is in one of your hospitals, somebody is thinking-- someone whose job it is to go, "Ah, that's an infection control issue. I need to draw attention to the Infection Prevention and Control team"?

A So, I don't think anybody back in 2018, including myself, considered-- I'd never heard of Cryptococcus prior to 2018, or the implications of it for patients. Pigeons, as I said earlier, are endemic in an environment. Whether anybody thought, or indeed still thinks, actually, that them being in the local external environment is a problem-- I think staff on the Queen Elizabeth campus are attuned to that. On their other sites, I'm less confident.

Q Can I go back to the email that I was going to take you to when I moved off it, which is bundle 14, volume 2, document 104, page 270? So this is an email, at the bottom of the page, from you to Dr Inkster, copying in Colin Purdon, and I just wonder whether the third sentence is an assurance that you really could have given at that time because you-- the way you've answered my questions about pigeons sort of implies – and please tell me if I've got this wrong – that you don't have a complete knowledge of what's going on in the plant rooms, because you're reliant on GP Environmental to have photographs or to

set it out in their reports and there's no inspection records. So how can you give the assurance that seems to exist in this email?

A So, my assurance would be sort of from Mr Purdon or other members of the team who would be accessing the plant rooms. I don't think I was ever in the plant room. I've been since, so I would be seeking assurance from others around-- it's a very large plant room.

Q It is.

A Yes, about whether there was any contamination or not, and I've seen photographs of small levels of contamination, I think a few feathers.

Q But you haven't seen anything else?

A No.

Q No? Okay. Well, what I want to do now is to move on to an IMT. I think it's the 18 January IMT, so that's bundle 1 and it is document 61, page 274. Now, I'll go into this-- it's really just to set it up as an aide memoire because I'm going to put a story to you and see what you think of it.

We had some evidence, largely from Dr Inkster, but there was a limited amount of evidence from Ms Dodds and some written material from Pamela Joannidis about this is what happened, and I'll give you a rough narrative and see what you think of it.

A Okay.

Q So the narrative is that there is a question about whether there should be a decant from Ward 6A to the CDU, arising because of the need to react to problems in some rooms in their en suites around the showers.

A Yes.

Q This is discussed at this IMT, and the way Dr Inkster describes it, because she's a bit more-- she has more information than the other two-- but this IMT decides to go ahead with the small, short-term decant and that later that day she ends up having a meeting with the chief executive and others in Ward 6A, in which it is suggested to her that she's being too risk-averse and that the decant's not necessary because there's been discussion of how you could manage it by having the building work done where the patients are in the ward in a particular way.

She says (inaudible) ground. She complains about certain colleagues not supporting her, but that's not relevant to you, in a sense, and then she observes in her written statement that Mr Best and Dr Armstrong backed her up, and the decant did happen, lasted a short time. Now, were you involved in any of those discussions?

A Yes.

Q So were you at the IMT?

A No.

Q No. Were you at the meeting with the chief executive?

A Yes. I don't think the meeting took place in Ward 6A. I think it took place in Mr Hill's office, but----

Q Right, okay, so what do you-- what's the meeting that-- It may be the same meeting, different meeting, I don't know. What's the meeting you recollect?

A I recollect-- so I think the meeting took place on the Monday.

Q Right, the 20th?

A Yes.

Q Right.

A And----

Q Or 21st, in fact?

A It was 21st, yes.

Q Right.

A Because that weekend, as that meeting alludes to, there was quite a significant plan of works to happen in the ward that weekend. All minor in nature, but a number to happen, and they were all associated with flooring repairs. So there was quite a detailed Scribe agreed with the IPC team. We had external contractors who were experienced in the hospital, and I had a member of the team who was working that weekend to supervise the works.

The works started on the Saturday, and I had had contact from the supervisor early in the morning to say, "Yes, the contractor is here. We've started." I had a phone call at mid-morning from Dr Inkster. She was on the ward with Professor Gibson and she had some concerns that there was a "gluey smell," in her words.

Q Right.

A I explained to Dr Inkster that there was no glue being deployed on the Saturday. The task on the Saturday was to reset flooring and the repairs would be effected on the Sunday. The conversation ended. I don't think I had any contact with her on the Sunday. I continued contact with the supervisor later on the Saturday and throughout Sunday, and the works were completed on the Monday, and there were works still to be done in other rooms.

On the Monday after this meeting, Dr Inkster considered that the risks were too great, and I think her logic around that was based on some air sampling that had been done the previous week, and there were high counts of, I'll say, fungal spores or other airborne contaminants.

Q Yes.

A My concern about that was that the plates that had been used were put down in an occupied ward, and it was not a critical air system, so we were naturally going to get contaminants coming through the system, albeit it's an F7 system. But moreover, the ward was

densely occupied by staff and patients and their families.

I thought it was an overreaction to move patients again, considering they'd only fairly recently moved from 2A, and I thought that the potential harm would be greater in terms of patients' and families' confidence in Ward 6A and instruction to go to CDU.

CDU was pretty much the same environment as Ward 6A: a general air system, same infrastructure around sanitary wear, etc., and, in turn, patients who had been treated in CDU were taken back to Ward 2A.

Q Sorry, I was just going to ask you a question: was there eventually a meeting with the chief executive?

A Yes.

Q What happened at that?

A So, I informed the chief executive that there was a recommendation to move patients again. She was concerned about that and wanted to know the reasons why, the strong reasons why, and she was over in site anyway, and we met with Dr Inkster. I think Mrs Grant asked her to explain her thoughts about why this was the case.

I can't recall whether I reiterated my thoughts. I considered this to be (inaudible) bread and butter work. These were minor repairs that we do day in, day out on all of our sites, albeit under Scribe process and recognising the client group we were dealing with, but nevertheless, there was robust processing in place.

Dr Inkster explained to Mrs Grant there would be an exchange. I don't recall that exchange. Dr Inkster reminded both of us that she was a world-renowned expert in such matters, and that was her view.

Q So I just want to understand this a bit more. I get the impression – and it's only an impression because I don't think we asked Professor Gibson last year – that this decant was not something that she was against, and I say that just because I want to mark it for later for checking.

But obviously Dr Inkster has explained her reasons, and her reasons, I think, are slightly different from the ones you've described: more to do with the idea that these were building works, and it was the building works that was the anxiety, not the sort of general nature of the ward, and that will be a reason to move the patients.

The final observation is this, is that whether or not Dr Inkster is a world-renowned expert for hospital buildings and ventilation systems, she's the lead infection control doctor, and you're not. You're the Estates director.

A Yes.

Q So, do you feel there's a slight

differential of expertise here, where you might be somewhat going beyond your area of expertise to balance these risks, which she's presumably considered and discussed with Professor Gibson and discussed in an IMT?

A We'd already considered all the risks the previous week, and the works that were done, whilst technically would be building works, they were straightforward building works that we do every day in that hospital in high-risk areas, high-patient-risk areas. The important thing is that we do them under appropriate risk mitigation methodology and that was in place.

Q So when you say that the methodology was approved by the Infection Prevention and Control team, it wasn't approved by Dr Inkster, was it?

A I don't recall. It's in my statement, the Scribe that was done. I think there's three signatures on it from my PC team.

Q Right, but it's-- even if there's a change of circumstances, do you consider that your views are more valid than the lead infection control doctor on this?

A No, I don't consider that at all.

Q You just think she's a bit risk-averse?

A I'm not suggesting she's risk-averse either, but there needs to be some reciprocity around my view and infection control views in regards to whether we would execute a plan or not. As it happened, following repatriation of patients back into 6A, we did further, I would say, broadly similar works in the kitchen in creating a family room. We stripped out a bathroom, for example, all under Scribe conditions, and those, arguably, were much more invasive than what we were doing at that time.

Q Right. What I want to do now, before we have the morning coffee break, is wrap up Cryptococcus by reference to the Cryptococcus expert subgroup.

A Okay.

Q So, I think you've presumably seen Professor Hood's report.

A I have.

Q Yes, and you describe it in your statement at question 185, page 613. You're glowing in your praise of Dr Hood's work. I think that's a fair comment of what you're saying there.

A I am. I had had little knowledge of Dr Hood. So I was relatively still new in post, and Dr Hood's approach to-- he struck me as being a very pragmatic individual but a scientist. His thoroughness was evident every time we would have a meeting. He had a fairly peculiar way of noting the meetings. He took his own notes and whereby the notes, they weren't necessarily singular

minutes, they built up into a very strong singular narrative which I'd never seen before.

Q Because I'm just wondering what expertise you have in instigating these issues.

A I have no expertise.

Q Well, what weight should we give to your view of the nature of Dr Hood's report?

A Of the nature of-- sorry?

Q What weight should we give to the opinion you express here?

A I was participative in the meetings and when-- My role there was one to be able to delegate resource, whether that be technical expertise within the team or financial resource to get external expert advice and, at all times, we did that.

Dr Hood involved free flow of opinion from those that had expertise in that, whether they be from other national agencies or, in the case of Mr Hoffman, was a regular contributor to that, and Dr Hood and Mr Hoffman clearly had an ongoing knowledge of each other. They seemed to be comfortable in the dialogue they were having. So my assessment of that series of meetings was that it was conducted robustly. Arguably, I've not-- arguably, in a very transparent, collaborative manner.

Q Are you aware that NSS effectively stated that it wasn't conducted in a transparent manner and didn't support the final conclusions of the report?

A I am.

Q Do you have anything to comment on that, given what you've just said?

A I think there were particular colleagues within NSS who had that view.

Q Well, yes, but they reached that conclusion. Are they not entitled to their own conclusion?

A Yes, they're absolutely entitled to their conclusion. I think those from NSS who had technical expertise would support and did support the hypothesis and that rigorous process of evaluating the hypothesis as it went along.

Q So we've had evidence from two people who attended the meeting, Annette Rankin and Susan Dodd, who was, of course, the lead ICD earlier in the year working for the Health Board.

A She was the ICN.

Q ICN, rather, sorry. They've expressed their concerns with the meeting. Have you heard their evidence?

A I've read some of their evidence and heard some of their evidence.

Q Right, yes, so they seem to have expressed a concern about the way the meetings were conducted. NSS

formally didn't support the conclusions, and are you telling me that there are people in NSS who disagree with that and we should give weight to them?

A I'm not suggesting you should give weight to them, but I think technical colleagues within what was then Health Facility Scotland would have supported the technical assessments that were done as part of the hypothesis around either including or excluding the technical feasibility of some of the hypotheses.

Q These people are who?

A Mr Storrar was the main person who----

Q Well, we can't speak to Mr Storrar, can we? So we don't know what he said. So you're coming here and telling us that people who weren't at the meeting contradict the position of their organisation. How much weight do we give to that?

A I think Mr Storrar attended some of the meetings.

Q But are we supposed to give weight to your understanding of his evidence when his own organisation says they didn't support it and sent emails to that effect?

A I'm not suggesting that you should give any greater or lesser----

Q Right. Well, let's move on to a letter from Professor Hood, which is bundle 14, volume 2, page 445. (After a pause) No, it's not. Let's do that after the coffee break and I'll find the correct reference.

A Okay.

THE CHAIR: As I said, Professor Steele, we usually take a coffee break about now, so could I ask you to be back for ten to twelve?

A Okay.

(Short break)

THE CHAIR: Mr Mackintosh.

MR MACKINTOSH: Thank you. I wonder if we can look at bundle 14, volume 2, page 456. 456. Thank you, so this appears to be a letter from the chair of the group, Professor Hood, to Marian Bain, who was then director of Infection Prevention and Control, after your Board meeting on 25 February 2020. Do you recollect the reports to which the professor is discussing?

A When you say "reports," do you mean minutes of the meetings?

Q The minutes of the meetings, yes.

A I do now. I hadn't seen the minutes of the meetings until the bundles were shared.

Q Yes, because, in essence, this is a letter from the chair of the expert group, I think, in short terms, complaining

that the update paper to the meeting of 25 February 2020 describes that the hypothesis the air from the plant rooms via the air handling units has been categorically ruled out as not technically possible, and he complains about that language in his letter. Do you see that?

A I do, yes.

Q Yes, and then, bottom of the page, in respect of the minute, the minute describes you as providing an overview in respect of work carried out in respect of Cryptococcus neoformans. You describe six hypotheses and that all the hypotheses are ruled out due to a number of factors, and it was concluded the likely source was spores were brought into the building from the incoming air. He complains that that's not the conclusion the group had then reached. Why were you reporting to the Board things that hadn't yet been decided by the expert group?

A But you have----

Q The next page? Of course, yes.

A Do you wish me to answer?

Q Yes, please.

A Yes, so could you go back to the previous page, please?

Q Of course.

A So, the bottom one refers to a minute of a finance planning performance committee, which I think took place in December, and I was asked to give an update to FP&P committee members on a verbal update on matters associated with litigation. Given the level of scrutiny that was ongoing in regard to pigeons and risk, I was asked to give an update to FP&P on the work that was done to date. The one above refers to the Board meeting which took place in February; I didn't attend.

Q You weren't involved in producing that paper?

A That update was given by Mrs Grant. So the papers from FP&P flow as a matter of course to the Board----

Q Yes.

A -- as for information. So, I was at the FP&P meeting but not at the Board meeting.

Q But you did tell the Board that you provided an overview to a Board meeting in December 2019-- so the FP&P meeting, sorry, in December 2019, in which you said something that's roughly according to this minute, and Professor Hood thinks, in effect, you're pre-empting the work of his expert group. Is that fair, that that's what he thinks?

A The following statements by Dr Hood-- so by the time that particular update was given, I think Dr Hood was then on to considering potential infiltration via risers.

Q Yes, but the point I'm trying to

make, Professor, is that at the bottom two paragraphs of this page, Professor Hood, as he eventually became, wrote to the then director of Infection Prevention and Control to say that in a minute of a Finance and Performance Committee, which you've helpfully told us was in December 2019, you are recorded as saying that certain things have been ruled out when he is saying that, at that point, the group had not discussed the hypotheses and had not reached those conclusions. Why would you tell the Finance and Performance Committee that things have been ruled out when they hadn't been?

A I think certainly the dialogue that was happening at those expert subgroups-- and I haven't reviewed the minutes or the chronology of the day, but the language that was developed around the technical capability of the air handling units being compromised from the air within the plant rooms was that it was "technically infeasible."

Q I appreciate that might be what you think----

A No, that's what the group think.

Q Well, why is Professor Hood writing and making a fuss, then? He says it's not thinking that. His position is that you said A and he's saying we haven't decided A. Why is he wrong?

A I think, if you go on to the next page, you'll see that Dr Hood-- by the time Dr Hood had sent this email, a further hypothesis of voids and risers had been developed. So the previous six hypotheses were in regards to, or had been associated with, the air handling units having been compromised, i.e. drawing air into them from plant rooms in general.

Q Professor, if we go back to the bottom of page 456, the author of this letter has quoted a minute from a meeting that you were at that you're not saying is wrong, in which you describe six hypotheses considered and the outcomes and the investigations of each of these. He then says that all the hypotheses were ruled out due to a number of factors. The first line of his response, which presumably is the words he chose to write, is, "Firstly the group has not yet definitively discussed each of these hypotheses." So why were you reporting hypotheses having been ruled out when the expert subgroup had not yet definitively discussed them?

A These were exhaustively discussed as hypotheses as the minutes went on. I think the minutes – and I haven't read them for a long, long time – would confirm that as they were being 1.) considered, analysed, were considered possible or not. So by the time of December 2019, we would have

gone through six hypotheses at the subgroup.

Q Except the chair of the subgroup says you hadn't, so is he just wrong?

A I suspect or I would anticipate that Dr Hood is considering that he hasn't got to end of his process and there would be-- I wasn't at the end of the process at that period of work, but I would anticipate that he had not had his final wrap-up of all of the hypotheses.

Q But he doesn't say that, Professor. He says, "The group has not yet definitively discussed each of these hypotheses," and you are telling a subcommittee of the Board that it has ruled them out. Is that right? Are you telling something that's true or are you trying to mislead the subcommittee?

A I'm definitely not trying to mislead----

Q Well, what are you doing, then? Because you're seemingly being told by-- Marion Bain is being told by Professor Hood that what you're saying isn't right.

A I would consider that the minutes of each of these groups that considered the six hypotheses would confirm, in all cases, that it was technically infeasible.

Q So Professor Hood is wrong and you're right?

A If you wish to choose that, I am pretty sure, if you go to the minutes, it will show each of these hypotheses at that time as having been ruled out.

Q Right. The next thing I want to ask you about – take that off the screen – is since the two cases of Cryptococcus in the end of 2018, which the Inquiry has had extensive evidence about and where unfortunately the patients died, have there been any further Cryptococcus cases in the hospital?

A Not that I'm aware of.

Q If there had been further Cryptococcus cases in the hospital, would that be something that requires to be investigated?

A Absolutely.

Q Okay. I'd like to touch on briefly – it's not covered in your statement, but it came up in Dr Peters' evidence – the issue of ventilation in the PICU.

A Yes.

Q So, just so we can put the context, where is the PICU located in the children's hospital?

A Level 1, I think, adjacent to high-care areas.

Q Right, okay. So we've heard evidence from Dr Peters about her repeated concerns that the PICU ventilation system was not safe and that she wrote an SBAR about this. Is that

something you're aware of?

A I will have seen Dr Peters' emails probably, yes.

Q What were her concerns as you understood them to be?

A I think her concerns were primarily that the unit hadn't been validated.

Q Had it been validated?

A It had not been validated.

Q Right, okay. So what did she want to have done to the unit?

A The pressure cascade within the unit and air change had not been confirmed at 10 in 10. I think the air changes were 10, but the pressure regime was neutral in the unit. There were also aspects of the unit that had been built, lay-in ceiling tiles that were potentially permeable in terms of pressurising and she had concerns around that also. I met with Dr Inkster and other IPC colleagues and so this was the subject of an HSE review as well.

Q It was, yes.

A So I met with the clinical director and I think one of the lead clinicians – I'd never been in the PICU – to try and understand what the operating parameters were within the unit and what were the issues or perceived issues.

The lead clinician was unaware of there being any issues. He was not aware of any particular issues associated

with increased infection prevalence. We discussed the need 1.) to validate and verify the systems and understand what their operating parameters were, but moreover, potentially create different environments within the one unit.

The PICU in the children's hospital is very large compared to other sites, certainly in Scotland and if not the UK. I involved our authorising engineer at that point to get his view as well as our AP on the site. The desire was to have a highly positive and highly negative series of environments, including HEPA-filtered environments.

The concern from the clinical team was that having different environments may have the potential to cause error of patient placement in terms of infectious patients or those that needed to be protected, and he was perplexed almost at the need to change anything in it because, in his view, it wasn't broken. His colleague who arrived at the meeting-- so I was trying to understand whether this unit was perhaps similar to----

Q Well, why don't we look at the SBAR while you're doing that so we can understand the answer? If we can look at the SBAR, it's in bundle 4, page----

A Is this Dr Inkster's SBAR?

Q Dr Peters' SBAR.

A Okay.

Q Is this in 2019, this meeting?

A (No audible response).

Q Is it in 2019, this meeting?

A I don't know----

Q No, no, you're talking about a meeting, so I'm wondering when it was.

A Yes, it would be in 2019.

Q Yes, so it's bundle 4, page 161. So I'm just wondering, is your position that somehow this concern that's set out by Dr Peters isn't legitimate or is exaggerated or something like that? Is that what you're trying----

A No, not at all.

Q So what is the point you're trying to make?

A So, the point I'm trying to make and will make is that the PICU that was delivered to the children's hospital is one of-- by design, and the other clinician who attended the meeting, actually came along, he was involved with the design of the hospital and actually came to the meeting with the plans that he personally had been involved with. We went through that, so from one point of view, the main thing for me was that we had a unit here that we demonstrated clinical involvement in the configuration of the wards.

Moreover, I heard from the lead clinician that, from their perspective and their peer review across the globe, actually, that PICUs are set up differently depending where you are in the world. We had a broadly nominal pressure cascade in our PICU. I can't remember the doctor's name, but he had collaborated with colleagues, particularly heading eastwards and I think in Singapore, they had a particularly negative environment in their PICU because of, I think, it associated with SARS at one point, highly infectious issues.

So, through an iterative process, we worked with the clinical team, our AP and our AE to look at how we could create an environment that would protect all of the occupants of PICU, whether they be surgical occupants or medical occupants. So, I am not contesting anything that Dr Peters is saying in her SBAR. I think we've been through a process to get to an outcome, and I'm not reading the detail on that, but an outcome where we've verified a facility that delivers 10 in 10 and offers significant flexibility to cater for a very broad church of different patients.

Q Thank you. The reason I asked you about it is because I thought it would be a good foundation to ask this question, which is that this ward went through a process that you've just described, and we've got Dr Peters' take on it and we've got her SBAR – we can take that off the screen – in 2019 of

realising it hadn't been validated, validating it and, as you say, achieving what's now been achieved.

Firstly, it's striking that process happened some four years after the hospital opened, but you weren't there at the time, so I can't challenge you on that. But the second point is, is there not a need to carry out something similar for the whole hospital to effectively validate the whole ventilation system for the whole hospital to ensure that you've done that similar exercise that you have just discussed and Dr Peters has touched and talking to the clinicians and working out what actually you wanted and what you've got? Is that validation exercise still not required for the whole hospital?

A Within the confines of the SHTM, we are required to validate, verify critical air systems, which we have done across the whole site. We have done selected wards across a number of different floors: Level 4, Level 6, Level 5, Level 7. They are standard wards; the plant and equipment that serves these levels is the same as all other wards. I think back in 2014/15 the guidance at that time didn't actually stipulate that validation had to happen.

Q You see, because the Inquiry's-- I'm sorry, my Lord.

THE CHAIR: Well, no, carry on.

MR MACKINTOSH: The Inquiry has heard evidence that SHTM 03-01 2009 draft, which is the one that's somehow referred to in the contract and the procurement process, does require validation, and that the 2014 version also requires validation. I wondered if you'd got any particular reason for thinking-- perhaps something it says – we could go and look at it – or whether that's just your understanding from discussing it with other people.

A So, having-- for other reasons, we have discussed the absolute contractual need to do that. My understanding is that the guidance that we were working to in our contract was not explicit. It was a client requirement to validate rather than a contractual requirement to validate.

Q Have you looked at the document yourself?

A No.

Q No. So, if you haven't looked at the document, I'm not going to take you to it. I wonder what your source of that is. Have you been given advice by somebody else, or----?

A It has been discussed with other colleagues and other, I guess, advisors to the Board.

THE CHAIR: Can I just clarify something? You introduced into a conversation which, up to this point, I'd understood to be about a-- what the

SHTM 03-01 required in, well, 2014 was where we started, and you introduced the notion of the contract. Now, I just wonder if there's possibility of us being at cross purposes.

It occurs to me that the contractor may have been – I'm just saying as a possibility – under no obligation to do more than he was required to do, or it was required to do, which might just have been commissioning and achieving practical completion, but the Board might be subject to an obligation imposed not by the contract, because that's not how it would come about, but imposed by the Scottish Health Technical Memorandum to achieve or to see that the work is independently validated. Now, I've used a lot of words there. I'm just wondering if there's any possibility of us being at cross purposes?

MR MACKINTOSH: Yes, so you've obviously said in your evidence that the contract might have said something, and we'll put that to one side for a moment. Is it your position that the guidance itself doesn't place an obligation on the Board to carry out validation?

A Well, I think you succinctly described the situation I believe that we have, in so much that it wasn't a contractual obligation, it was an obligation for the client.

THE CHAIR: Yes, okay.

MR MACKINTOSH: So we obviously can't ask you because you didn't work it out – we'll have to find the person who advised you or they'll be offered to us as a witness – but your understanding is that SHTM 03-01, either the version that was in place when the hospital was opened, didn't actually place an obligation on the Health Board to do the validation? On the Health Board, not the contractor.

A So my understanding is that it was a client obligation.

Q Which means the client thought of it and said, "We'd like to do this," as opposed to it was placed upon them by somebody else?

A I think it's within the SHTM 03-01 that it's a requirement of the Board.

Q Right, so the Board is required to do it?

A Yes.

Q Right, that's fine. We just got a little confused there. I'm grateful for sorting that out. Now, what I'd like to do is to return to the topic of chilled beams. So, if we go back to your statement, please, on page 564, and we asked you the question of, "What's a chilled beam?" I'm not going to go into that now, but obviously, presumably, you've learned quite a lot about them since you came across them for the first time.

A Regrettably so, yes.

Q Yes. Now, we've heard evidence from Dr Peters particularly but to some extent from Dr Inkster and also from Susan Dodd and from Pamela Joannidis that there were-- and also I think from Lynn Pritchard, although she's not clear about the date as the others, that there were issues involving the chilled beams, condensation particularly, prior to your arrival. I know that's not the reason, but just, in the years before, in '17 and '16. Is that your understanding as well?

A My understanding is that there had been issues that were attributed to condensation and, potentially, leaks----

Q Right.

A -- that had potentially-- probably been conflated as not knowing exactly where the source of the----

Q Yes, so there's a sort of-- early days there seems to be an uncertainty of whether it's condensation or whether it's a leak.

A Yes.

Q But as we get into 2019, the understanding amongst Estates people, the Infection Prevention and Control team, is they begin to understand the difference. Would that be a sort of fair description?

A Yes.

Q What I want to do is to look at question 65 at the bottom of page 564.

So, I see that you say in your answer that one instance specifically related to the dew point issue-- would that be related to the way that the controlled circuits reacted to the----?

A The incident I'm referring to there, I'm going to assume it was 2019. I think there was three times, actually, but that particular incident I'm referring to, we had very significant dew point issues across the campus.

Q Yes.

A 150-plus rooms affected. It was a Sunday and I got a phone call about it. I remember it quite clearly.

Q Some people described it as "raining inside."

A I'm not sure whether it had been raining, although I wasn't there, but there would be-- The weather event that happened was not unique to Glasgow that particular weekend.

Q In that it was very hot?

A It was humid outside and hot.

Q So that would have caused the particular condensation problem that we're describing at that weekend?

A Yes.

Q Right. Now, there's been some evidence that in the early part of August 2018, the issue of chilled beams comes up in IMTs, and we're going to look at two, which is 8 August 2019 and 14 August 2019, and we'll go and look at

them first and then I'll ask you a question. So, bundle 1, document 76, page 338. This is an IMT at which you are, I think, not present----

A I am.

Q -- unless I've missed you. You are there?

A Yes.

Q Oh, you are, the right-hand side, top line. You are there. Right. I always worry about this when I do this, but if we go on to the second page, there's a discussion at the bottom about swabs being taken from chilled beams, and there's light growth of some gram-negatives including Klebsiella, Acinetobacter and Pantoea. Now, Pantoea is supposed to be quite rare. Is that the one that's found inside the cooling water?

A I understand from reviewing the documents-- I think it was a Pseudomonas.

Q Right, but in any event, there's been some testing, and then the next meeting-- Well, I'm just going to show you the document before we come back. If we go also onto page 341, we have a minute entry in the middle of the page that you ask if anything can be added to the chilled beam water to contact Pseudomonas.

A Yes.

Q Dr Inkster suggests chlorine dioxide, but of course, I think, possibly unsurprisingly, she's unsure whether it's sustainable in a closed system. Did you ever look into a treatment for the chilled water system?

A Yes, we actually did sample the system.

Q Did you ever put a secondary control in?

A Yes.

Q What's the secondary control?

A We have a maintenance contract on the sealed system now, and there has been for some time a system sampled. There are draw-off points within that system and there's a biocide added.

Q When did that all start, the biocide?

A So the biocide-- so that meeting, I don't know the date of that.

Q 8 August.

A Okay, so it would be done in fairly short order after that, that the system is sampled and treated.

Q Then the next minute that's got this issue arises is 14 August and so that's at page 343, and you are at this one. If we go to page 334, over the next page, 335, there's discussion about samples being taken from the chilled beams. Do you see that in the third, fourth paragraph?

A (No audible response).

Q Then there's mention of the warm weather, which I think you just told me about.

A Yes.

Q Right. Now, in the context of those entries over those two meetings, at which you're both present, we've got evidence from Dr Inkster that you might have said at the meeting that there couldn't be leaks from the chilled beam water circuit, or that it was very unlikely. Is that something you might have said, and, if so, why?

A The context, I believe, why I said that statement was that given the scale of leaks – i.e. from the previous time, there was 150 rooms affected – it would have been, in my opinion, at that time, unlikely that we would have had 150 leaks from the chilled water system. (Inaudible) the water that was emanating was from condensation rather than the sealed system.

Q So this statement by you is in the context of the big, humid day?

A Yes.

Q You're referring to that particular incident in particular, not the general issue?

A Well, I think actually there was three dew point events within close weeks.

Q Right, but your comment that it's unlikely to be leaks is in respect of--

on the dew point incident days?

A Yes.

Q Right, because I think later in your statement, if you go to page 566 of your statement, which is, I think, the next page but one, in answer to question 67, you say:

> "Initially we considered the leaks to be caused by a dew point issue and therefore the conclusion would be, in that case, it was a condensation issue rather than a sealed pipe system.
>
> On review, I now believe it possible for a leak to occur when heated flow temperature control occurred resulting in lower temperature and resulting contraction in pipe joints causing a small leak.
>
> We did at this time take proactive measures to change the connection of the seal system from push fit to fully mechanical joints."

Could you explain what you mean by a "fully mechanical joint"?

A A screwed fitting.

Q A screw fitting. So, basically, it can't pop out?

A Yes.

Q Right. The Inquiry's had some evidence that in March or so 2020 there was a significant failure of the chilled

beam water system in the hospital. Have we got that right?

A I'm not aware of any significant----

Q Because the material we've seen suggests that there was a corrosion incident or potentially a corrosion incident. We've heard evidence about it in the hearing and, ultimately, the Health Board's in dispute with the supplier.

A The chilled water system is one area of a civil litigation, yes.

Q Then it might be a concern that inappropriate materials are used to make the pipework. It might be the heart of it.

A That's exactly correct, yes.

Q Yes. Mr Clarkson explained that, from his perspective, without getting into the issue of whether inappropriate materials were used – because he was quite careful to stay off that – that there had been issues of the thin pipes, in his eyes, corroding either from the outside in or from the inside out and failing around the hospital. Is that something you're aware of?

A Yes.

Q Yes. Given the summer of 2019 is the time we're talking about, is it possible that, in addition to anything happening in terms of condensation and anything happening around push-fit failures of the connections, that pipes were actually failing – the pipes themselves – due to corrosion and that would have caused more significant amounts of liquid to land on beds or floors or patients?

A It's conceivable at that time, but I don't think-- we weren't gathering data at that time about the cause of a leak or exactly which system was leaking. We've got much more granular data now. It could have been.

Q Because the reason it might matter – and I'll put this to you – is that, in those early August IMTs, one of the issues for discussion, I understand it, is to what extent do the chilled beams, either in the condensations or the cooling water, pose an infection risk to the immunosuppressed patients in Ward 6A? Do you remember those conversations?

A I do.

Q Right, and I think the argument goes like this: if the chilled beams are condensing and dripping, or the pipes are leaking in some way, the condensation water will inevitably have microorganisms in it because dust, even if you clean them every six weeks, will have dust in it, and you're aware of that argument?

A I'm absolutely aware of it, yes.

Q Okay. Then, if you think about the chilled water system, although it had a microorganism in it, albeit not one that was found in patients, you're aware of that?

A Yes.

Q Yes, so if it's able to grow one microorganism, the suspicion is it might grow other ones. Is that something that you're familiar with as a concept?

A It has potential. It's not my area of expertise.

Q Yes, yes. Because I'm just wondering whether Dr Inkster and Dr Peters and Ms Harvey-Wood are wrong when they draw to our attention their impression that, in these early August IMTs, particularly 14 August, you seemed keen to play down the possibility that the chilled beams posed a risk to the patients?

A I don't agree with that. We had, I guess, demonstrable evidence about why the dew point event happened, and no one can deny that happened because there's a significant impact across the hospital, including Ward 6A. The failure associated with the heating side of the cold chilled beam units, but you'll know by now----

Q There's both hot and cold.

A -- yes. So after it-- over that period, and I don't recall any dates, but if thermal control was lost, i.e. the circulatory temperature of that fluid was lost, and there is examples of that, then there's a potential for the flexible connection to move through movement in the pipework.

Now, whether the connection had been poorly fitted or there had, indeed, been a move in it, I know not, but when heating would have been restored, then fitting effectively resealed itself. So there would have been the potential for fluid to release from the hot side. On the cold side, if-- and we believe that any fluid that's leaking on the cold side would be associated with corrosion.

Q So, what I'm trying to put to you is that the lead Infection Prevention and Control doctor and two microbiologists – who she invited to the 14 August meeting for the reason that she felt she was being challenged on her own expertise by people in the meeting on 8 August – describe a pushback from you on the idea that chilled beams would pose a risk. It seems to me, from what you're saying, that you're-- and effectively saying, "Well, the big incidents around the humidity, they were a one-off. They happen everywhere, so they couldn't be a risk." Am I understanding your position correctly?

A No, they weren't a one-off. They had happened, I think, at least on three occasions in-- over that particular summer, so they weren't a one-off.

Q So why do these three people think that in the early-- well, only one of them is there on the 8th, but all three of them are there on the 14th-- think there is

a significant pushback from Estates, particularly from you, at the idea that chilled beams require to be investigated as a possible cause of infections in Ward 6A?

A I don't recall any particular pushback, and in terms of what we did as an Estates team and me would be recognising several things: one, the cleaning of the chilled beams and the amount of lint, etc., that was gathering in them was significantly beyond that that we had anticipated.

So we developed, iteratively, actually, a revised cleaning schedule for them to mitigate any risk of dust build-up and subsequent microbiology load on them. Leaks, demonstrably, did happen in terms of the dew point, and we resolved that matter. I think Mr Connor explained how that was done.

In terms of thermal loss to the beam, we did have data that suggested we lost circulatory control and our response to that was to replace all the connections, and I think it's in one of the minutes and I asked for all the tails, flexible tails, to be changed to mechanical. So, I'm unclear as to why I am resolving concerns that they had about the chilled beams.

Q Because the other narrative, which I've put to a few witnesses who were present on the 14th, is that by the

time we get to 14 August, a tension has built up in the Infection Prevention and Control team between Infection Prevention and Control doctors and microbiologists on one side, and maybe some of the treating clinicians, and people who represent-- hold senior positions in the Board on the other, where one group, the group you're in, is effectively saying, "No, there's not a risk here. We sorted out the water. We've put in chlorine dioxide. Why do we need another decant?" Is that, effectively, something you were saying, or is that not something that happened?

A The IMTs were increasingly difficult in terms of trying to understand where an environmental source, i.e. water, was emanating from, and I recall a colleague from another organisation effectively saying there must be a water source.

Given all the work that we had done to that ward in terms of flooring, drains, chilled beams, point-of-use filters, the next thing that I asked the team to do was quite literally get the Estates team to put their head above ceilings in a controlled manner to see if there was any mould source that we were unaware of above ceilings.

Q Yes, but the point that I put to Dr Deighan and Dr Kennedy and others is that there might have been multiple

sources for these infections, and how do you respond to the criticism that, by the time we get to 14 August, you are dismissing the suggestion that there is actually really a problem in 6A, that effectively, it's been fixed? "Well, why are we still talking about this?" How would you react to that suggestion?

A I don't think anyone was saying that. I think those within the room were frustrated by the fact that we couldn't find an answer to further infections, despite the work we'd done thus far.

So we had looked in all areas that we possibly could and mitigated and proved where we could, yet there was still – I'll go back to what I said earlier – a statement by one person saying there must be a water source, and I was at a loss about where that water source could be because we had exhaustively looked for it.

Q Professor Dancer gave evidence that when you're looking for a source, you just keep looking until you find it. Would that not be a reasonable approach to these sort of things?

A I don't think it's an unreasonable approach and I don't think we actually did stop looking for it.

Q What I want to do now is to move on to the aftermath of the meeting of 14 August. Now, we've had evidence

from Dr Kennedy that as he was leaving the meeting, he spoke to you and the two of you discussed that there was tensions in the meeting, and that he drew to your attention that in the public health it's possible to change an IMT chair. Do you remember that conversation?

A I don't.

Q Did you do anything after the meeting to suggest to any other senior members of the Board staff that the IMT chair should be changed?

A No.

Q No. When you received the invitation to attend it, did you know-- attend a meeting on 20 August, did you know what the meeting was to be about?

A I did.

Q How did you find that out?

A Probably in discussion with perhaps Dr de Caestecker or Dr Inkster. There was discussion after that meeting because it was an extremely challenging meeting. There were many, many people in the meeting and the language that was used in the meeting was, in itself, inflammatory. When we went into meetings, there would be other-- seemed to me to be always another very rare thing we had found.

Q Well, that might just be because there was, mightn't it, Professor Steele?

A Well, I, like others in the room,

would have thought that this is-- how can this be happening to us? So it was said in the room that we have found a particular microorganism, and the statement was made it had only ever been found in the space station, and I personally thought that was, "Wow, how can that be?" I never said anything.

Q Could the statement have been, "It was first identified in the space station"?

A No. That's how it was said in the room. Thereafter, the-- Dr Peters was sitting to my right and, if it's the same meeting, I think it was, I asked about trying to understand why we are still having this issue.

I asked around other national centres, Great Ormond Street in this case, and I asked a question about what were their levels of infection compared to us. Dr Peters leaned across me and, as I say, there was-- it was a busy room, clinical staff present, and she made a sign like so: there are zero infections in Great Ormond Street.

Q Well----

A That was her words. So the context of that meeting was----

Q Do you know whether there are zero infections of that (inaudible)----

A I believe that's not exactly right. My action after that meeting was----

Q So what's your source for that, Professor Steele?

A I understand that Great Ormond Street do have data that would suggest they do have infections. How comparative or not, I don't know. I'm not able to----

Q Well, this is the point. I want to ask you a question before you go on too further. This isn't in your statement, this section, and so I haven't had the opportunity for it to be put to Professor Steele or Dr Inkster. Why didn't you put this section in your statement?

THE CHAIR: I think you said put to Professor Steele. You meant Dr----

MR MACKINTOSH: Dr Inkster or Dr Peters. Why isn't it in your statement?

A No particular reason. The impact of these two statements was quite profound to me and would have been profound to everybody else----

Q But you didn't give us notice, so we weren't able to ask. You're accusing two doctors of unprofessional behaviour and----

A I'm not accusing them.

Q No? Right, well, what's wrong with going, "There's zero"?

A It was the way in which zero was said.

Q So, after the meeting, you say you spoke to Dr de Caestecker?

A I may have.

THE CHAIR: The fault, I think, is

mine. I'm not sure if we're speaking about one meeting or a number of meetings.

MR MACKINTOSH: Is this 14 August, Professor?

THE CHAIR: Or are we talking about the meeting of 14 August?

A If this is-- I'm unclear exactly. So if this is a meeting that was a difficult meeting, a challenging meeting where a number of people were impacted around some of the language and behaviours, then it's 14 August.

MR MACKINTOSH: Okay.

THE CHAIR: 14 August, thank you.

MR MACKINTOSH: So, I asked you earlier on about who did you speak to about the meeting afterwards and you said, "I might have spoken to Dr de Caestecker or Dr Inkster." I wondered if you did speak to Dr de Caestecker?

A I can't recall exactly if I did. There would have been feedback, certainly, by me when I got back to the office about, "That was a really challenging meeting."

Q So this is the office block-- offices where your office is?

A Yes.

Q Right, and is that near Dr de Caestecker's office?

A Yes, right next door.

Q Right, so it's entirely possible that you would have said-- you'd given her feedback?

A It may well have been possible that I and others would have given her feedback from that meeting.

Q Yes, because there's eventually a meeting on 20 August, isn't there?

A Yes.

Q Can we look at the minute of it, which is bundle 6, document 22, page 70? So you're there with Dr de Caestecker, Dr Armstrong, Mr Best, Dr Deighan, Dr McGuire, Mr Redfern, Dr Kennedy, Sandra Devine, Dr Green, Ms Rogers, Dr Mathers and Mr Forrester is there from Board administration. Dr Inkster is not present. You're nodding.

A Yes.

Q Were you told why she wasn't present?

A The reason for the meeting was to discuss the IMT and the position that I'd got to and relationships.

Q Did the invitation to the meeting say that?

A I can't recall.

Q (Inaudible), the invitation to the meeting doesn't say, "We're discussing the IMT"?

A I can't recall what the invitation would have said.

Q You have a meeting to discuss the IMT and eventually decide to replace the chair. Is that effectively the summary

of what happens in the meeting?

A That's what the note says, yes.

Q Yes. Imagine this was a meeting about you and the meeting you were chairing. How would you feel if your colleagues and your managers held a meeting to discuss removing you from a project that you were running without involving you. How would you feel about that?

A Potentially aggrieved.

Q Right, so do you see that Dr Inkster has a reason to be-- feel a little bit aggrieved about the way this has been done?

A Potentially, yes.

Q Yes, because whilst you're not an infection control specialist, you are an engineer.

A I'm not an engineer, no.

Q So what's your professional background?

A I'm a chartered surveyor, chartered builder.

Q All right, but you'll be familiar with the idea that in order to make good decisions, you need to hear the views of everybody involved who has relevant opinions to contribute. That's a principle of governance.

A Yes.

Q Yes, so could this be criticised as potentially not a good decision, given that Dr Inkster wasn't heard before the decision was made? Is that a valid criticism of this process?

A I think Dr Inkster, at that particular meeting, I would have anticipated, given how that meeting went and the general atmosphere in the room-- had that been me, then I would've been thinking about a lack of control in that room.

Q Because the Dr Inkster version of events is that she thinks the problem is more multi-factorial: it's not just how she's chairing the meeting, it's how other people are behaving, it's about the complexity of the team, it's about the number of people who are there, it's about her not understanding why people are there and it's about sometimes her not being able to report back to Dr Armstrong before someone else has done it first. But you didn't hear any of that in this meeting, did you?

A No.

Q No. Later at the IMT on 23 August-- were you at the next IMT on 23 August?

A Would that be the first IMT for----

Q Dr Deighan.

A Dr Deighan?

Q Yes-- Dr Crighton, sorry.

A Yes.

Q You were? Do you remember Ms Rankin raising concerns about the

way the chair had been changed and asking whether it had been done in accordance with the principles of good governance?

A I don't, no.

Q Well, it's in the minute, so----

A It's in the minute. I've read it.

Q Yes. Do you think this exercise on 20 August was done in accordance with the principles of good governance and fair process?

A I think there had been considerable reflection and consideration given to particularly that meeting and the impact it had on a number of others within the organisation. Whether it could have been done more collaboratively with Dr Inkster, I know not. Perhaps so. In----

Q Well, what steps were taken to ensure that the treating clinicians who were treating the patients who are the subject of the IMT and at the risk of the infection were informed about this process?

A I don't know.

Q Was Professor Gibson at the meeting?

A I can't recall. She'll be in the minutes----

Q She wasn't invited, was she?

A I don't know.

Q Well, she's not on the invitation list email that you received.

A It was not a matter of note that I would've made. I went to the next IMT.

Q Because what this looks like is that you go back to the offices and you raise your concerns which you hold, and in part because of your concerns but also potentially the concerns of Dr Kennedy or Ms Devine, a meeting takes place where a selective perspective on the IMT is heard and a decision is taken to remove the chair. What's wrong with that analysis?

A I think there were more colleagues' feedback on that particular IMT, more impactful feedback than I----

Q Well, we can see whose colleagues feel an impact. They're listed here; they're all there at the meeting.

A I think there were other colleagues at that meeting – nursing staff, ward staff – who----

Q Ward staff?

A -- reported back.

Q So you think the ward staff were looking for a change of chair?

A No, I think the ward staff were very concerned about the way that the meeting took place and what happened at the meeting.

Q Do you think the ward staff knew what was going to happen on 23 August when the next meeting happened?

A No, I think I have heard, and it would be heard, that some ward staff

were not prepared to attend another IMT. It was too much.

Q Well, we haven't had that evidence. We've had evidence from the evidence from the ward staff who attended. The perspective they give is that after the IMT chair changed, the nature-- the approach of the IMT changed, and it ceased to be about looking for whether there was a cause but deciding whether there was an outbreak. That's what we have as evidence from last year. Do you have other sources we haven't spoken to?

A No.

Q No, okay. I want to turn to water governance, if that's all right. You've explained in your statement that you are now a duty holder and the Designated Person (Water), and you're nodding again, for the benefit of the transcript person.

A Yes.

Q Now, and the chief executive would be the duty holder, effectively?

A Yes.

Q Yes. Now, when you arrived in 2019, who was then the Designated Person (Water)?

A Mary Anne Kane and Alan Gallacher.

Q Yes. When did you become the Designated Person (Water)?

A Formally-- So, as a result of this process-- So I recall when I took up post that I became in writing a Designated Person for-- a Responsible Person for Water, Fire. I've tried via our assurance team to retrieve those appointment letters. We haven't found them.

We went through a new process earlier this year, exchanged letters between myself and the chief executive and I and other colleagues around responsibilities and passing on those responsibilities, so the most current version of that would be March this year.

Q Indeed, and we looked at it, and you are the Designated Person (Water), and we can look back to-- But you weren't the Designated Person (Water) in 2019, is that----

A The paperwork that we-- that I have been able to see suggests that Mary Anne Kane and-- We had a period of time as I was coming into the organisation where Mary Anne effectively demitted her interim director role and became a deputy to me, so she retained that responsibility.

Q Because, effectively, you don't chair any meetings of the Water Safety Group until after March 2022, do you?

A No, and I have not chaired many. Again, one of my deputies, who will be on that scheme of delegation, takes the lead role in that now.

Q Would that be Mr Cox?

A It was Mr Cox, and now I think Mr Riddell and Mr Clarkson are heavily involved now.

Q So because you've obviously had the opportunity to look backwards and investigate your team and reflect on these changes, as you've explained, do you consider that the ward's water safety plan and the ward's safety group were operating effectively in 2018 and 2019?

A They were operating and were, I guess, learning in terms of new technologies that we had deployed on the campus, new infrastructure we had deployed on the campus around sanitary wear, point-of-use filters, how to manage them, how to test water, etc. So they were on a journey of learning. They were meeting but on a continuous improvement pathway, and have been so since.

Q We've had some evidence, from Mr Gallacher particularly but also from Mr Purdon – we've not yet heard from Mary Anne Kane – but one gets the impression, and I put this impression to you to see how you respond, that in 2015 and 2016 and 2017 at least, there wasn't actually a proper structure of Designated People, written scheme, that sort of stuff for the new hospital. Is that your understanding?

A From the information that I've been able to review, that would be my understanding, yes.

Q Yes. When the hospital opened, would you agree or disagree with the view expressed by the Inquiry's expert, Mr-- from the investigations you carried out, Dr Walker, that there was widespread contamination in the water system when the building was handed over? The reason I ask that is because I noticed that in your summons you refer to systemic contamination at handover, and I wondered if there's a distinction.

A Well, I think from looking at sampling, and particularly as we get into 2018 and we were finding unusual organisms in the water, at first we were looking in Ward 2A. It was then sampled elsewhere in the main risers, I think, in the adult hospitals, and we were finding the same, like, bacterium. Therefore, the term systemic, I guess, was used because it was throughout the whole system.

Q Yes, and is that a position that you'd accept is effectively still a Health Board position, that there was systemic contamination in the system?

A Whether the system was contaminated or not, "contamination" is-- I'm not sure whether it's the right word. I think the system had the potential to be compromised. There was no doubt. It's a free-flowing circulatory system, so

others in the system, as long as the system is moving and being drawn, then you're going to get the same-- I'll say "bugs" in the system throughout the system. Whether they can be classed as contaminants or not, I'm not in a position to say.

Q But there was material that shouldn't be there in the quantities that were there?

A The potential-- The control of the system was not robust to eradicate those.

Q Because the reason I'm pressing you on this, and I can put it on the screen if I need to, is that within the litigation that the Health Board is pursuing against its suppliers, which I understand exists, there is an averment that at handover there was systemic contamination; the water system was systemically contaminated.

Now, we've heard evidence from a number of your staff that there's a distinction to be drawn between contamination in terms of things that shouldn't be there and colonisation by microorganisms. I really want to understand what your understanding is, looking back on it as the head of Estates, what the state of the water system actually was in January 2015, and whether you could help me about whether, if it's systemically contaminated, what you mean by contaminated, if it's not systemically contaminated but it's systemically something else, what you mean by that. You're seeking to prove that it was, so what is it you understand?

A Our review of the systems that would support our position is that on review of all of our data around how the system was commissioned, effectively compromised the sterility of the pipework, i.e. it was filled, drained and, I think, refilled. Having water that's not moving in the system then compromised the system.

Thereafter, from a management point of view, from the Board's management point of view, we had a system that would be difficult to control. There was-- I'm not a water expert, but I would anticipate that water that's not moving in the system would have the potential to have created biofilm and, as a result of that, potential to harbour microorganisms embedded in it.

THE CHAIR: I'm discerning there may or may not be a difference between "compromised" and "contaminated." Can you help me with this?

A Lord Brodie, the compromised system would be one of-- We consider that the system was not commissioned in an appropriate manner, i.e. filled and then the water constantly circulated to not allow biofilm to proliferate.

The potential for contamination in the system-- It's a difficult word, "contamination." It conjures up many things. So, microorganisms that were in the system that had the potential to proliferate, because of the commissioning of the system, to some may be considered contaminants.

THE CHAIR: Well----

MR MACKINTOSH: I think I've got one more question----

THE CHAIR: I mean, it apparently is a word that has been used at least in the context of the----

A So, early in the----

THE CHAIR: -- litigation, so what does "contaminated" mean?

A The system had microorganisms in it at numbers that we would not ordinarily have expected to have been in there.

THE CHAIR: Did I note you correctly as saying that there was bacteria in the system in 2018 that you wouldn't expect, or did I not-- did I fail to pick that up correctly?

A The 2018 bacteria----

THE CHAIR: 2018?

A -- I haven't mentioned that.

THE CHAIR: Right, okay. I have a note which may be inaccurate in relation to sampling in 2018 producing unusual results. I appreciate this came after questioning as to what was the situation in January 2015.

MR MACKINTOSH: So, I have a----

THE CHAIR: Have I just failed-- have I just got this entirely wrong?

A I don't think so. Hopefully Mr Mackintosh will (inaudible).

MR MACKINTOSH: Okay. What I have noted, or what my learned junior has noted, is that when testing was done in 2018, unusual organisms were found in the system. Is that something that you----?

A When would that be?

Q 2018.

A Early in 2018?

Q Early 2018.

A Yes.

Q You'd agree with that? Right. I've got one final question, then we'll have to have a short break to see if any of my colleagues have questions that you haven't been asked. Can we go to page 626 of your statement, this bottom half of the page, please? You're asked if there's anything further you could assist the Inquiry with, and you describe in the first four lines the difficulties that you've experienced in this role and some of the effect that this has had on you, and I note that; we've got that evidence. But the question I want to ask you about is about the next sentence, which goes:

"The deliberate actions of

> others to systemically undermine the efforts of those charged with managing these complex issues was extremely challenging and stressful for many. They did nothing other than to fuel the unfounded concerns of already anxious parents, relatives and staff. In essence, these cynical actions, allied to intense media scrutiny, created a working environment that was, in effect, under siege."

I wondered if you could help me out. Who are the others who are systemically undermining these efforts?

A I think there were many others. I said that in the context of what appeared to me to be the deliberate release of information over a protracted period of time, week on week, of what would have been generally thought to have been confidential, potentially, certainly sensitive and certainly inflammatory.

It would be, in some cases, emerging information that we would have had no opportunity to validate or, indeed, mitigate, so we were never able to get upstream of trying to give assurance to the public, maintain confidence in these particular hospitals.

So, we were investigated by so many people, sometimes at the same time. Same questions, broadly the same answers, yet there didn't seem to be any person who wanted – or people who wanted, actually – to be part of the solution to make hospitals better.

It's on public record that there are numerous issues with aspects of the hospitals that we're in the process of or have fixed. My regret is that not everybody would appear to be keen to behind fixing them in short order.

Q I need to press you: who are the others whose actions were deliberate in the fourth line of your answer to question 260?

A Well, I think some information that was released was only available to a limited number of clinical staff, released to various media, released to politicians.

Q Before meetings that took place in 2019, do you have any evidence that any clinical staff spoke to the media?

A No.

Q Okay. Are you aware of clinical staff speaking to the minister?

A Yes.

Q Are you aware of retired clinical staff speaking to politicians?

A No.

Q No. What I'm wondering here is you said you wanted to get upstream of things; you could never get upstream of what was being said. You're nodding. At the time you arrived, there had just been a decant of the patients from 2A to 6A.

That must have been – well, we have evidence that it is – but it must have been a deeply frightening experience for the patients and the families who were being moved from one ward to another ward in the hospital. You appreciate that?

A I absolutely appreciate that.

Q You now have given evidence today that the Health Board accepts that the water system, when it took handover of the hospital, had things in it that shouldn't have been there. I think you accept that it was systemically contaminated. You accept that the water system wasn't being properly managed in the years before the decant, and you've told us the ventilation system wasn't validated. That's all right, isn't it? That's all correct?

A Except for the word "contamination."

Q Is that where you're stuck, because it's not your knowledge?

A It's not my knowledge and it's an inflammatory term.

Q Well, that's the thing, isn't it, because we also-- First, "it's an inflammatory term." It's in your summons, Professor Steele. You are a board director of a company, a health board, that's suing some people for a large amount of money. You're offering to prove that it's contaminated, but you won't use the word. What are we supposed to do in this Public Inquiry?

Because we have submissions from the Health Board that we shouldn't-- our expert is wrong to say, "It's widespread contamination." We have a submission in a question to Dr Walker and we also have a summons which says there is "systemic contamination," and we're confused and we want to know what the position is. What is the position of NHS Greater Glasgow about whether the water system was contaminated on the day you took operational ownership of the hospital?

A We had a system that had been compromised through the commissioning process of construction team.

Q Was it contaminated when you took it over?

A We, at the testing at that time, suggested that – and the email exchanges between colleagues that I've seen would suggest that – the system was fit to be taken over, it was suitable to be taken over. If we-- the measures that we have had to take as an organisation in terms of further----

Q I'm not interested in that. I want a straight answer to a straight question. When the hospital took over the-- was taken over by the Health Board, was the water system contaminated on 26 January 2015? Yes, no or don't know? Those are-- no?

A I don't know.

Q You don't know? Right, okay. Let's go back to getting upstream of the issues. We know – you may not know – that in 2015, Ward 2A and Ward 2B's ventilation systems were not built according to the clinical output specification. Do you know that?

A Yes.

Q Yes. Do you know who found that out?

A No.

Q Dr Peters and Dr Inkster. We then know that it took some time for the ventilation system in 4B to be brought up to the standard that NSS required it, wanted it to be. Are you aware of that?

A Yes.

Q Yes. We know that the ventilation system in Ward 2A wasn't upgraded outside the small number of isolation rooms until the refit happened after 2018. Do you know that?

A Yes.

Q Do you think it's possible that it might have possible for the Health Board to get ahead of these issues and get upstream if it had been frank about the problems it was facing, rather than going after the people who were bringing it out in public?

A I don't think the Health Board for that period were aware of any issues with the domestic water system.

Q No, but once we get to 2018 and you're in post – because I can't ask you about what the Health Board did much before then because you weren't responsible – but once you're on the Board, do you think the Health Board could have got ahead of these issues in the autumn of 2018 by being frank with people about what the problems were and, potentially, risk assessing its ventilation system, rather than not talking about it?

A I think the organisation did take really swift action. I personally did and directed to do so. We did an exhaustive-- well, a consultancy did on behalf of us, an exhaustive review of the whole campus in what is now an open and transparent manner. It was sensitive at the time while we were investigating that.

Q But you've never risk assessed a ventilation system in the general wards, have you?

A Not that I'm aware of, no.

Q Do you appreciate that might create a feeling that there's something wrong because you won't talk about it in basic sort of public relation terms?

A I don't think anyone is not talking about it. It's a known fact that the ventilation system at Queen Elizabeth delivers three air changes normally per hour.

Q Is it really that known? When do you think the public knew about that?

A I have no idea. I----

Q There wasn't an announcement. There wasn't, for example, an announcement around about the winter of 2018/19, "We've discovered that we approved a hospital built at three air changes an hour, but it's all right, we've risk assessed it and this is our risk assessment report from an independent auditor who says it's fine apart from these patient groups, and we've done this in this ward and this ward and this ward." You didn't publish that, did you?

A I'm not aware of that being published.

Q No, so I'm wondering whether part of the reason that there keep being these investigations is not because everyone's out to get you but because the information hasn't been coming from the Health Board. Could that be the case?

A I don't think that's necessarily the case. I think we have at all times sought to understand what issues are, ensure patients, staff, the public are protected, and it's certainly not in a secretive manner.

Q Well, today is the first day-- I recognise it was in your statement when you gave us your statement a few weeks ago. Today was the first day that anybody I'm aware of has confirmed there was no validation of the ventilation system. We've been asking questions about it for months. So is that not an example of things not being said and having to be discovered?

A I can't comment on that. I'm not aware of you not knowing that.

Q Right. What I want to do now is pick up a final few thought questions and then see where we go to with my colleagues. It's been suggested that I should ask you this question: how do you respond to the suggestion that a significant priority for you, particularly in 2019, was the organisational reputation of the Health Board?

A I completely refute that suggestion. My priorities at all times are those of patients and their families and the impact, in particular, the media would have on them. We will-- Going into a hospital is a stressful experience. Going into a hospital where there is widely spread concerns about-- can only make that matter worse. So, my-- I have absolute empathy with patients.

Q Final question, because we ought to have this check about the questions, it is ten past one: how do you think the Health Board is going to get to a place where its management of this hospital stands up to external scrutiny and restores public confidence?

A I think we do stand up to public

scrutiny, particularly for the matters that we've discussed today around ventilation and domestic water systems. They are very tightly controlled, they are reviewed internally, we've robust management processes in place and we've robust external review of those processes to provide public assurance.

Q Has the work of Mr Kelly and Mr Clarkson and their water testing results been publicised?

A I don't believe they've been publicised, but I don't think there is anything sensitive about them not being available to the public.

Q My Lord, I think I've got no more questions, but maybe my colleagues have questions. I don't know whether we want to have-- actually have a lunch break and get the professor back or have a ten-minute break. I'm conscious that Dr Cruickshank may not be the whole afternoon.

THE CHAIR: Thinking about Professor Steele's convenience as well, I think maybe we will take a lunch break, if that doesn't inconvenience you----

A That's fine with me, my Lord.

THE CHAIR: -- Mr Steele. Maybe if we aim to sit again at two o'clock. Now, in that period of time, Mr Mackintosh will find out if there's any further questions, and I would hope that that gives anyone who is taking lunch time to take lunch.

But if you can be back for two o'clock.

A Okay.

THE CHAIR: Right.

MR MACKINTOSH: Thank you.

(Adjourned for a short time)

THE CHAIR: Mr Mackintosh?

MR MACKINTOSH: Well, we have two requests from the room, both of which I'm minded to accept. I also want to show the professor the page from the M&E clarification log, which I couldn't find when he raised it this morning.

THE CHAIR: Good afternoon, Professor. A few more questions. Mr Mackintosh?

MR MACKINTOSH: Thank you, my Lord. So the first thing I want to do, Professor, is to go back to the document that I couldn't find this morning, which is bundle 17, page 824. I wonder if that can be put on the screen. It's about the M&E clarification log with the "agreed." Is this the document that you-- I'm going to say for some reason the words "r"-- the "r" and "e" are missing from "agreed," but take it from me that that's "agreed" in the original. Is that the document that you've seen?

A I think so. I'm assuming that's just a snapshot----

Q Just that page is.

A -- of what is a big spreadsheet.

Q Yes, it keeps going back all the way through. Thank you very much. Take that off the screen. I've got two questions for you. The first one relates to the validation. So you explain that-- you appear to be accepting that validation should have been done for the new hospital. Have I got that right?

A I think it was a client requirement and the guidance at that time, yes.

Q Yes. You haven't really explained why was it not done?

A I don't know why it was not done.

Q Did your investigations not find out why it wasn't done?

A There's-- the people who may be able to answer that question are no longer in employment.

Q Are you able to help us about whether there was any attempt to do it before patients moved into the hospital?

A No.

Q The second question involves paragraph 216 from your statement. If we can put page 626 from the bundle on the screen, the bottom half of the page. We discussed this just before the lunch break, and I need to focus on the third sentence in your answer, the one that goes, "The deliberate actions of others to systematically underline the efforts of those charged with manning these complex issues." You see that there?

A Yes.

Q Yes. I need to ask you three questions to which I'm looking for a yes or no answer.

A Okay.

Q Are amongst those others Dr Peters? Yes or no?

A No.

Q Are amongst those others Dr Redding? Yes or no?

A No.

Q Are amongst those others Dr Inkster? Yes or no?

A No.

Q Thank you very much. Well, I have no further questions to ask of the professor.

THE CHAIR: Thank you, Professor. These are the questions that you have been asked to answer. Thank you for your attendance today. Thank you also for the preparation behind that in answering the questionnaire which allowed the witness statement to be put together. So, thank you for both these pieces of work, but you're now free to go. Thank you.

A Thank you, my Lord.

(<u>The witness withdrew</u>)

MR MACKINTOSH: Thank you. Well,

my Lord, allowing a moment to change the water and glasses for the witness, I'm proposing that we move swiftly on to Dr Cruickshank.

THE CHAIR: Right. Well, we can maybe just do that immediately and-- but you're otherwise ready to go on?

MR MACKINTOSH: Absolutely. (After a pause) So if we could have Dr Cruickshank.

UNKNOWN SPEAKER: Yes, (inaudible).

(The witness entered the room)

THE CHAIR: Please sit down, Dr Cruickshank----

THE WITNESS: Thank you.

THE CHAIR: -- and good afternoon.

THE WITNESS: Good afternoon.

THE CHAIR: Now, as you appreciate, you're about to be asked questions by Mr Mackintosh, who is sitting opposite, but first, I understand you're willing to affirm.

THE WITNESS: That's correct.

Dr ANNE CRUICKSHANK

Affirmed

THE CHAIR: Thank you very much, Dr Cruickshank. Now, I don't know how long your evidence will take. I don't anticipate it will take us the whole afternoon, but if at any stage you want to take a break, we can do that. Now, Mr. Mackintosh.

MR MACKINTOSH: Thank you.

Questioned by Mr MACKINTOSH

MR MACKINTOSH: Dr Cruickshank, I wonder if I can take your full name and your occupation?

A My full name is Anne McDonald Cruickshank. That's my maiden name. My married name is McTaggart, but I practise under Cruickshank, and I am a retired consultant biochemist.

Q Thank you, and when did you retire?

A 2019.

Q Did you produce a written statement for the Inquiry?

A I did.

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

A I am.

Q Thank you. Your final job was as a consultant clinical biochemist, but were you also at one point interim clinical director for infection control doctors?

A Correct.

Q Would that have been from

November 2015 to May 2016?

A Correct.

Q Right. I want to just get some context in my mind about 2015, and I don't understand who the senior part of the Infection Prevention and Control team was at NHS Greater Glasgow in the summer of 2015. Who was the infection control manager?

A A chap called Tom Walsh.

Q Who was the lead ICD?

A Professor Craig Williams.

Q Would he have been a full-time on that or would he also have had microbiology sessions?

A I think he was roughly half and half: half microbiology and half infection control.

Q Who was the senior or lead infection control nurse?

Q Sandra McNamee.

Q McNamee, who later became Sandra Devine.

A I'm not sure to be honest, no.

Q Right, okay. Who was the South Sector ICD?

A Christine Peters.

Q How many sessions would she have had for infection control?

A I think it was about a couple.

Q Then who would have been-- was the regional ICD?

A Teresa Inkster.

Q How many sessions would she have had?

A I think probably the same.

Q Yes, and would there have been a couple of other ICDs as well (inaudible)?

A Yes, most of the-- all the different sectors would have had a similar arrangement, so I think there were maybe five or six in total, all of whom would have had a couple of sessions in their job plans for infection control.

Q Am I right understanding that, at that point, the microbiology parts of these doctor's sessions would have been managed through the microbiology laboratory's management system and the infection control bit through Mr Walsh and the Infection Prevention and Control team?

A Not quite. The microbiology side of it was definitely managed through the microbiology team. I think the infection control component-- it wasn't really clear how that was managed.

Q Right, so if you were a sector ICD, you did answer to Professor Williams, but beyond that, it's a bit unclear?

A I would say so.

Q Right. I want to look at your answer to question 30 to your statement on page 639, which is the longest answer you've given----

A Yes.

Q -- and you described the complexity of the team. I want to look at the middle of the document. So there's a section in the middle where you describe the lead ICD's management style, and then it begins, "The situation was exacerbated..." It's about----

A Correct, yes.

Q What you seem to be describing:

> "The situation was exacerbated by the opening of the new hospitals, reallocation of ICD responsibilities and formation of new local infection control teams. The direct reporting line between the SMT and the Board Medical Director effectively marginalised input from ICDs."

Why do you say that?

A Because the senior management team of infection control had a direct route into the medical director. That was the way the system was set up, I understand, as a result of guidance or instruction from the Scottish Health Department.

Q Right.

A But because there weren't good relations between the lead infection control doctor, who was part of that senior management team, and microbiology, who were managing the infection control doctors, it was actually quite difficult for the infection control doctors to get any of their views escalated up the chain.

Q So they couldn't escalate things up the chain?

A Well, no, I think if the senior management team in infection control didn't agree with what their views were, then it was difficult to see how they could.

Q What's wrong with the idea that if senior management and infection control doesn't agree-- Is that not appropriate that it stops somewhere?

A Well, my understanding was always that for good management you had to be aware of what differing views were, and I also think that part of the issue was that-- again, I'm getting this second hand from the doctors who had brought their concerns to me, but there wasn't really any chance for them to properly air their views. Things were just shut down.

Q So this was their views expressed to you?

A Exactly, yes.

Q Right, and you've then gone on to say, "I was contacted by both the Board medical director and lead director for acute medical services…" Now, at this point, would they have been Dr Armstrong and Dr Stewart?

A Correct.

Q Right, "… to relay complaints and concerns they had received about Dr Peters." What, in very broad terms so that we could just place it in time because we've heard various stories, might those complaints have been about?

A The two that I can remember, one was related-- I can't really remember much about the details, but one was related to an outbreak of a virus in intensive care.

Q Possibly an RSV virus?

A Yes.

Q Right.

A And there was a debate about whether masks should be worn. This was pre-COVID, so actually it was quite unusual for masks to be worn in a hospital.

Q Right.

A So it was quite a big deal to use masks and I think there was a slight-- I won't say disagreement, but I think there was a frustration on behalf of the-- of Dr Peters that what she thought had to go up and down the sort of nursing hierarchy before anything that she wanted to get done in terms of infection control and prevention.

Q Right, and what was the other issue that was----?

A The other one was-- I think it was to do with orthopaedic infections.

Q Right.

A She was doing an audit of orthopaedic infection.

Q Then you say, "… which I sought independent input which did not support the complaints." In very rough terms, what sort of independent input did you seek?

A The first incident, or the one we talked about first, I remember I contacted a junior doctor who had been at the meeting with some of the infection control nurses and Dr Peters to see what her take on that meeting had been----

Q Right.

A -- given that my understanding was that the nurses hadn't been happy with that meeting.

Q Right, and what were the other sources (inaudible)?

A And the other one was my general manager, Isobel Neil, who was general manager for the labs. She had sought feedback from a lady called Susan Groom, who I think was the manager of the surgical side of things in terms of Christine Peters and orthopaedics input, and she got very positive feedback back.

Q Then you're reporting, at the next sentence, that:

> "At local ICD-level, ICs were frustrated about the clinical advice that was submitted to the infection

control nursing hierarchy for approval."

Which I think you've just said a moment----

A Yes, which was one of the issues with the RSV.

Q Right. Was there any formal grievance process undertaken at that point against Dr Peters?

A No.

Q No?

A Not that I was aware of, no.

Q No, but there was an informal feedback, you looked into it, you found no support?

A Correct.

Q You're nodding. There's a person typing a transcript somewhere and it----

A Sorry, yes. Correct.

Q Now, if we go to your answer on the next page to question 32, we asked you about staffing levels, and you begin to touch on an issue about "on call." I wonder if you can expand on that. Was there any issue that arose out of the on call arrangements?

A Nothing specific that I can think of. It just was that there was no real infection control cover, in a sense, out of hours. I think I'm right in saying that the infection control nurses worked, I think, nine to five, Monday to Friday, or sort of office hours, and all the sort of infection control things that developed out of hours had to be managed by the consultant microbiologist on call, some of whom had more infection control experience than others.

Q Right, so that's problematic in the sense they didn't know----

A Well, yes, it's difficult because a lot of it's quite specialised.

Q Right, okay. Now, I just wondered-- I mean, you're a biochemist, so this may be the wrong question to ask you----

A Yes.

Q -- but there's been some discussion about where-- is there a line to be drawn between the work of a microbiologist and an infection control doctor and the Infection Prevention and Control team and when you do certain things, and I wanted to put one thing to you: if a microbiologist is on call and they come across something which they think might be an Infection Prevention and Control issue, what should they be doing about it? Obviously, do something about it over the weekend or at night, but when it gets to the next day, should they keep pressing on with it or pass it on or drop it? What's the correct approach for them to take?

A Well, I don't know if it's the correct one, but, put it this way, if it was me, I would be speaking to the infection

control doctor, whichever-- whoever was the relative----

Q Yes.

A -- or relevant infection control doctor because they definitely have an expertise that----

Q If you have an infection control doctor-- Well, I think that's probably enough of that. I want to move on to the resignation of Dr Inkster and Dr Peters.

A Okay.

Q So, if I understand from your-- was there a meeting-- The date's a little bit unclear. I think you might have made it an annual date in error in this document.

A Oh, did I? Sorry.

Q Was there a meeting on 7 July 2015----

A Yes, that's----

Q -- between you, Dr Inkster, Dr Peters and Dr Jones?

A Yes.

Q Or was he Professor Jones?

A No, not Dr Jones on the-- I don't-- Dr Jones wasn't at the meeting. The meeting that I had on 7 July was after Dr Jones had told me that Dr Inkster and Dr Peters wanted to relinquish their infection control responsibilities. So I met with Dr Peters and Dr Inkster and Isobel Neil, who was the general manager for the labs----

Q Right, and that was----

A -- but Dr Jones wasn't at that meeting.

Q (Inaudible), and that was, presumably, because you were clinical director for laboratories at that point?

A Yes.

Q Right, and they-- did they explain to you what their concerns were?

A Yes.

Q Did they eventually put those concerns into writing?

A They did. I saw Teresa's-- Dr Inkster's submission within a few days. I think Dr Peters had also put hers in writing to Brian Jones, Dr Jones, but I didn't actually see what she'd written until I was made the interim director for infection control doctors, but I sort of had talked about it with her anyway, so I think I had a fairly clear idea of what her problems were or what her issues were.

Q We put them in your document list. Have you had an opportunity to look at those two letters before the hearing?

A Yes.

Q I don't want to look at them because it takes time and they're long letters. I wanted to ask a question, and if you need to look at them to answer it, tell me, and we'll do that.

A Okay.

Q But what would you characterise them largely being about, the two letters? Is it cultural

communications issues in the team or patient safety?

A No, patient safety.

Q Patient safety, and why-- you seem quite emphatic about that. Why do you think these letters are about patient safety?

A Because my impression from the meeting I had was it was all to do with patient safety in relation to the fact that they felt that perhaps the procedures they thought should have been followed hadn't been followed and therefore the systems that were in place might compromise patient safety. Then the gist of Teresa Inkster's letter was very much outlining her specific clinical concerns.

Q What was done, as far as you know – if you don't know, please say – after they attempted, I think they called it resignation. You call it-- what did----

A Say that again. Oh, she wanted to-- yes. You can't-- they didn't resign as consultants. What they wanted to do was relinquish their infection control----

Q Relinquish, yes. They've called it resign----

A -- but it wasn't really.

Q -- you've called it relinquish, Mr Walsh calls it demit.

A Fair enough.

Q Well, whatever it is, whenever they did, those three things----

A Yes.

Q -- what was done, as far as you know, to investigate the patient safety aspects of their letters?

A I honestly don't know what happened from that side of it. I only know that Dr Stewart, after Dr Jones and I had raised the concerns with Dr Stewart----

Q Yes.

A -- Dr Stewart initiated a review, but because I was not involved really in the infection control side of things and, at that stage, I was still just clinical director for labs, I wasn't aware of what was happening in terms of dealing with or addressing the issues that had been raised by Drs Inkster and Peters.

Q Well, we've had some evidence from Dr Stewart about what he did, so that-- we can use that. He eventually produces a report. Did you see his report?

A I saw the report after-- I think I met with him the day after or a couple of days after I was formally appointed interim clinical director for infection control, and at that stage, he handed me a hard copy of the actual report.

Q Right. Well, let's go back to July because I'd like to go to page 635.

A That was November that I saw the actual report.

Q Indeed, yes. I'd like to go back to 635 of the bundle, which is the answer

to question 23. At the bottom of this page, the line that begins, "… of service of microbiology," you say:

> "I met with Dr David Stewart, lead director of Acute Medical Services, on 10 July to highlight these concerns and their request to relinquish infection control responsibilities. Dr Stewart indicated he would set up a review of infection control."

Now, in his version of events, he doesn't remember your meeting, to be fair to him. But his version of events is that he took the issues that had been raised to the medical director and was told to set up a review of cultural issues but not patient safety issues, and I wondered if at the time of that meeting he was indicating the scope of the review of infection control.

A I can't honestly remember the details of that meeting, but I'd be very-- Because Brian Jones and I were both there. Dr Jones and I were-- both met with him.

Q Yes.

A I'm pretty sure that, at that stage, most of what we were seeing would've been relating to the concerns about such things as ventilation because I know that, at that meeting, I still hadn't seen Christine Peter's submission and I hadn't seen Teresa Inkster's either. So basically, I was parroting what I'd been told----

Q By them?

A By them, and their concern was primarily issues with ventilation, etc., not management culture, although that was obviously an issue, but that wasn't what drove them to resign.

Q But you don't remember whether he told you that the review would----

A No, I honestly don't know.

Q Okay. Now, there's a letter that was sent to a large number of microbiologists and infectious control doctors and infectious control managers and you, amongst others, on 13 October 2015----

A Yes, mm-hmm.

Q -- which is bundle 14, volume 1, document 45, page 472. Is this letter the feedback you've mentioned in your statement in your answer to question 41? If I need to show you that, I will. It's on page-- If we go to 642 on the statement bundle, to the foot of the page----

A Let me just----

Q Oops, it'll come back. Bottom of the page.

A Bottom of the page----

Q There we are, so we have, "What was the response of senior management to her resignation?" You've

got, “David Stewart instigated a review of infection control, which he fed back on the 30th of"-- Now, I'm just checking that that email we just looked at----

A Yes, that email was what I was referring to in answer 41.

Q Yes, and so what I'm wondering is that email is just about communications, cultural management issues.

A Exactly.

Q Is that something you noted at the time?

A Yes, but again, I didn't know that there wasn't-- I mean, for all I knew, there might've have been other things going on that I didn't know about, but that was specifically something-- You know, that might just have been one side of the coin, if you like.

Q Of course.

A But because I felt it didn't actually address some of the actual management issues, if we were just talking about the management side of things----

Q Yes.

Q -- I had contacted him and said that if we're going to do this, we need to have some input from the line management for infection control, as well as----

Q You pointed upwards, so you’re sort of pointing higher up the structure.

A Yes.

Q What input was there? Was there any input from higher up?

A Well, what happened after that was I was asked to-- I can't remember the details in the meetings, but I certainly spoke with Dr Armstrong. I think there were chats with my director of labs, with just the general manager, and then it turned out that-- I can't even remember who actually asked me, but somebody asked me to become the interim director for infection control, primarily to improve the interface between microbiology and infection control.

Q Is this a situation of someone has said, "We've got a problem here," and they go, "Well, fine, you can fix it," sort of thing?

A Well, try and help.

Q Yes. What were the sort of remit you were given?

A I wasn't really given much remit, other than being told that I was being appointed for six months to try and improve relationships, interface between microbiology and infection control.

Q Where did you sit in the organisational organigram, if there was one?

A Well, actually, there was one. There was one sent round when I was appointed, and I was-- Craig Williams, as

lead infection control doctor, was professionally accountable to me, and I was professionally accountable to Jennifer Armstrong, and he was managerially accountable to Tom Walsh, who was managerially accountable to Dr Armstrong.

Q Then Dr Peters and Dr Inkster, who weren't allowed to relinquish their sessions, were----

A Well, interestingly the ICDs weren't in that----

Q Organigram.

A -- organigram.

Q So, although you got into this because you're dealing with, in simple terms, the complaints of some sector ICDs, you end up being placed in the organisational structure between Professor Williams and Dr Armstrong?

A Sort of, yes. Uh-huh.

Q Yes, and did that involve much passing of messages from him to her and up and down the tree, or did they cut past you occasionally?

A One of the first things that happened after I was appointed is that I had quite a few meetings with Professor Williams, with Professor Williams and Tom Walsh and Isobel Neil and Dr Jones, microbiology and labs, meetings with the infection control doctors. I didn't tend to get in touch with Jennifer, Dr Armstrong, because I didn't think there was much that I needed her to do at that stage.

Q So what were you doing? I mean, it's a terrible question----

A I was trying to-- Probably the key issue was the lack of clarity about the roles and responsibilities of infection control doctors, how they fitted into their local infection control teams, how much autonomy they had.

So we were trying to instigate systems whereby there would be better communication with the lead infection control doctor and the other infection control doctors, where the head of microbiology would sit down with the lead infection control doctor, work out issues about cover, you know, which doctors might need more infection control sessions, so basically just to try to get the system that was in place to work better in terms of management----

Q From your point of view, do you think you succeeded?

A The short answer is I don't really know because at the start of-- I got appointed in mid-November, and it wasn't long before it was Christmas. Everybody was off on holiday and then, by the end of January, very early February, I heard that Professor Williams had taken a job down in the south of England somewhere.

Q Right.

A So the question then became who would replace him.

Q Who did replace him?

A Dr Inkster.

Q Did that in any way change the dynamic in a way that's relevant to your post?

A Well, I was very much hoping so because Dr Inkster, I thought, would be a very good lead infection control doctor because she seemed to get on well with other infection control doctors, and she was certainly very well abreast of all the infection control issues that were ongoing in terms of the patient safety side of it, and she seemed to be able to work well with other people.

Q What were the issues that were alive in the Queen Elizabeth at that point? Just the Queen Elizabeth we're focusing on.

A Well, I knew that – at the stage when I was appointed the interim CD for doctors, ICDs – Dr Inkster, I knew, was unhappy that she hadn't really been kept abreast of what changes were being made to the adult bone marrow transplant unit, and then she was sort of landed with dealing with it.

So the main issue that I was aware of was what improvements were being made to the bone marrow transplant unit because there was a lot of pressure to move patients back from Gartnavel to the Queen Elizabeth.

Q Right.

A So that was the primary issue, but I know that there were also concerns about the children's specialised ventilation----

Q Ward 2A?

A Sorry?

Q Ward 2A?

A I honestly can't even remember which ward it was, but it was certainly where they were doing transplants and things like that.

Q Right, and then if we go back to Dr Stewart's report, which you say you received in the November, which is also in bundle 14, volume 1. It's document 41, page 464. It's called a summary of infection control-- "Informal Review of Infection Control Issues," and you say that it's given to you by Dr Stewart in a hard copy.

A Yes.

Q Now, obviously you're not involved in producing this. There is a section that slightly intrigues us, confuses us, and we'd like to understand it more. It's paragraph 6, the general findings. The reason it's interesting is because it seems to-- Well, I wonder what it says, so if you look at paragraph 6, let's go sentence by sentence.

A Yes.

Q What personal knowledge do you have about whether each of these sentences is true, whether there's some

validity in them or whether you've had to deal with it as an issue? So the first sentence is:

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

Is that something that you were involved in?

A Well I wasn't involved in compiling this report, but I would agree that my impression, from what I've seen and what discussions I'd had, that that first sentence is true.

Q Then the next sentence forms into two parts:

> "On the one hand there are reports from ICDs of having their professional authority undermined by the overturning of decisions by the IC management team."

Is that something that had been reported to you at the time?

A Not at that stage, no.

Q No, so when you mentioned the----

A RSV.

Q -- the RSV thing----

A That was after.

Q That's after that?

A Mm.

Q So you'd not heard these issues at the time this report's produced? No, okay. Then:

> "Whilst on the other hand, there are reports of ICDs not taking decisions when given authorities do so."

Is that something you'd heard at the time?

A No.

Q No, and then:

> "Whilst it is clear that concerns for patient safety is the primary motivator for ICDs in arriving at decisions, there appears on occasions to be a lack of appreciation by some ICDs of the need to risk assess decisions from an organisational or political perspective."

I'll come to what the last three words mean, but if we sort of leave them as a sort of amalgam for the moment, is that sort of topic, a lack of appreciation by some ICDs of risk assessment decisions in a particular way, something that was being discussed in the time you raised the issues with Dr Stewart for this review or when it was produced?

A I don't think so. I mean, I don't remember that. It certainly wasn't raised from my side.

Q All right.

A I----

Q Can you help us what the last three words mean?

A Well, I actually know because I remember the hard copy I had-- after I'd read it, I actually underlined "political perspective" and put two question marks because I'm not sure what that means, and I'm not sure that it's the job of the ICDs to think about a political perspective.

Q You were obviously in a room with Dr Stewart with this in your hand. You didn't have the opportunity to ask him?

A Yes, but I didn't have a chance to-- I mean, like----

Q No, he doesn't remember either, so that's right.

A I mean, he gave me it, but I didn't sit and read it while I was in the room with him.

Q Right, okay.

A That was after it.

Q Now, we've had some evidence from Dr Peters and Dr Inkster – we'll take that off the screen – about their reaction to his email in October and their desire to raise patient safety issues through the organisation up to and including Christmas. Did you have any involvement in responding to their complaints or-- You're not on the email threads, so I'm wondering if you had any----

A When it was primarily related to patient safety issues, I was occasionally copied into things, but that literally wasn't what I was there for.

Q Because you were there for the organisational----

A Yes.

Q Right.

A So I tended-- I mean, I was aware sometimes of things going on and I did attend a couple of meetings to do with the bone marrow transplant unit after I was made interim CD, but that was primarily to support Dr Inkster, just----

Q This would have been the latter part of that year?

A Yes, that would've been actually into 2016 as well. Probably December 2015 and into early 2016.

Q At the time, did she explain to you why she wanted you to be there?

A I can't honestly remember. I think it was just I was keen just to see what the lie of the land was, what the sort of cultures and attitudes were, and I think Teresa was quite keen to have somebody there. But, to be fair, the two meetings I was at, they were both held in a very cooperative, professional way. There was----

Q Right, well, that was going to be my next question, so you've answered that.

A Mm-hmm.

Q Now, if we go back to page 641, question 35, we asked you a rather broad question:

> "Did you have any concerns about the management style within GGC, and if so, what were they?"

You said:

> "I had no concerns about the overall management style within GGC. My concerns were primarily about management structure and working relations with infection control and microbiology."

In essence, what were your concerns?

A The fact that it wasn't working very well because there wasn't enough communication between infection control and microbiology.

Q This was, effectively, what you were working on in the time you were in post?

A Yes, because that was one of the reasons that the infection control doctors weren't happy because----

Q Why do you think that your role wasn't continued beyond May 2016?

A Well, I think the feeling was, which I shared, that when Dr Inkster took over, that there would be better relationships between microbiology and the senior management team in infection control.

Q From your perspective, were there?

A Well, I think there were, but as I say, I wasn't involved for that much longer. So, I do know, for instance, Christine Peters, Dr Peters, was made the lead clinician for microbiology, I think, the following year. So, to me, that must have meant that, you know, professionally, she was thought of well and was well regarded----

Q That was in 2017 or 2016?

A I can't remember if it was '16 or '17. It might even have been '17, yes.

Q Yes.

A I knew Teresa had been fairly optimistic when they'd had meetings early-- maybe March I think, March 2016, about what steps needed to be taken to make the adult bone marrow transplant unit fit for patients. So I wasn't aware of-- I mean, I thought things were actually progressing reasonably okay by the time I demitted office.

Q So by the time you'd demitted office-- I mean, this is a slightly unfair question because I'm not giving you notice, but since you were there and you were retiring at that point in 2017, (inaudible) at that point----

A Retiring from----?

Q Greater Glasgow.

A No, no, I was 2019.

Q Oh, 2019? Well, even better.

At the point you retired, what was your understanding of the-- We've had lots of evidence; I want to focus on one specific answer. I'm not going to ask you about Ward 2A, I'm not going to ask you about Ward 4B, all the different wards. I'm not going to ask you about the water system because you weren't involved.

There's one question which I'm intrigued to see what a clinician in the building thinks about, thought about something at the time. By the time you retired, there'd been public stories in the press and everything about the hospital.

A Yes.

Q So if we just step back a year into early 2018, if I'd asked you in early 2018, "What's the ventilation like in this hospital, in the general wards?" how would you have replied?

A I honestly wouldn't have known.

Q The next, final question is, you do a little bit about cystic fibrosis in your statement on page 632. It's a very short section and I just wanted to understand it because it possibly seems important. This is after you cease to be interim director.

A Yes.

Q It's on page 632, the bottom half, paragraph 11. Could it be that you're talking-- this relates to an SBAR as an output from this meeting?

A Yes.

Q This is bundle 4, document 14, page 60.

A Christine-- yes, I'm sure Christine definitely sent me that. I can't really remember. I've seen it since, but I can't remember exactly why, but Christine definitely sent me this, probably because although this was about infection control, it also touched microbiology and I was still the clinical director for labs, so that was-- microbiology was under my remit.

I can't honestly remember if Dr Jones had asked me to get involved or not, but whatever, I received this. Clearly Christine was not happy about certain issues in terms of epidemiological data relating to cystic fibrosis patients perhaps not being shared and, as a result of that, I met with Teresa Inkster and we went through the evidence, most of which I was relying on her professional judgment.

Q Yes.

A I remember, because I've still got it, I sent an email to Brian Jones and to somebody called Catherine Neilson(?), who I can't even remember who she was, but I suspect she had something to do with the cystic fibrosis service, just outlining what our discussions had been and what actions were going to be taken both by microbiology and infection control. As far as I'm aware, I mean,

Teresa had-- Dr Inkster had already more or less actioned everything anyway.

Q I just wanted to look back at page 632 of the statement bundle and ask you what the final sentence means because I don't really understand it.

A Oh, right, okay. Because, as a clinical director, one of my key things is duty of candour, so if you felt that something had gone wrong, a mistake had been made in such a way that a patient had suffered as a result, there was a duty of candour to speak to. I was very keen to establish whether or not that was an issue in this case.

Dr Inkster's view was that although some of the data hadn't been shared, it was more a sort of epidemiological thing, and that you certainly couldn't say with any confidence at all that any individual patients had suffered as a result.

Q So what you're saying there is that Dr Inkster has advised there was doubt about whether there had been a clinical impact.

A Yes, so for me, that meant that there wasn't an issue in terms of disclosure under duty of candour, if that makes sense.

Q Thank you. It does now, thank you. My Lord, I think that's all the questions I have for Dr Cruickshank. Maybe we want to take a few minutes to see whether there's any questions in the room.

THE CHAIR: Right. Dr Cruickshank, what I need to check is that there are no further questions----

A Sure.

THE CHAIR: -- from anyone else in the room, so what I'll ask is that you return to the witness room and we should be able to give you a yes or a no on that in about 10 minutes.

A Yes, that's fine. No problem. Thank you.

(Short break)

THE CHAIR: Mr Mackintosh?

MR MACKINTOSH: I have nothing from within the room.

THE CHAIR: Right. Well, will we ask Dr Cruickshank to come back?

(The witness re-entered the room)

THE CHAIR: As it turns out, there are no more questions----

A Excellent.

THE CHAIR: -- Dr Cruickshank, but I'm keen to ask you back because I want to take the opportunity of saying thank you for your attendance today and also thank you for the preparation of your statement. Both formed part of the evidence of the Inquiry and I'm grateful

for that, but you're now free to go.

A Thank you. Thank you.

(The witness withdrew)

THE CHAIR: Now, we'll be resuming on Tuesday?

MR MACKINTOSH: Tuesday. In the morning we have Dr de Caestecker, and in the afternoon Mr Wafer.

THE CHAIR: All right.

MR MACKINTOSH: In the morning, it's me. In the afternoon, it's Mr Maciver.

THE CHAIR: All right. Well, can I wish everyone a good afternoon and a good weekend, and we'll see each other on Tuesday.

(Session ends)

15:02