Friday, 22 June 2012

(9.30 am)

THE CHAIRMAN: Good morning. Just before we start, Dr Mulholland who gave evidence yesterday afternoon, left a note for me this morning which has been circulated and it has been paginated as witness statement 243/2, page 7. It is a correction to one point which he gave in his evidence yesterday. He says that, on reflection, his clinical directorate accountability was to Mr McKee, but his reporting role was to the medical director, Dr Ian Carson, as per the diagram which had been provided. Then he clarifies that the organisation known as NCAS is the National Clinical Assessment Service and is now under the umbrella of the Patient Safety Agency. So I'm grateful to Dr Mulholland for that correction.

Is there any point arising from it, or is everybody content? Thank you.

Mr Lavery, I had left an issue with you and Mr Simpson yesterday afternoon about the DLS letter about the paediatric directorate clinical audit meetings. Do you have a response?

MR LAVERY: We are still waiting for firm instructions from the Trust in relation to that. We hope to have a definite answer to that, if not by the morning break,

then certainly by lunchtime. The position, Mr Chairman, is that it looks as if the information that formed the basis of that letter came from people who are currently on the Clinical Audit Committee. The difficulty of, course, is that we don't have the minutes of that meeting and really there's no evidence that we have at the moment to say what actually occurred at those meetings and whether or not this was discussed. We are making further enquiries and we hope to be in a position to tell the inquiry, hopefully, by lunchtime.

THE CHAIRMAN: Thank you very much.

Ms Anyadike-Danes?

MS ANYADIKE-DANES: I wonder if I might please call Professor Savage.

PROFESSOR MAURICE SAVAGE (called)

Questions from MS ANYADIKE-DANES

MS ANYADIKE-DANES: Good morning, professor.

A. Good morning.

Q. Professor, there are a number of issues that I would seek your assistance with today. Most of them are to do with organisational matters, protocols and so forth, and basically how institutions worked. But there's another very important issue that I would like to start off with, which is actually what happened from the moment you notified the coroner of Adam's death up until

we have the inquest and we look at the aftermath. Because it is in the light of that that we may perhaps be able to reflect on and see how these organisations actually work in terms of the institutions.

So I'm right, aren't I that you're the person who notifies the coroner that Adam has died?

A. Actually, I don't know if I phoned the coroner, but I think you're right.

Q. Let's put up 011-025-125.

THE CHAIRMAN: That is it.

MS ANYADIKE-DANES: Sorry, I beg your pardon. That is the coroner's note of 8 December and you can see from the second sentence:

"Dr Maurice Savage reported the death to me; he said the death was totally unexpected."

So it looks like you're reporting it to the coroner.

A. I think that's right. I wasn't quite sure about that. I think the clinical note that was written for the autopsy was not written by me, but I notified the coroner because I immediately knew that there had to be a coroner's inquest.

Q. So was your hesitation because you weren't sure that you were the first person to notify his death to the coroner?

A. No, I wasn't sure whether you were asking about phoning

the coroner or writing to the coroner.

Q. I understand. It would appear from the note that the coroner has made that there was a bit of a discussion, or at least you were imparting some information, not just simply saying: we have a death we think is going to be a coroner's case. Do you remember providing --

A. I don't know the content of the conversation, but certainly I would have been quite frank with the coroner that there was a child who had gone for a renal transplant, we expected it to proceed successfully and that he had died in theatre or as a result of events in theatre and that therefore I felt it was essential that there was a full coroner's inquest.

Q. Would you have indicated why you had the view that it was a case that ought to be subject to a full coroner's inquest?

A. Well, I knew that any death within 24 hours of surgery or any death that occurred as a result of an anaesthetic event had to be investigated by the coroner. That would be the main basis for my phoning, but of course from my own point of view, I wanted to know what exactly had happened.

Q. And why were you the person contacting him?

A. Well, always with Adam I regarded myself as his doctor

more than anyone else.

Q. I understand. You then provided a letter to, I believe it was Dr Murnaghan. We can pull that up. It's 011-001-001. If we pull the second page of it up next to it, 002. There we are. We see it's on 28 November.

A. Yes.

Q. By 28 November, you had formed a view as to what had led to Adam's cerebral oedema.

A. Yes.

Q. And your view was that he'd had too much low-sodium fluid.

A. Yes.

Q. Why were you producing this statement?

A. Well, in the structure of --

MR FORTUNE: I rise at this stage because my learned friend said that "by 28 November". In fairness to Professor Savage, he ought to be asked in the form of an open question when he formed that view.

MS ANYADIKE-DANES: Because I think he has already given that evidence in his clinical evidence. He already said that he was contacted by Dr O'Connor, it was like a cold hand on his heart, he went to see her, they looked at the medical notes and records and they concluded.

MR FORTUNE: That that was the 27th.

MS ANYADIKE-DANES: That was the 27th, yes.

A. Immediately Adam was in the paediatric intensive care unit, Dr O'Connor and I formed the view that there was a major problem with the fluid he had received in theatre. Adam was clearly bloated, his mother pointed that out to me and I already saw it. When we looked at the balance of fluids in theatre it was obvious to us that he had certainly had excessive fluid and had had a lot of fifth normal saline. I was then asked by Dr Murnaghan to produce this letter because I would be required to produce a statement for the coroner. He asked me to produce a statement that was strictly factual.

Q. Sorry, can I just interrupt at that stage? Why was he asking you to produce a statement initially as opposed to the clinicians who had actually been in the operating theatre and had been treating Adam during the course of the surgery?

A. Well, I wouldn't have known that he hadn't asked anyone else. I assume that he did ask the others.

Q. Then what did he ask of you specifically?

A. He asked me to produce a report of my own involvement, a factual report of my own involvement. So he didn't ask me to produce a report that had any conclusion in terms of what I thought. He wanted a factual report and my understanding, legally, was that I should only write

a report that stated facts.
Q. Yes. You copied that report to Dr Taylor.
A. Well ...
Q. You certainly seem to have intended it to get to him because you've cc'd it.
A. I think perhaps he copied it to Dr Taylor and you can see that there are alterations to that report, which I believe were made in Dr Murnaghan's office.
Q. Sorry, are you saying that Dr Murnaghan copied this to Dr Taylor?
A. I can't remember the detail, but I produced it via Dr Murnaghan and --
Q. But how could Dr Murnaghan be putting the "cc" down there to Dr Taylor?
A. Perhaps I'm thinking about the final report, but you can see in this report there are things that are stroked out.
Q. Yes, and we have a version where there are not. But in any event, what I'm trying to clarify with you is you actually cc'd this to both Dr Murnaghan -- because it is written openly "To whom it may concern" --
A. Yes.
Q. -- and you have cc'd to Dr Taylor.
A. Yes.
Q. So you intended Dr Taylor to receive this.

A. Yes. If I can clarify: what I'm saying is that I'm not sure whether the copy that went to Dr Taylor was the corrected version or this draft version.
Q. Yes, I understand that and if anything turns on it, we can take you --
A. I don't think anything does.
Q. So you have said that you were being invited or asked to provide a simply factual account.
A. Yes.
Q. And in fact, if we look at it, you have done that. If you look at, for example, the third paragraph on that first page, you have said what his serum sodium levels were, his haemoglobin, so on. You have talked about your contact with the theatre. Then you talk about:

"Post-operatively, Adam failed too breathe spontaneously."

That first paragraph on the second page, that is a fact, but you weren't there to view that. That would have been Dr O'Connor, if there was a nephrologist there at that time.
A. You mean the statement that says "post-operatively --
Q. And going on to "on examination". That's something that's been reported to you:

"Post-operatively Adam failed to breathe spontaneously."

You weren't there when that happened.
A. No, but I obviously knew when he was in the intensive care unit that he required to be ventilated, so he wasn't --
Q. I understand that, Professor Savage. What I'm putting to you is that this document is not simply a recital of the things of which you have first-hand and direct knowledge because you weren't there post-operatively when Adam failed to breathe spontaneously. There's no issue; I'm just making sure we understand it --
THE CHAIRMAN: If there's no issue, we don't need to go into it.
MS ANYADIKE-DANES: Because of what I am then going to go on to say.
THE CHAIRMAN: I thought there was no issue.
MS ANYADIKE-DANES: There were some other aspects that this report doesn't include. You, at that stage, had formed a view as to -- in fact, you didn't form a view, you'd seen the medical notes and records to say the amount of fluid that Adam had received.
A. Yes.
Q. That's not included.
A. No.
Q. Or the type of it.
A. No.

Q. Nor the rate.
A. No.
Q. Nor the CVP measurements.
A. No.
Q. Nor anything to do with his serum sodium levels post-operatively.
A. No.
Q. You knew that there was a 119 millimoles taken about 1.30.
A. Yes.
Q. But that's not included in here.
A. No.
Q. Why isn't that information in here?
A. I think because the indication that had been given to me was that the events that happened in theatre would be the subject of other people's statements and, as you say, I was not directly involved. I think it is splitting hairs to say that I was not the person who noticed that he failed to breathe spontaneously isn't particularly relevant because I knew he couldn't breathe spontaneously; he was on a ventilator in the intensive care unit. I accept that it is correct that I could have written that he had a low serum sodium.
Q. Yes. You could have when you said that post-operatively, when you gave that information and

when you gave the information about the chest X-ray, because that is something also that happens. He has a chest X-ray, a CT scan and he has his serum sodium levels. So they're all part of what happens in the immediate aftermath to his surgery. So you could have included that in that section.

A. I could have. As I said, so --

Q. Yes. And if you had done that, that would have given us a slightly broader picture as to what was happening, even though you wouldn't necessarily have to include your conclusions about that. It would just be factual.

A. Correct.

Q. Yes. Then there is a similar sort of document that comes from Dr Taylor, dated 30 November. 059-067-155. I think we can pull up the second page to that, which is 156. There we are. That is cc'd to you. Did you receive it?

A. I don't remember reading it.

Q. Sorry?

A. I don't remember reading it, but if it was copied to me, I would have read it, yes.

Q. And if you would have read it -- then if we start with the third paragraph on the first page, second sentence, after it says "crystalloid fluids" and so forth. Then it talks about three bags of that quantity of

No.18 Solution --

A. Yes.

Q. -- and then that quantity of Hartmann's solution, all that being given over four hours. But that doesn't actually reflect the concern that you had. What concerned you was the amount and the rate of the low-sodium fluid; that's correct, isn't it?

A. That is correct.

Q. That doesn't really capture what the problem was if one looks at the second page. And you can see in the second paragraph:

"Pulse rate, CVP and arterial blood pressure gave me no cause for concern throughout the case and a blood gas at 9.30 confirmed good oxygenation."

Did you see the blood gas report of 123 that was taken at 9.32?

A. No, I don't think I'd seen it at that time. Obviously, having read so much since, it's difficult to know, but what I did know was that there was a sodium of 119 in the intensive care unit.

Q. Yes. I think Dr Armour also believes that she didn't see that printout, but she did see the lab result of 119. But this is indicating about the CVP giving no cause for concern. Then it goes on to say:

"In view of the CVP, heart rate and BP, I did not

consider the fluids to be either excessive or restrictive. Indeed, I regard the fluids to be appropriate and discussed this with other doctors present in the theatre."

Pausing there, you had formed the view that there might be a concern in relation to the level of the CVP?

A. I think at this stage my concern was mainly to do with the fluids.

Q. Well, then the statement then continues on to say:

"I did not consider the fluid to be either excessive or restrictive."

Well, you certainly wouldn't have agreed with that.

A. I did not agree with that.

Q. Exactly. And if he had referred to a blood gas at 9.30, you'd looked at the immediate medical notes and records, you wouldn't have seen that, would you? Did you ask where that was?

A. I don't think so.

Q. And then the next sentence:

"Indeed, I regarded the fluids to be appropriate."

Well, you wouldn't have regarded them to be appropriate.

A. No.

Q. And he says that he discussed that with other doctors present in the theatre. Did that make you feel that

maybe I ought to see what they had to say because I didn't regard them as appropriate?

A. I knew that I had discussed this situation with Dr Taylor immediately before speaking to Debra Strain. I know that I had discussed with him the fact that I thought that Adam had had excessive fluids at that stage. I know that I had discussed with Dr Taylor that Adam looked bloated and it would appear to me that he had had excessive amounts of fluid and that that was the cause of his cerebral oedema, not breathing, his fixed, dilated pupils and, in that discussion, I said that I believed that I then had to go and explain that to Debra Strain and asked him to accompany me.

Q. Did you agree what you were going to say to Adam's mother?

A. I told him I was going to tell Adam's mother that there had been a major problem with fluids during theatre and I believed that was the cause of his current condition and that I thought the situation was probably irrecoverable.

Q. Because in fact, if one looks at the documents surrounding what Adam's mother was told, there was a bit of a mixed message. Because if that was your message, that's a very clear and simple message.

A. Yes.

Q. But Dr Taylor's message is not quite that: it's a one-in-a-million thing and we don't quite know what happened.
A. That's right.
Q. And how did you feel that a mother in those circumstances ought to be left? On that account, she has two completely different things being told to her by those who were directly connected with the care of her child.
MR FORTUNE: Could I invite my learned friend to ask Professor Savage how that conversation proceeded? Because if my learned friend proceeds along that line, everyone will hear how the conversation went.
MS ANYADIKE-DANES: How did that conversation proceed?
A. The conversation with Debbie Strain?
Q. Yes.
A. Well, it was obviously a very painful and distressing conversation, both for her and for me, but much more for Debbie. I think I did all the talking and I've read what Debbie's written since and I've read the note of the counselling note that the nurse who accompanied us wrote because I did not make a detailed note. But I explained to her about the fluid, about the fact that his brain was swollen, about the fact that we needed to try and remove fluid, that we needed to get a CT scan

just to see how serious the situation was and I indicated to her that I was very seriously concerned that the situation was very grave. Throughout that conversation, I do not think that Dr Taylor spoke, to my memory. And indeed the phrase, "This was a one-in-a-million event", didn't register with me at the time. I was trying to communicate with Debbie Strain and I think Dr Taylor was in such a state of shock, shall we say, because of events and because he realised that he had probably lost a patient in theatre, that he did not or was incapable of speaking or chose not to speak and left it to me. I think that is my best recollection of what happened.

I know that you've asked me before why I didn't mention hyponatraemia and I think my judgment was that trying to explain the physiology of the situation to someone who was extremely distressed about their little boy didn't seem like a sensible idea. I realise that most of us here have struggled to quickly grasp the concepts of dilutional hyponatraemia and it did not seem an appropriate time to get into that with Mrs Strain, bearing in mind that I knew she would likely only remember the bad news that I was giving her.

Q. Yes. Well, we'll have it checked, but I think that Adam's mother remembers Dr Taylor telling her it was

a one-in-a-million thing.
A. Oh yes.
Q. So that seems to have been said?
A. It must have been said. It obviously struck Debbie Strain very strongly when he said that.
Q. But you don't remember it?
A. Not specifically.
THE CHAIRMAN: In fact, you remember something different, which is you don't remember Dr Taylor speaking at all --
A. Very much.
THE CHAIRMAN: -- for the reasons that you've said --
A. Yes.
THE CHAIRMAN: -- and without suggesting for one moment that Debra Strain is dishonest --
A. Oh no.
THE CHAIRMAN: She clearly isn't.
A. Debbie Strain clearly remembers that phrase. It stuck in her mind forever.
MS ANYADIKE-DANES: It's just simply that you don't remember it?
A. That's right.
Q. Thank you. So is your position then, or your evidence then, that you don't recall there being a difference between the view or the content of what you were telling Adam's mother and any comment that Dr Taylor might have

made?

A. I don't believe he made any comment to disagree with what I was suggesting or what I told Debbie Strain.

Q. Thank you.

THE CHAIRMAN: Sorry, not just in front of her, but when you were speaking to him beforehand about what you intended to say, you don't remember any disagreement on his part?

A. No. I think he was struggling to work out what had gone wrong, but accepted that he was obviously fluid overloaded. To look at him, you could see he was fluid overloaded.

MS ANYADIKE-DANES: In fairness, Mr Chairman, I'm not entirely sure that it was put to Dr Taylor that there was a conversation between he and Professor Savage preparatory to speaking to Adam's mother. I am not sure that was put. So I am not sure he has had an opportunity --

MR FORTUNE: [Inaudible: no microphone] he was not asked that question.

MS ANYADIKE-DANES: It's not a criticism; I'm simply saying that we haven't had his view as to what the content of any such conversation might have been.

Can we then go on to the final paragraph, where he says:

"I remain extremely perplexed and concerned that

this happened to Adam and cannot offer a physiological explanation for such severe pulmonary and cerebral oedema in the presence of normal monitoring signs."

But you could. You had a perfectly rational explanation for what had happened.

A. My analysis and discussion with Dr O'Connor was that Adam's cerebral oedema was as a result of him receiving too much and too rapid fluid in theatre. I think what Dr Taylor's saying in that paragraph is that he was having difficulty accepting it because he still believed the CVP was believable. We now know that that probably was not true.

Q. Yes. But the serum sodium levels weren't normal.

A. No, they weren't.

Q. Can I just take you back to something where you had said in that conversation that you had with Dr Taylor before going to see Adam's mother when you were discussing what you were going to explain or what you were going to say to Adam's mother, how do you know that Dr Taylor accepted that it was obvious that it was fluid overload?

A. I think because of the appearance of Adam at the very basic level. You've seen photographs of Adam. He was completely bloated.

Q. Well, "completely bloated" is not a description that features in his medical notes and records.

A. I can't remember if that's true or not.
Q. It doesn't. Dr O'Connor recorded him as being "puffy".
A. Well --
Q. In fact the view that Dr Armour thought is that if you didn't know him, as she didn't, you might be forgiven for thinking he was rather chubby and slightly overweight.
THE CHAIRMAN: "Well nourished" was her phrase.
MS ANYADIKE-DANES: Thank you, Mr Chairman, "well nourished".
A. But we did know him.
MS ANYADIKE-DANES: Sorry?
A. We did know him.
Q. Did you tell Dr Armour that, "That is not how I know that child to look normally"?
A. I don't remember that I said that to Dr Armour. My conversation with Dr Armour would have been to be there, for instance, to give her any clinical information extra to what was written in these sorts of documents and also to make it clear to her that I believed that there had been a major problem with his fluid balance and that the likely diagnosis was dilutional hyponatraemia.
Q. Yes, but that might have been something relevant to tell her because her evidence was that, absent that kind of information, she had no idea what Adam looked like

normally. And since you formed the view that he was clearly bloated or very bloated and you knew what he looked like normally, why didn't you tell Dr Armour that?

A. I'm not saying that I didn't tell her; I'm saying I don't remember discussing that with her, nor indeed do I remember her saying to me, "Does Adam look normal to you?" What I was discussing with Dr Armour was: did he have cerebral oedema, had he coned? And because I believed it was likely that if that was the case, it was as a result of the fluids he got in theatre.

Q. Yes. Bloated due to fluids as opposed to swollen due to some sort of cerebral constriction. Those two things are different. In fact, the inquiry's own expert, Simon Haynes, wondered whether the appearance of his face might in and of itself indicate that there was some sort of form of constriction. One sees that from his first report, I believe.

So there is an issue there, which you were uniquely in that room, mortuary, in a position to assist Dr Armour with. But in any event your evidence is that you cannot remember whether you told her that or not.

A. No.

Q. When one goes to this document that Dr Taylor has produced, as I understand it, you wouldn't agree with

certain parts of it.

A. No.

Q. And what did you do about that?

A. I didn't write any rebuttal of it, but I did go to the post-mortem and made sure that Dr Armour understood my perception of the fluid balance situation. I'm concerned that there is a suggestion in your questions that I would not have replied to this for some inappropriate reason.

Q. No.

A. And that is not the case. Always with Adam Strain, I wanted to know exactly what happened and to make sure that it was fully understood and explained.

Q. I appreciate that. I'm simply asking what response, if any, you made when you saw that document and you saw that there were things in it that you disagreed with. That's a question that has been asked of all the witnesses.

A. Well, I'm quite sure that I made it clear to Dr Murnaghan that I believed the situation in relation to Adam's cerebral oedema and death was related to fluid mismanagement and, also, to the person who carried out the post-mortem and subsequently to the coroner during the inquest and certainly to his mother in the days and weeks and months afterwards.

Q. But I thought earlier, when you were giving your clinical evidence, forgive me if I've got you wrongly, that you said that you couldn't actually remember attending the autopsy. But you realise now that you must have been because I showed you a letter that you wrote to the GP, Dr Scott, which established that you had been there.

A. Yes.

Q. So how can you remember now what you were telling Dr Armour?

A. Because I've listened to Dr Armour and that has stimulated my memory and I've thought about it a great deal. I've been in this hearing every day and, if you sit there, then you gradually do come to realise what actually happened. This is 17 years ago. My belief is that I went to the post-mortem, I spoke to Dr Armour, I explained to her what I thought and I believe that is also what Dr Armour believes.

Q. I don't think Dr Armour can remember having a conversation with you. In fact, I don't think she's entirely sure that you were there, but we can -- it's in her evidence in any event because she was asked about it.

If you communicated your views to Dr Murnaghan that were different from those which we've just seen in that

document from Dr Taylor, how did you do that and when did you do that?

A. I think I had numerous conversations with Dr Murnaghan, I think the majority of them by telephone. There have been suggestions that I was at meetings with Dr Murnaghan. I don't believe that most, if any, of those meetings actually took place in a round table manner, but we certainly were in communication. And obviously, after the report from Dr Sumner --

Q. Sorry, we'll come to that in a minute. I'm trying to move things through in quite a tight chronological order.

THE CHAIRMAN: Sorry, I would like to hear what he says about "after Dr Sumner" and then we can pick up the details and go back on any details --

A. You will remember the coroner asked me to talk to Debbie Strain and explain reports to her. You did draw my attention to a comment that I made that I was willing to do that, providing there were no medico-legal issues. And subsequently I have seen a document where Dr Murnaghan has agreed that I could speak to Debbie Strain. So there's no doubt that, at that point -- which I think was January -- that Dr Murnaghan was aware of my view, was aware of Dr Sumner's view and I communicated those views to Debbie.

MS ANYADIKE-DANES: Okay.
A. So if you go right back to December, then it's more difficult to be sure of that because we don't have written --
Q. We do have some documentation that I'm going to take you to.
A. Right.
Q. But it's quite an important thing, isn't it, that Dr Taylor has communicated in writing something like that to Dr Murnaghan? Would you have appreciated that he was producing a like exercise to you, something that could ultimately be going to the coroner?
A. Say it again, the end of the question.
Q. When I asked you why you produced your document of 28 November, you said --
A. These were both for the coroner.
Q. -- that Dr Murnaghan had asked you to do that because you were going to have to produce a statement for the coroner. I asked you why he had asked you in particular and you said you assumed -- or something like that -- that he would be asking all the others. So when you were copied into that document from Dr Taylor, did you consider that that was actually Dr Taylor's equivalent of the document that you had been asked to produce?

A. I think so, yes.
Q. Yes. So that's quite important if he's got those things which, to you, are just incorrect.
A. It is.
Q. Is there any reason why, given the significance of that, you didn't put that in writing?
A. I think because I was talking to Dr Murnaghan ... I didn't put it in writing, that's all I can say.
Q. Yes.
A. I have to say that, looking back, I regret that I didn't push harder to have that area explored at that time. You're aware that Debbie Strain expected me to do everything I could to find out what had happened to Adam and to make sure it never happened again. As I look back, I have to question my own judgment around those early days, that I didn't push harder for a full internal investigation and all the things that have been discussed. I regret now that I did not do that and I feel that I probably let Debbie Strain down by not doing that. And with the knowledge I have now, I certainly would do that if this situation arose again, but I apologise to Debbie Strain and her family that I didn't pursue it with the vigour that I might have done, but at that time I believed there was a difference of opinion, probably, but I left it to Dr Gaston and

Dr Murnaghan to follow that up and perhaps I put too much faith in that system.

Q. I understand what you're saying. I'm going to pick up something of what you said in a little while.

Could you help me with this though, as to what document is what. When Alison Armour is asked by the coroner to provide documents and, effectively, to brief Dr Sumner and Dr Alexander, if you'd been in the chamber, you'd see I pulled up a cover letter. The one to Dr Sumner is actually not necessarily -- yes, to be called up, 011-028-130.

That says, "A report from the consultant paediatric nephrologist". Is that your 28 November document?

A. I don't know.

THE CHAIRMAN: In other words, professor, apart from the note which you wrote, the two-page note which you wrote to --

A. Did I write anything else?

THE CHAIRMAN: Do you remember writing any further document beyond that within the next three weeks?

A. No.

THE CHAIRMAN: Thank you.

A. But do we not have a copy of the report she refers to?

THE CHAIRMAN: Unfortunately not. It may very well be the note that you wrote, the note that we've just looked at

that you wrote to Dr Murnaghan.

A. We might speculate that she hasn't sent anyone else's report.

MS ANYADIKE-DANES: Sorry, I beg your pardon, Professor Savage? I didn't hear you.

A. [inaudible] two reports from the consultant anaesthetist involved.

THE CHAIRMAN: The consultant anaesthetist involved is obviously Dr Taylor, so she's sending to Dr Sumner the original medical notes and records, two reports from Dr Taylor, a report from you and the equipment check report.

A. Yes. I agree.

MS ANYADIKE-DANES: So what I was asking you just to clarify -- because it isn't very specific -- is that if she was sending a report from you, is the only document she could be sending the 28 November one?

A. I believe so because I don't remember Dr Murnaghan asking me for any other report or to comment on Dr Taylor's letters.

Q. I had referred earlier to the letter that you had sent to Adam's GP, which is dated 4 December 1995.

A. Yes.

Q. And in that, I presume you're not as constrained as to giving your views as to what you think happened as you

were when you were trying to produce an entirely factual document for the coroner. We can see your letter at 016-004-014.

There are two pages of it. I wonder if we might pull the second page up, 015.

There's your recital of factual matters and then, if we go to the third paragraph on that first page, that is him being taken down to theatre, identifying who was involved in the surgery, technical difficulties because of multiple previous surgery.

And then:

"The transplant was successful and the surgery was completed with no evidence of any intraoperative event ... brought through to intensive care. At that time, it became apparent that, on withdrawal of the anaesthetic, he wasn't breathing spontaneously and he was found to have fixed dilated pupils."

Then if we go to the second page:

"I saw him at that time. I was concerned that he had had some intercerebral event ... Emergency CT scan performed showed gross cerebral oedema and the he had also coned ... obvious it was likely to be irreversible ... Asked David Webb and he felt he was essentially brainstem dead. All that information was communicated regularly to the mother. The following

morning, repeated the tests, confirmed the situation. A decision was made in discussion with myself and by his mother that we should switch off the ventilator. We did this with Adam sitting on his mum's knee ... Since attended a forensic post-mortem when no new information was obtained that would explain the events during his surgery, but confirmed the presence of gross cerebral oedema."

But you did you have an explanation for his gross cerebral oedema. In fact, I think you have just said you thought that Dr Armour was agreeing with you.

A. Yes.

Q. Why didn't you put that in your letter to Adam's GP?

A. Because there was nothing that proved that at that time in terms of the post-mortem and I was aware that there was a coroner's inquest. And I think I probably thought it would have been inappropriate for me to suggest a diagnosis in advance of the coroner's inquest.

Q. But you didn't have to suggest a diagnosis. You could simply tell him about the amount of fluid. That would all be part of the recitation of the facts.

A. I could have done.

Q. And his serum sodium level.

A. I could have done.

Q. Why didn't you?

A. I think because there was a coroner's inquest pending and I left it at this.

Q. Then we can go to the document, which talks about you being asked to speak to Adam's mother. That's 011-033-165. At the top, it's reciting a conversation that the coroner has had with Adam's mother and his uncle. In the middle of that first paragraph:

"I said I would ask Dr Savage from the Children's Hospital if he would be willing to explain each [that's the reports] to Ms Strain."

In the penultimate paragraph:

"I subsequently spoke to Dr Savage and he agreed to explain the reports to Ms Strain provided that Dr Murnaghan was happy and there were no medico-legal reasons to suggest otherwise."

What did you think they might be at that stage?

A. Well, I don't know. I was in completely uncharted water. I was taking advice on the legalistic aspects of how the investigation of Adam's death should proceed from Dr Murnaghan. I had not, unfortunately, contacted my medical defence union because I believed the advice I would get from Dr Murnaghan was appropriate. So I was merely saying, yes, of course I will explain everything as best I can to Mrs Strain, but I just need to check with Dr Murnaghan because I didn't want to do something

inappropriate.

Q. Firstly, why would you have contacted your medical defence union?

A. A child had died in theatre who was my patient.

MR FORTUNE: If there has been an unexpected death, it's perfectly proper for any clinician to contact his or her protection body.

THE CHAIRMAN: I accept that entirely.

MS ANYADIKE-DANES: Then if all you were going to do was to explain the medical terminology, if I can put it that way, of those reports, why did you think that doing that would give rise, potentially, to a medico-legal reason that --

THE CHAIRMAN: Presumably because there are questions which arise from it.

MR FORTUNE: Absolutely, sir.

THE CHAIRMAN: That's the obvious explanation: that you can be giving Debra Strain an explanation of the terms in the reports and an understanding of what the reports mean and then that may very well lead on to her asking, "Does that mean that so-and-so was to blame or so-and-so did something wrong?"

MS ANYADIKE-DANES: Is there any guidance provided to you or your colleagues from the hospital or the Trust as to what you do in these circumstances?

A. No.
Q. Is there any guidance that the GMC provides as to what your duty is and what you do in these circumstances?
A. I couldn't be sure of that, but obviously the General Medical Council has a document called "Good Medical Practice".
Q. Yes.
A. And it does say that you should be open and honest with your patients or, in the case of paediatrics, with the parent, and I believe I always was. But to go back to this question -- I'm not quite sure, it's difficult when you're sitting here to read this letter. Does it just say that he was asking me to explain terms or to explain the reports? Because my understanding was that I explained the reports --
Q. Yes.
A. -- not just the terms in them. And of course, Sumner's report was quite explicit and it came through in January.
Q. Yes. I'm not sure that it had quite come through yet at that stage.
THE CHAIRMAN: I think he's correcting your suggestion a moment ago that he was only being asked by the coroner to explain the terms in the reports as opposed to the reports themselves.

MS ANYADIKE-DANES: Yes. But then if we go back to where I was with you before. You say there was no guidance provided by the Trust --

A. No guidance provided by the Trust.

Q. And then I was asking you about the GMC and you had said the GMC had "Good Medical Practice" and it says that you should be open and honest and so forthwith your patient. What did you understand that would mean in circumstances such as this where there's going to be medical reports about what happened in relation to the treatment and death of her son, obviously reports where even the coroner can envisage she's unlikely to be able to understand what it is? You were her son's consultant; what would you understand that duty to mean in these circumstances?

A. I would tell her exactly what the expert's conclusions were and explain them to her.

Q. So the concern was, in doing that, that might prove problematic for your employer or for you?

MR FORTUNE: Sir, [inaudible: no microphone] the time in question.

THE CHAIRMAN: I'm not sure which of the reports would cause Professor Savage a personal concern.

MS ANYADIKE-DANES: I don't either. I'm simply -- I --

THE CHAIRMAN: Then the question's too broad.

MS ANYADIKE-DANES: Then the question is: would cause some concern to your employer.

A. I think I should explain that I was not particularly concerned about what in the reports would cause any problem to anyone. I was being given advice by Dr Murnaghan on how the legal process should go forward and I merely wanted to check with him that -- that me explaining reports was fine. I had no problem about saying the report blames this person, blames that person, blames me, blames the hospital. I had no problem with that. I always wanted Debbie Strain to know everything there was to know.

Q. Thank you. And then, in fact, I think that Dr Murnaghan accepts that you should be able to explain the report to Adam's mother. In fact, we see that in a note he makes at 059-047-102. That is dated 30 January. A copy is to be given to Dr Taylor for his information and to you so that you may provide counselling to Adam's mother.

A. Yes.

THE CHAIRMAN: Was it a bit more than counselling, professor? In a way, explaining the reports and, for instance, explaining what Dr Sumner has said and concluded is a little bit, on one interpretation, a little bit different from counselling; it's giving her information.

A. It is.
THE CHAIRMAN: It may lead to her needing counselling or support.
A. Debbie Strain, during these months, was enormously upset by the loss of her son. I mean, I visited her at home and talked with her parents and her on many occasions. For a long time, she kept Adam's bedroom as it always had been and would go there for consolation. I know that she went to his grave every day. So I think a lot of what I did was an attempt to support her and counsel her and I probably was more interested in doing that than thinking about the content of these reports. But obviously, I would have discussed them with her and I know that Debbie Strain, at that time, felt that someone should take the blame for what happened to Adam. And we had discussions about that.
MS ANYADIKE-DANES: Can you remember those discussions, Professor Savage?
A. Not in detail. But I think the letter that you showed yesterday was certainly as a result of one of those discussions.
Q. In fairness, I'm going to pull that up.
THE CHAIRMAN: 306-090-001.
MS ANYADIKE-DANES: Thank you very much.
It's dated 19 February, so it is not far away from

this part of the chronology. We see there that you are very clear as to what you consider has happened. The second paragraph:

"After Adam came out of theatre, we knew his sodium was low. We realised this was dilutional and set about removing fluid. Tragically, we could not solve the problem because of the development of brain swelling. Once the cause of Adam's death is established, it is right that we should try and work out why. We want to avoid anything like this happening again."

And if I just conclude in that paragraph:

"It is important we learn anything we can from Adam's death to make the operation safer for them."

That is the other children:

"Mr Leckey has done all he can to make sure this is the case and so will I."

So apart from your commitment to finding out what happened and making sure that, so far as it can be done, that it doesn't happen again, you are expressing your clear view as to what you think is the mechanism of the development of the cerebral oedema that led to his death.

A. Yes.

Q. And even if you didn't use those words, do I understand you correctly to say that's the sort of thing you would

have told Adam's mother when you were with her speaking to her when you realised that Adam's condition was irretrievable?

A. Well, I think by the time I replied to Debbie's letter to me, we had obviously discussed the mechanism of dilutional hyponatraemia, otherwise I wouldn't have said these sort of things blandly in a letter without having previously had the perception that she had an understanding of what had happened. And you can see in that letter she must have written to me that because she was looking for someone who should be blamed for all this, that she was saying, "I hope you don't think I'm being spiteful in doing that; it's just to make sure it doesn't happen to anyone else".

Q. I understand.

A. Debbie Strain is a very caring person in many ways, not just in terms of Adam, and I do believe that she did have that drive. That's probably why she has put herself through this inquiry: to make sure that these things didn't happen again. And that's why I said earlier that examining myself, looking back, I wish I had done more.

Q. I understand that. Can I just ask, because I think it's relevant to know what various people saw, so how the investigation into Adam's death was proceeding. Because

ultimately, Dr Murnaghan will have to be asked certain questions about that and it will be unfair for us not to explore with others who were involved what their knowledge was of various things.

If I pull up this document, 059-053-108. So it's 2 February, it's from Dr Taylor to Dr Murnaghan. Had you seen this before, so far as you can recall?

A. I don't think I saw it at that time.

Q. Had you seen it at any stage prior to Adam's inquest?

A. I don't even know that I saw it at the inquest. I think the first time I saw it was when the papers for this inquiry became available to me.

Q. I understand. The reason I ask you this is because this is now 2 February. If one looks at the bottom paragraph and starting with "however" -- so he has read Sumner's report in particular, disagreeing with it, and:

"Both have failed to comprehend the physiological differences in this case and have used dubious scientific argument in an attempt to explain cerebral oedema."

He then goes on to say:

"In Adam's case, where the urine output of his native kidneys had to be maintained, deficits had to be replaced, extra fluids had to be given to provide the donor organ with adequate function. The type and volume

of fluids were appropriate."

There are really two bits to that. The first is his criticism of the way in which Dr Sumner has reached his conclusion. What is your comment on that criticism?

Sorry, let me put it a different way. Did you share his view that Dr Sumner had failed to understand the physiological differences between Adam and any other child with chronic renal failure?

A. No, but there is a fine point, and this is what, even after the inquest, I believed was the difference between Dr Taylor and Dr Sumner and myself. That is that there was a lot of play put on the Arieff paper and this inquiry seems to have regarded it as a very key document in this area. It is in general, but in terms of Adam's situation, the children, 16 children out of a review of 25,000 operations -- they found that there was this small group of children who, after simple surgery, had extra-renal sodium losses, probably vomiting, and that they developed an inappropriate secretion of antidiuretic hormone. Antidiuretic hormone stops your kidneys producing urine.

My understanding of Dr Taylor's disagreement at the time of the inquest was that he believed, (a), that Adam did not have extra-renal losses of sodium and he could not, because of his kidney failure, react to

antidiuretic hormone. Therefore he had this disagreement that the Arieff scenario applied directly to Adam's case. And I thought that was the only area of disagreement. I did not think that he had any disagreement with the concept that Adam had had an excessive amount of fifth normal saline, which caused his sodium to drop dramatically, his brain to swell and that the cause of his death was dilutional hyponatraemia. I thought that his disagreement was that it was not exactly the same mechanism as Arieff describes. Have I explained myself?

Q. Yes, you have, very well. Are you saying that you didn't appreciate that Dr Taylor's position was that Adam couldn't suffer from dilutional hyponatraemia? You didn't understand that?

A. I know that he had said that at times, but I thought that after the inquest he had accepted the overall diagnosis and, listening to Dr Taylor yesterday, I thought he was going to say that, but it is unclear to me exactly what he was saying yesterday. Indeed, I wonder if it's clear to him what he was saying yesterday.

Q. Well, he was certainly still of the view that Adam couldn't develop dilutional hyponatraemia when he gave his interview under caution to the PSNI.

A. I agree.
Q. And he was clearly of that view when he provided witness statements to the inquiry.
A. I agree.
Q. We'll come to --
THE CHAIRMAN: Sorry, professor, that's the point about Dr Taylor's evidence. He appears to have been in denial until February and, more specifically, until April.
A. I agree.
THE CHAIRMAN: And it therefore seems that if you had the impression that, after the inquest, he accepted the overall diagnosis, that is not consistent with what he told the police or what he told the inquiry.
A. I agree.
THE CHAIRMAN: And I have to ask at the end, on what basis did you form the understanding or the view that he had accepted the overall diagnosis of the inquest? You will have heard me yesterday expressing concerns about whether there are mixed messages being sent out for internal and external purposes.
A. I have no recollection of Dr Taylor ever telling me directly he disagreed with the overall conclusion of the coroner's inquest. And I believe that that is also the situation with my colleague, Dr O'Connor, and probably with Dr Crean. We believed that he had

accepted the diagnosis of dilutional hyponatraemia, but had some disagreement with the mechanism of it.

THE CHAIRMAN: Does that mean that you believed he had accepted it because you did not hear him continue to argue against it?

A. Yes.

THE CHAIRMAN: So it's putting it in a negative, really?

A. It is.

THE CHAIRMAN: Because he wasn't complaining after the inquest about the finding, you thought, well, notwithstanding the evidence which he gave at the inquest, that he must have accepted it?

A. Yes.

THE CHAIRMAN: But because there's evidence at the inquest that would not indicate that he accepts the finding.

A. At that time.

THE CHAIRMAN: Right. So before the inquest, he doesn't accept the overall diagnosis.

A. Mm-hm.

THE CHAIRMAN: He gives evidence at the inquest in which he doesn't accept the overall diagnosis. Because he doesn't expressly argue against the inquest finding, a view is formed that Dr Taylor agrees with the finding. Then it must have come as a shock to you when you saw his PSNI interviews and when you saw his statements to

this inquiry.

A. I was amazed.

THE CHAIRMAN: Thank you.

MS ANYADIKE-DANES: Thank you, Professor Savage.

You had referred to meetings and a number of meetings were scheduled, or at least we can see them from the papers that we have, in the early part of 1996. For example, we see one at 059-043-098. Sorry, I should have gone to 059-042-093, if we do that first.

As you see there, in manuscript, what has happened at this stage is that Professor Berry's report has come in, it doesn't seem to help, he's not going to be called. This seems to be a note that Dr Murnaghan is making. The report should be sent to you along with a number of others for information and possible comment, if one sees that right down at the bottom. And then:

"Arrange a meeting with the solicitors with all those to be called as witnesses."

And you see your name there included with Mr Keane, Mr Brown, Dr Webb and Dr Taylor. And then the document that I referred to just a little while ago. 059-043-098, that is actually arranging that meeting. It is confirmed that one has been arranged for 17 April 1996 and that has been circulated and you see your name there, you're included in those.

Then perhaps in preparation for --

A. Can I just say something about this?

Q. Yes.

A. You will see that it says a meeting has been arranged for the 17th and this is sent out on the 15th.

Q. Yes.

A. Well, I don't remember being at this meeting. And knowing how busy I was, the idea of arranging a meeting with a letter posted on the 15th, which probably wouldn't arrive until the 16th, asking me to go to a meeting on the 17th --

Q. Would it be posted as a memo?

A. I don't know. But what I'm saying is these people are all busy, could be in theatre. Wednesday if I remember correctly, I had an outpatient clinic. I don't know because -- what I'm saying is I don't remember being at such a meeting.

THE CHAIRMAN: It looks as if it's maybe arranged as a lunchtime meeting at 12.45. Might that make it a bit more feasible for you to be there? Let's assume, for instance, that this is sent by internal mail. I presume there's an internal system within the Royal.

A. Mm.

THE CHAIRMAN: And you find out about it on the Wednesday or the Thursday -- sorry, this note goes out on the Monday.

A. Well, perhaps it's inappropriate for me to have drawn attention to the dates on it. What I'm really saying is I don't remember being at the meeting.

THE CHAIRMAN: Okay.

MS ANYADIKE-DANES: Right. Then let's go on to 059-039-082. This is a memo:

"The attached arrived in the post."

We believe "the attached" that is being referred to is the post-mortem report. The undersigned, or the undernoted, which includes you, Dr Savage:

"Grateful if you would read it carefully and respond on its contents, particularly if anything therein raises with you a concern which may lead to a development at the inquest for which we would need to be prepared in advance."

What did you understand that to be referring to?

A. Well, I mean ... It's difficult to comment if I don't know what the report was. But if it was the post-mortem --

Q. Yes.

A. -- the autopsy report, I had no disagreement with anything in the autopsy report except that perhaps there was some doubt about the ligature, but that wouldn't have been my concern.

Q. Then if that's the case and you were responding to this,

what is it that you would think that we -- I presume meaning the Trust -- needs to be prepared for in advance?

MR FORTUNE: Sir, I'm listening to this with some fascination, but where is it going, bearing in mind that here is Dr Murnaghan, apparently representing the Trust, seeking to pull together the strands of the respective witnesses at a forthcoming inquest? All he's doing is seeking comments that will no doubt be the basis of instructions, either from the solicitor to counsel or from the Trust to the solicitor.

MS ANYADIKE-DANES: Yes, that's what I'm asking him about.

THE CHAIRMAN: Sorry, remind me what the question is.

MS ANYADIKE-DANES: The question is: if you saw the post-mortem report, what, if anything, would you communicate in relation to the Trust needing to be prepared in advance? I think that's what all the undernoted are asked to provide their views on. What would be your view?

THE CHAIRMAN: Well, in other words, whether or not you remember receiving this note or responding to it, knowing what you do about the autopsy, the autopsy report, how would you have responded --

A. I would have been saying to Dr Murnaghan that I agree entirely with the conclusion of the autopsy.

MS ANYADIKE-DANES: What would "prepared in advance" mean? That's the element. That's what's sent to all of you.

A. I don't know because I have no difficulty with the autopsy report. If I'm being an honest, professional paediatrician, there is no issue for me. I don't know what the issue for the Trust would be. It should be the same as mine, that the truth is established. So there we are.

Can I just say, if we're going to go through lots of these letters, that you will see -- because I looked at this last night, the list of documentation -- you will see, very close to the time of the inquest, there is a note from me to Dr Murnaghan asking for a meeting prior to the inquest. That leads me to believe that I was never at any meetings because they didn't, for some reason, suit me or happen. And I thought, "The inquest is in a few days at the time, I need to speak to Dr Murnaghan".

Q. So although you're ticked as these things having been sent to you, and although you're not denying that you received them, what you're saying is you don't think you went to any of those meetings?

A. I don't think so.

Q. If you couldn't attend a meeting, wouldn't you be letting Dr Murnaghan know that?

A. Oh yes.
Q. But when there's a phone call, there's a very clear record of that made by Dr Murnaghan's secretary. So for example, if we go to 059-041-092, there we are:

"Dr Savage's secretary rang. Dr Savage would like a copy of the PM report as Adam's mother has a copy already. Checked with [so-and-so] at the coroner's office [and so on]."

She seems to keep -- and there are a number of those, which I think you've referred to one already, where, if there's a phone call that goes through, she makes a note of it.

A. Mm-hm.
Q. So if you couldn't attend these meetings, particularly as there's more than one, you'd be missing out on these things where he clearly would like your attendance, then presumably you would be phoning and telling somebody "I can't make that meeting". But there seems to be no record of that.
THE CHAIRMAN: That would be a rather different note. In fact, it begs the question whether this is a note at all. This is Dr Savage's secretary, on his behalf, asking for a copy of a report or for whatever document.
MR FORTUNE: It begs the question as to whether it's the post-mortem report that went out a little earlier.

A. Yes, what was the date of your previous -- because here on the 24th I'm saying I haven't got it. And you will see that, from this, as Mr Leckey had asked, I was trying to explain what all these things meant to the family. But they were getting -- they appear to have got the post-mortem report --

MS ANYADIKE-DANES: No --

A. -- before I did.

Q. I think it was Dr Sumner's report you were being asked to explain. There is a record of you being sent Dr Sumner's report. This is the post-mortem report.

A. I thought Mr Leckey asked me to explain any of the reports that came through, but it's splitting hairs.

Q. Thank you. Maybe we'll just move on to 060-022-041.

A. But the question that my counsel asked was -- you were suggesting to me that that was the post-mortem report that I was asked to comment on.

Q. I said we think it was.

A. If we compare the dates, we can tell.

THE CHAIRMAN: Yes, but actually, if -- sorry, can we go back to the previous document for one second? I think it says in the body of that document, five lines down:

"Checked with Linda, coroner's office. Grainne sent copy in post on Monday."

So it's on its way, but it hasn't -- doesn't appear

to have reached you.

A. But was the previous letter to this one --

THE CHAIRMAN: It was an earlier date.

MS ANYADIKE-DANES: Right at the bottom, Mr Chairman, 24 April 1996:

"Porter to collect and take to Dr Savage's office in Musgrave Ward."

THE CHAIRMAN: Yes. I think Professor Savage's concern, if we go back again to an earlier document, if his secretary is ringing up and asking for the post-mortem report, is it doesn't support our supposition that the post-mortem report had already been issued with -- I think the document is 059-039-082.

A. Thank you.

MS ANYADIKE-DANES: Well, the post-mortem report had been received.

THE CHAIRMAN: It's the 25th. So that is -- whether this is directly in response to your secretary's raising of the issue or not, that is the post-mortem report. It has now come in.

A. It seems to me that that --

MS ANYADIKE-DANES: Thank you. Just for completeness, not to be called up, 059-035-068 is Mr Leckey's letter to Dr Murnaghan, dated 22 April, attaching the post-mortem report.

THE CHAIRMAN: That confirms what Dr Murnaghan's secretary said in that note.

MS ANYADIKE-DANES: Thank you. Can we then go on to 060-022-041? This is a memo to the undernoted. You're one of them. It attaches correspondence, which I will come to in a minute. Did you receive this? (Pause).

THE CHAIRMAN: It might help the professor to know if he received it if we put up the correspondence which is attached.

MS ANYADIKE-DANES: Yes, of course, except it goes over a number of pages.

A. I don't think it matters because I don't remember receiving this and I do not believe I have kept anything on file of a reply to this to Dr Murnaghan, unless you have it. So I can't answer that. I do remember, however, that when the litigation was settled, I remember feeling surprised that the litigation had gone on and I wasn't aware of what the discussions were.

Q. Sorry, you mean that the litigation had proceeded to a level where it then had to be settled?

A. Yes.

Q. But you weren't surprised that there was litigation?

A. No, I'm not surprised that there was litigation, but I wasn't -- I don't remember being involved in how the litigation was settled and I don't remember replying to

this.
Q. But you did know that there was litigation, didn't you?
A. Well, I must have done because it looks like I got this letter.
Q. Yes. The only reason I ask you that is because when you were asked about the letter which you've just been referring to, which actually is 060-010-019, not to be pulled up, that's the letter that Dr Murnaghan writes to a number of the clinicians after the matter's been settled. When you were being asked about that, I believe by the chairman, actually, in your evidence on 18 April, you said that that was the first time you knew there was any litigation. In fact, just to have it, it's 18 April, page 169 --
A. I accept that.
Q. It starts at line 13.
A. That was my memory: that I was quite surprised to hear that there was litigation and it was settled when I got that letter. But by the look of this, it looks like I did know before, but perhaps in the midst of the coroner's inquest and so on, this had slipped my mind.
Q. We'll go to what the solicitor's letter is in just a second. But there you see he's referring to the fact that:

"All of you have provided information to ensure that a witness statement could be prepared for and provided for the coroner."

And I take it that's your 28 November --

A. Yes.

Q. -- and, in the case of Dr Taylor, that's the other document that we looked at:

"However, you will appreciate that more detailed information will now be required by me as case manager for the Trust in order that proper instructions may be given to our legal advisers. In particular, it would be helpful if you would clearly identify and give as much detail as possible, supported by references, with copies, of the strengths and weaknesses, if any, of the care provided for Adam."

And if we go to 060-022A-042, there's another page to that at 043. So that's the solicitor's letter. The first paragraph simply recites the details of being admitted for the surgery, subsequently dying and what they're really looking for is voluntary disclosure of all his medical notes and records. But it is clear from the first sentence that:

"[They] have been consulted in connection with a potential claim for damages for personal injury, loss and damage sustained by reason of negligence in and

about the performance of the renal transplant operation."

A. Mm.

Q. So that's what you have got. All of you are being asked to provide, if you can, details on the strengths and weaknesses of the care that was provided for Adam. Even if you didn't respond in writing, did you respond at all to the preparation of the Trust's position, if I can put it that way, in that litigation?

A. Well, I hate to say that I don't recall because I don't think it's helpful, but I honestly do not recall. And what I would therefore ask is: do you have a copy of any response that I made? Has that been provided by the Trust? Because I don't remember making one.

Q. No, that's why I'm asking you. Some who received that did respond. For example, if we go to 059-034-067 --

MR FORTUNE: Sir, where is this going? Because Professor Savage has said, "I don't recall". He has challenged my learned friend to produce a document. There is no document that the Trust can produce that emanates from Professor Savage. Merely to show that others responded may or may not be helpful to you, but how is it going to help Professor Savage?

MS ANYADIKE-DANES: It may jog his memory. Professor Savage has been fair enough to say that having sat and listened

to evidence, some of that evidence has had the effect of jogging his memory so that he can assist us further and that's what I'd seeking to do.

THE CHAIRMAN: I'm sorry, but the fact that Mr Keane responded --

MS ANYADIKE-DANES: I was going to ask him if he saw it. If he saw the responses, Mr Chairman, it might help him recall whether he responded in like mind, even though at present he can't remember doing it.

THE CHAIRMAN: Does it help you?

A. No. I don't remember. I was hoping that you might produce the document and then that would certainly jog my memory. And I also have to say that having got that letter, I would have thought I would have responded. That was why. I wasn't challenging you about the document. I'd hoped that if I got a letter like that, I would have responded appropriately and I would have hoped you had that response.

MS ANYADIKE-DANES: I'm afraid we are only as good as the documentation provided to us.

THE CHAIRMAN: Professor, you said a little while ago that you are sure you made it clear to Dr Murnaghan that Adam's death was due to fluid mismanagement --

A. Oh yes.

THE CHAIRMAN: -- and that you had numerous discussions with

him, mostly by phone.

A. Yes, and I think following the inquest there was no doubt that Dr Murnaghan understood that.

THE CHAIRMAN: I think the documentation which has already been produced over the last few days seems to indicate -- I think there's a letter from Mr Brangam indicating that that issue's raised before the inquest about the differences between you and Dr Taylor.

MS ANYADIKE-DANES: If you're telling him very clearly, "This is my position on what happened, in fact my position from very, very early on", would Dr Murnaghan be telling you what others were saying? Did he discuss with you what others were saying?

A. Well, I think when I said that I was surprised to learn that the litigation was settled is that because I don't have any recollection of people communicating with me on a regular basis as to the progress of any litigation. And of course, I was also, around that time, talking to Debbie. I don't remember that she even told me that there was litigation. But then she might not have wanted to. But there is --

Q. I didn't actually specifically mean about the progress of the litigation. What I was really asking you is: was Dr Murnaghan sharing with you the views that he was receiving from the other clinicians?

A. I do not think so.
Q. Then what were you discussing in your many discussions?
A. I thought you were talking about the litigation.
Q. I was talking about your discussions. You said you had many discussions with Dr Murnaghan. I'm trying to find out what you were discussing in those discussions.
A. I was discussing the fact that I believed that Adam had died from dilutional hyponatraemia, that I agreed with Sumner's conclusion, that I agreed with the autopsy report. Those sorts of things. I was putting my position to him.
THE CHAIRMAN: Can I ask you this: were you raising concerns about Dr Taylor?
A. No.
THE CHAIRMAN: Why not?
A. Well, I think because I didn't have any particular concerns about Dr Taylor. I mean, the situation, as I understood it, was that he had made some catastrophic mistakes in theatre. He accepted my hypothesis that he had got too much fluid and I believed that particularly after the inquest and, therefore, I believed that the chances of him making a similar mistake again were negligible and I also believed that because he had been interviewed by Dr Gaston and by -- in that way, that they formed the same view that there was no particular

risk. But as I've said, I regret now that there wasn't a more thorough investigation that may have brought out some of the evidence that you've received 17 years later.

THE CHAIRMAN: Let me ask you this because this point was raised a number of times: it was said on a number of occasions about Dr Taylor that he's a good anaesthetist, that he is well regarded; is that right?

A. Yes. And I think that probably is what influenced a lot of us. We knew Bob Taylor's work. I never heard any of his colleagues have any criticism of him, either anaesthetists or surgeons who worked with him day and daily because I didn't work with him day and daily, I worked with him occasionally. Therefore, that in a way supported my view that this was a one-off tragic mistake that he had made.

THE CHAIRMAN: But when you were giving me your longer answer a few moments ago, you went back to the point that you believed he accepted your hypothesis that Adam had got too much fluid and you believed that particularly after the inquest.

A. Yes.

THE CHAIRMAN: But I don't want to go over old ground again, but you believed that on the basis of his silence after the inquest.

A. I think so.
THE CHAIRMAN: Okay.
A. I think what I said was he never -- I don't remember him ever saying to me directly, "I admit I was wrong, I accept that what the coroner said is right". He has said that now, but that was what I thought he was indicating in those early days.
THE CHAIRMAN: He's accepted that now after what he told me in April that he was, in a sense, overwhelmed by the number of expert reports coming out from this inquiry, saying he'd got it wrong. But they're only saying, largely, what Dr Sumner said.
A. Exactly.
MS ANYADIKE-DANES: In your answer to the Chairman, you said "particularly after the inquest". But you didn't think he agreed with you before then, did you?
A. I thought he was contesting the situation, yes.
Q. Exactly.
A. Again, it's reading what he wrote, and I don't remember how much of that I saw during that interval between December and June.
Q. I appreciate that. In your evidence, I think, you -- and others have said so as well -- have said that Dr Taylor was a good and liked and respected colleague; would that be fair?

A. Yes.
Q. Yes. But you nonetheless regarded -- and I think this was your expression -- he had made a catastrophic mistake and that had led to the death of a child in surgery.
A. Yes.
Q. Did you go and sit down with him and see how on earth could he have made that catastrophic mistake?
A. I certainly discussed it with him and I knew that some of the calculations he'd made were incorrect. For instance, he thought his urine output was 200 ml per hour.
Q. Did you share with him the view that that couldn't possibly be right?
A. Probably, yes.
Q. But if you shared that view with him, then was he accepting, "Yes, I see now, I can't for the life of me see how I thought that", or was he still maintaining the view that that didn't matter because Adam's polyuria meant that he could simply accommodate such large volumes of fluid?
A. I don't remember him ever saying that to me.
Q. This is an important issue: you're having to deal with the fallout of it, which is the effect on Adam's mother. Either you are satisfying yourself that he is accepting

that he made an error or you are simply conveying your view and walking away from that and not really knowing for sure whether he has accepted he made an error.

A. My understanding is that he accepted that he got the fluid calculations wrong.

Q. And on what basis prior to the inquest did you think he was accepting that?

A. From my conversations with him.

Q. Then, when he gave evidence at the inquest, you must have been shocked because his evidence certainly doesn't indicate that he had got the fluid calculations wrong. So why didn't you say something at that stage? "That can't be right, I've explained to you the basis of your error and you've accepted that to me, how can you possibly be giving that evidence to the coroner?"

MR FORTUNE: Sir, is my learned friend suggesting that Professor Savage, at the inquest, should have intervened?

THE CHAIRMAN: Well, let's look at it in a slightly different way. If Professor Savage is saying that he had conversations with Dr Taylor before the inquest that he knew from what Dr Taylor was saying that Dr Taylor had got the urine output wrong and then he hears him say at the inquest the evidence which he did give. Well, whether or not he should stand up at the inquest and

say, "You're wrong, you're wrong", or intervene in some way, it makes it exceptionally difficult for me to understand how, after the inquest, a view could have been formed that Dr Taylor accepted the inquest verdict. Because the inquest verdict was directly in the face of what Dr Taylor said.

So we now have three phases. We have Professor Savage's understanding on 27/28 November that Dr Taylor had made catastrophic mistakes. That's a view, which, as we know from the last few days of evidence, he expressed in different terms internally with the Royal and, in terms, he expressed it to Debbie Slavin.

He said a few moments ago that he had then spoken to Dr Taylor and understood that Dr Taylor was accepting some of the things that had gone wrong. Dr Taylor then comes to the inquest and adheres to his original position, but somehow a view is formed after the inquest verdict -- based, apparently, on silence -- that Dr Taylor accepts the verdict of the inquest. That's what concerns me: not whether he should have stood up at the inquest and intervened, but it's how that leads on to a view being formed afterwards that this good, competent, likeable anaesthetist now accepts what went wrong. I just don't understand that, Mr Fortune.

MR FORTUNE: Sir, let's just break it down. At the inquest, the Trust is represented by a competent solicitor. If there was a conflict in the evidence, then it was his duty to take a certain position and to give advice.

THE CHAIRMAN: Yes.

MR FORTUNE: And in reality, Dr Taylor should have been separately represented. Insofar as he wasn't, there is some obvious criticism that can be laid at the door of the solicitor. However, moving on --

THE CHAIRMAN: And an experienced client. The Trust wasn't some novice at the inquest, whose senior officers would not have had some understanding of the concept of conflict of interest because this would not be far removed from a medical negligence case, in which they would know that doctors get separate representation from the institution from time to time.

MR FORTUNE: I don't know that I can impute to Dr Murnaghan particular knowledge. But certainly I can impute --

MR LAVERY: Sir, I rise. With respect, Mr Chairman, in our submission, there is a difference between a medical negligence action and an inquest in terms of conflicts of interest arising. A coroner's interest is an inquest held by the coroner, an officer of the state, and he is the one that calls witnesses to the inquiry, and he's the one that carries out the investigations, it's not

adversarial. Whereas a medical negligence action is adversarial and, as has happened on numerous occasion when conflicts do arise, then doctors and clinicians have been advised to seek independent representation. That is something that has commonly occurred over the years.

THE CHAIRMAN: Did they not also do that at inquests from time to time?

MR LAVERY: From time to time, yes, individual clinicians will be represented by their MDU, but that's not something that, as a matter of course, comes from the Trust.

THE CHAIRMAN: Okay.

MR LAVERY: That's a different situation, in my respectful submission, Mr Chairman.

MR FORTUNE: Sir, I'm staggered to hear that because I have no doubt that, as counsel for a Trust on previous occasions, if I have had any concerns about whether I can represent a particular doctor, then unless it is safe, the advice is: go elsewhere.

THE CHAIRMAN: And you're talking in terms of both inquests and medical negligence cases?

MR FORTUNE: Certainly so far inquests are concerned. And here, the advice should have been that Dr Taylor was to consult other solicitors and, if necessary, be

represented independently.
THE CHAIRMAN: Okay.
MR FORTUNE: But move on from there --
THE CHAIRMAN: Let's get back, somehow, to where we were a few minutes ago.
MR FORTUNE: The fact is Her Majesty's Coroner heard the evidence, was satisfied firstly as the medical cause of death and then returned his verdict. It was then up to Dr Taylor to continue to express his concerns about the mechanism or to accept. And it would appear from what Professor Savage has said that he, Professor Savage, understood that Dr Taylor now accepted what had been --
THE CHAIRMAN: What I'm getting at is: what is the basis for that understanding? Because the basis for that understanding appears to be silence on Dr Taylor's part.
MR FORTUNE: And that is Professor Savage's evidence.
A. There's one other thing I would like to draw to your attention.
THE CHAIRMAN: Please do.
A. If you remember -- and I don't have the facility to draw things up -- that at some point in Dr Taylor's evidence -- I think perhaps his written evidence -- he said that he had had a discussion with myself and Dr Sumner --
THE CHAIRMAN: Yes.

A. -- at lunchtime or after the inquest indicating that he did not accept the mechanism of the Arieff scenario in Adam's case. That is where I formed the view that he accepted the overall cause of Adam's death but did not accept that it had happened as in the Arieff cases. So it wasn't entirely silence. The second thing I would say is that I think Dr Taylor has indicated that he then changed his practice so that he never again used fifth normal saline, but as he said, used and taught textbook fluid balance.

So I'm not trying to defend the situation. I accept that I probably should have pursued this more vigorously, but that was my thinking at the time.

THE CHAIRMAN: Just on your first point there, professor: to the extent that the aggravation which he appears to have felt at the time of the inquest that Dr Sumner was -- and I think more particularly directed at Dr Sumner -- that Dr Sumner was agreeing with Dr Taylor about one thing and then saying something different in the witness box. And that seems to have been your understanding, that that was only related to the mechanism. The trouble about that is that Dr Taylor's understanding of the mechanism then -- that somehow is swollen enormously into a complete disagreement, which is much more fundamental than just the mechanism, isn't it? Maybe

there was a lack of clarity or an ambiguity about what Dr Taylor actually meant by disagreeing about the mechanism.

A. Exactly. That's why I'm saying it's to my eternal regret that there wasn't a more detailed internal inquiry, which may have revealed the things that you have revealed. I'm sorry that that did not happen. I'm just trying to explain my thinking at the time.

MR FORTUNE: Sir, can I rise at this stage? Professor Savage has been going for well over an hour --

THE CHAIRMAN: I think there might be two people who want a break, so we'll break for 15 minutes, professor. Thank you.

(11.10 am)

(A short break)

(11.35 am)

MR LAVERY: Mr Chairman, just before Professor Savage recommences his evidence, I do have an answer to the query that was raised yesterday with regard to the letter.

THE CHAIRMAN: For the record, this is the letter of 21 July 2011 and it is reference 305-029-001.

MR LAVERY: Yes. You'll recall that that letter stated that in relation to bullet point 4 of the Trust's letter to the inquiry dated 30 July 2010, it states:

"Adam Strain's death would have been discussed at the paediatric directorate clinical audit meeting in December 1995."

The information that provided the basis for that letter came from two members of the clinical audit committee, who are presently on the clinical audit committee. It was stated that this would have been discussed on the basis that every death would have been discussed. But the position, Mr Chairman, is that the Trust is not in a position to say categorically that Adam's death would have been discussed at that meeting. The minutes are no longer available. The Trust did carry out further investigations and, indeed, spoke to a Dr Mike Shields, who may well have been sitting on the committee at that time. But unfortunately, he's not able to say one way or another whether or not the death was discussed and, unfortunately, that's as far as the Trust is going to be able to advance this matter.

You can see that the letter was carefully worded to say that it would have been discussed rather than it was discussed.

THE CHAIRMAN: That's on the basis that every such death would be discussed at the clinical audit meeting?

MR LAVERY: Indeed, Mr Chairman, yes. But unfortunately the minutes are no longer available and it's just impossible

to say whether or not, in fact, it was.

THE CHAIRMAN: Then there's a bit of a debate yesterday that -- you'll remember when Dr Mulholland was querying whether a death would be discussed if it had already been referred to the coroner or if it might be, for instance -- there's a number of variations -- it might not be discussed at all. It might be because it has gone to the coroner that it might be mentioned, but then discussion deferred until after the inquest. There's now a degree of uncertainty whether, in fact, it was discussed in December 1995.

I think we don't know whether there was any discussion of it after the inquest.

MR LAVERY: We don't know that, Mr Chairman.

THE CHAIRMAN: Is that again because there were some minutes but not the -- the inquest was in June 1996, so if it was picked up again at the audit committee, that would be July, August or September, depending on how frequently the committee meets during the summer.

MR LAVERY: Yes. The difficulty is that any individual patients would be anonymised during these audit meetings, so even if the minutes were available they wouldn't necessarily identify any particular patient. So we just can't say. The Trust believes --

THE CHAIRMAN: If you had a child who died in Adam's

situation and, in respect of whom, there had been an inquest, it wouldn't be difficult to glean enough from anonymised minutes to know who was being discussed, would it?

MR LAVERY: I think that's fair to say, Mr Chairman, yes.

THE CHAIRMAN: We ask the DLS to do a lot and I'm sure it raises hackles somewhere down the line, but if I could ask that a fresh effort is made to see if there are available minutes from July, August and September 1996, even if anonymised, which help to identify whether Adam's case was picked up again after the inquest.

MR LAVERY: Certainly further efforts can be made, although I suspect that they won't prove fruitful.

THE CHAIRMAN: Let's see.

MR LAVERY: I can undertake to arrange for those investigations to be carried out. Thank you, Mr Chairman.

THE CHAIRMAN: Okay. Ms Anyadike-Danes?

MS ANYADIKE-DANES: Can we go to 059-020-046, please? If we pull up the second page of that, which is 047. That's a letter from the Trust solicitors to Dr Murnaghan, dated 30 May. And the first sentence of it indicates that, at least by this, it seems that there is a meeting that you attended because it says:

"I refer to a recent meeting with yourself,

Mr Savage and Dr Taylor concerning this inquest, which has been listed for hearing on 18 June."

And then it refers to issues to do with the correspondence from the solicitors and I am not going to take you to the substance of this unless you tell me you saw it. Did you see this letter?

A. I don't remember it, but I see that I am mentioned in it.

Q. Yes.

A. I do see that it says that --

Q. I'm going to come to that in a minute. Can you tell me if you saw this letter as far as you can recall?

A. I don't remember.

Q. Then you are referred to, if one goes to the final paragraph in the first page:

"Given the complexities of this case and the particular anxieties of all concerned, I believe a further consultation nearer the time of inquest would be helpful and I believe that the views expressed by Mr Savage in relation to the attitude which we should adopt in respect of this matter are entirely correct and responsible in that we should acknowledge that everyone concerned in the care of this child was devastated by his death and that, where possible, answers will be provided to the queries raised by the solicitors on

behalf of the next of kin."

Do you know when you were expressing those views? Sorry, the first question is: do you accept that that is a record of the views that you were expressing at the time?

A. They're the views that I have always held.

Q. Yes. And do you know whether you were doing that at that recent meeting or is that just a general sense of your position?

A. I don't know. It looks as if it's more or less a minute of the meeting, doesn't it?

Q. Yes, it looks like that. Can you recall anything further about the attitude that you were saying should be adopted other than the fact that everybody concerned in the case should acknowledge being devastated by his death and seeking to provide answers so far as possible?

THE CHAIRMAN: I think we have that at the top of the next page, don't we? If you look at the first paragraph on the next page it, in effect, says the essential issue is about fluids and Mr Savage --

MS ANYADIKE-DANES: Sorry, what I was trying to get at is that if there was anything further about the attitude he said we should adopt. That, I think, is Professor Savage's view and he has fairly said that that has always been his view as to what the problem was.

But I was actually dealing with this question of the attitude that you thought the Trust and its clinicians should adopt. Can you help us with any more detail on that?

A. No, I don't think so.

Q. Well, why would you have to say that you should acknowledge or those concerned should acknowledge that they were devastated by the death of Adam?

MR FORTUNE: Sir, I do rise again at this stage. This is a solicitor's letter. What is the purpose of asking Professor Savage about what Mr Brangam thinks should be the Trust's position?

THE CHAIRMAN: Because Mr Brangam has reported these as being the views of Professor Savage. Professor Savage has said consistently -- and I entirely accept -- that he was devastated and that those who knew Adam and worked with Adam were devastated by Adam's death. The slight twist on that, which Ms Anyadike-Danes is asking, is -- if it's right that this letter from Mr Brangam is correct -- why is it that Professor Savage would need to be expressing the view that the Trust's position should be that everyone concerned was devastated by his death? And to put it bluntly, were you suggesting that to Mr Brangam because somehow you were concerned that that wouldn't be acknowledged as the Trust's position?

MS ANYADIKE-DANES: Thank you, Mr Chairman.

A. Well, I shouldn't speculate.

Q. Well, why were you --

A. I obviously felt that it needed to be said.

Q. That's exactly the point, Professor Savage. Why did you think it needed to be said?

A. I don't remember exactly, but I may have felt that we were pursuing a very legalistic approach to the inquest and the evidence that was given, whereas I felt that the family's needs were paramount rather than the Trust's or the doctors'.

Q. Exactly. Did that mean therefore that you felt that was being lost sight of?

A. Perhaps.

THE CHAIRMAN: Or that it might be lost sight of and you were giving a reminder?

A. Yes.

MS ANYADIKE-DANES: Thank you. So then if we go to the next page, you have again stated your view. I know, although we had this terminology "retrospect" yesterday, but in any event:

"Mr Savage feels the child may have received excessive fluids. I presume that Mr Savage will hold to that view if asked at the inquest. Again, I believe it is of critical importance that we obtain Dr Taylor's

specific instructions on that point."

And that continued to be your view, that he received excessive low-sodium fluids?

A. Yes, I think it's mildly put. It says, "Dr Savage feels the child may have received excessive fluids". I think that's understating my position.

THE CHAIRMAN: That's a legal understatement, isn't it?

A. Yes.

THE CHAIRMAN: What you would say it confirms --

A. I've always made that position clear.

THE CHAIRMAN: That was your position, your position was known to Dr Murnaghan, your position was known to Dr Taylor and it's now well-known by the solicitors.

A. Yes.

MS ANYADIKE-DANES: Can we go to 059-009-027? That is a memo that is attaching a fax, which we'll come to in a minute, but it's being circulated to the three of you: Dr Taylor, yourself and Dr Gaston. It says it's sent on 7 June. Then if we go to 059-014-038. That's the first page of it. This again is the Trust's solicitor writing to Dr Murnaghan. It is a two-and-a-half page letter in which the Trust's solicitor, as you can see, is setting out the various positions as he has distilled them from meetings. So for example, if one goes to the second paragraph:

"As you know, there are a substantial of number issues contained in the experts' reports which will require to be carefully and exhaustively examined and investigated and, in that regard, I have already had the benefit of very detailed instructions from Dr Taylor and these have now been reinforced to me by Dr Gaston."

He refers to Dr Sumner and:

"[Welcoming] a further statement from Dr Taylor in which he would deal with each of the criticisms raised by the medical experts. Although they don't entirely agree, you will be aware that Dr Sumner and Dr Alexander both thought that it was dilutional hyponatraemia that was the issue."

Then over the page, he sets out what Dr Armour classifies as the problem or at least the cause of death:

"Cerebral oedema due to dilutional hyponatraemia. Impaired cerebral perfusion during renal transplant."

And then sets out the veiled criticisms that the solicitor has distilled from Dr Sumner's report and, essentially, is saying will have to be addressed. You can see them there: Dr Taylor's estimated fluid deficit, the electrolyte values, the CVP readings. And then at the bottom of that page he raises two other issues:

"Dr Gaston has indicated during the course of the

procedure that there had not been an opportunity for Dr Taylor to accurately measure the urinary output."

If one goes over the page again, to 040, an additional point raised by Dr Gaston, which relates to the potential for this child, for whatever reason, to absorb fluid into the brain. He's asking for further literature or information on that, which could be put forward as a reason for why things ended up the way that they did. And:

"In conclusion, Dr Taylor has also undertaken to provide certain documentation on anaesthetic monitoring guidelines and a resume of learned papers [and so on]."

Then it ends up with:

"It will be necessary to have a further consultation with Dr Taylor and, no doubt, you will make the arrangements."

The reason for taking you to this is because this is a document that is sent to you as well as to Dr Gaston. Do you know why it was being sent to you?

A. How can you tell it was sent to me?

Q. Because the cover memo says so.

A. Can I see that?

Q. I've just pulled it up to you. That's where I started. 059-009-027:

"Attached is a copy of a lengthy fax recently

received from George Brangam, which raises several queries and requirements which are urgent and need attention and response as soon as possible."

Make the arrangements and then it's circulated and you're one of the noted people to whom it's circulated.

A. And you're asking why it was circulated to me?

Q. Yes. Why do you think Dr Murnaghan, who you say that you spoke to many times, he knows your views, you have set that out quite clearly -- in fact, he has received parts of your views in the solicitor's correspondence. Why is he sending you this, do you think?

A. I suppose because I was Adam's consultant, but he doesn't ask me to comment on it. He would have known my views quite clearly.

Q. Did you comment on it?

A. I don't remember.

Q. Sorry?

A. I don't remember.

THE CHAIRMAN: You're also going to be a main witness at the inquest.

A. Oh yes.

MS ANYADIKE-DANES: These are the things that, not to put too fine a point on it, the Trust solicitor is envisaging are likely to cause the Trust some difficulty in the inquest. Difficulty, that is, if you're trying

to ensure that you come through that process with the minimum amount of criticism, if I can put it that way. So he's sending that to you and what is your response to it?

A. I don't know what my response was, but I know what it would have been. It would have been --

Q. That might help.

A. I would have maintained my position that I believed Adam got excessive fluids and his death was due to that because of the results dilutional hyponatraemia and cerebral oedema.

Q. Given what you're recorded as having said, that we really ought to be acknowledging that we're all devastated that Adam has died, you have an earlier letter to Adam's mother of 19 February saying, we really need to find out what happened, do all that we can to learn the lessons and make sure it doesn't happen again. Did you think this process of getting information, this kind of information together, was assisting that attempt to find out what happened, learn the lessons and make sure it didn't happen again?

A. I think it was assisting Dr Taylor.

Q. Yes. Thank you. Then can we go -- you do actually write on 7 June. Sorry, I hadn't appreciated how quickly that came afterwards. 059-003-005. I beg your

pardon, professor; I hadn't realised that you had actually responded to that.

A. I remember this letter.

Q. So there's another page to that, 006. Let's put that up as well. It says:

"I have received your fax regarding Adam Strain's inquest and the points raised by Dr Sumner's report."

Do you envisage that to be a direct reference to the document we were just looking at?

A. Yes.

Q. And you set out information regarding the child's urinary output --

A. Yes.

Q. -- prior to surgery. You say what you think his insensible losses would be. Then if we go down:

"Assuming normal urine output for Adam was approximately 70 ml per hour, or in Dr Sumner's words, 75 ml per kilogram, I think it is acceptable that the maintenance fluids during surgery should have taken into account the overnight fluid deficit."

THE CHAIRMAN: It's the critical conclusion, isn't it, that whatever the deficit was, it's the last sentence in that paragraph:

"The difference between the two figures."

MS ANYADIKE-DANES: Yes, and just before that, because the

rate is something that you have previously regarded as important:

"The infusion rate per hour would then vary on how quickly one wished to catch up this deficit and giving 200 ml per hour would have ensured that the deficit was corrected in four to five hours. Giving 150 ml per hour, this would have taken much longer. The difference between the two figures, of 50 ml per hour, would only have accounted for 250 ml over the period of the operation and I doubt if this difference would have given rise to hyponatraemia."

Is what you're trying to say there that given what his urinary output was, given what he received, even if you had a slight quibble about whether it's 150, 200 or whatever it is, that's unlikely to have produced the level of hyponatraemia that has been identified in Adam; is that actually what you're saying?

A. Yes, it's a bit like when you asked myself and all the experts to analyse the input/output that there is always a little bit of discrepancy when you're reading through those figures. I'm saying that the discrepancy between Sumner and the other figure is not significant. And I think that's the question, probably, that Dr Murnaghan put to me.

Q. Yes. Is there any reason why, when you're setting it

out like that, you don't just say as the final point, "This child received excess low-sodium fluids and, as a result, he developed dilutional hyponatraemia"? Because in your view, it really was as simple as that in terms of the fluid input/output?

THE CHAIRMAN: I'm sorry, that's not fair to Professor Savage. Because in the letter from Mr Brangam to Dr Murnaghan, to which this is a response, Professor Savage is already acknowledged as having adopted that position.

MS ANYADIKE-DANES: Yes.

THE CHAIRMAN: It's the second page of the letter that we looked at a few moments ago. This is a specific response to two points. But it's unnecessary and a waste of Professor Savage's time to repeat in this response a position which he has already adopted and which has already been acknowledged by Mr Brangam as having been acknowledged.

MS ANYADIKE-DANES: I understand that point, Mr Chairman. Firstly, what the solicitor did was incorporate a reference in solicitor's correspondence. This is Professor Savage's own letter to the medical administrator, which has a degree of formality, and I was simply exploring with him why he didn't put it in those terms. This letter could be used to be shown to

anyone, given the proximity of it to the inquest. And I'm simply asking why you didn't include, in this letter, those views that you have had all along about dilutional hyponatraemia.

A. They were transparently clear to Dr Murnaghan. And of course, I wouldn't have been aware that a letter I wrote to the person who I assumed was my legal representative would have been made available to the coroner.

MR FORTUNE: Sir, I'm going to rise because clearly there would have been, at that stage, legal professional privilege attaching to this correspondence.

THE CHAIRMAN: I think this is unnecessary. I think that Mr Brangam specifically acknowledges Professor Savage's position in the letter that we looked at a few moments ago.

MR FORTUNE: One matter that concerns me -- and I have already touched on it -- is that when you go back to that letter from the solicitor to Dr Murnaghan, it is quite clear that the solicitor failed to ensure his duty to advise the Trust that there was an obvious conflict of interest.

MS ANYADIKE-DANES: I wonder, Mr Chairman, if we can come to those sorts of points with another witness? I'm not sure it's an appropriate place to do it at this stage.

MR FORTUNE: Well, Professor Savage is being asked, at different stages, about his view. His view has been consistent throughout: that Adam died as a result of too much fluid administered too quickly. And yet in that letter from Mr Brangam, the solicitor is setting out various points, essentially put forward by Dr Taylor, that he, Mr Brangam, wants arguments or suggestions to address.

MS ANYADIKE-DANES: And we are going to come to that, but I'm not sure that this is the appropriate witness to deal with it.

THE CHAIRMAN: I've got that point.

MS ANYADIKE-DANES: Thank you.

Can we go to your paragraph 2:

"It is true after examining the notes that I have said that Adam's electrolytes should have been repeated before going to theatre. The junior staff involved were unable to obtain venous access because he got extremely upset. This was not pursued in the ward situation. I understand that venous access was readily achieved in theatre and therefore it would have been possible to check the electrolyte picture at that stage. I am not sure whether these comments are particularly helpful and, obviously, we will need to discuss them further."

What did you think you particularly needed to

discuss further about these comments with Dr Murnaghan?
A. I don't know. I suspect that I expected the opportunity to reiterate my position, since the letter mainly referred to Dr Taylor's position and not to mine.
Q. Was it the implications of these being your views that you wanted to discuss with Dr Murnaghan? Because at that stage, you will have received the solicitor's letter, so you know what is trying to be achieved. Was this really putting down a marker for what your views were?
A. Yes, I think so.
THE CHAIRMAN: Or putting down another marker?
A. Yes.
MS ANYADIKE-DANES: Then there is a further consultation arranged. We see that by 059-002-003, the memo there. There we are:

"I write to confirm that a further consultation has been arranged for Friday 14 June."

And it is circulated to -- well, you are included in those noted. And of course, the inquest was due to start on the 18th. You will have seen, Professor Savage, that there was an effort made by the consultant paediatric anaesthetists, with some involvement of Dr Murnaghan, to produce a document, and ultimately two documents were produced really. One was

a draft of recommendations that was presented to the coroner and the other is a document that was, effectively, like a press release. And in fact, we can see that there was press reporting quite close to the press release document.

Were you involved in any of those meetings that produced either of those documents?

A. I don't know. I remember the -- I remember seeing the document that was presented at the coroner's inquest, but I don't remember that I was involved in drawing it up in any way, unless you can, as you often do, produce something that shows that I was. But I don't remember it.

Q. It's usually inadvertent. 011-014-107A.

A. I know the document, yes.

Q. That's the one that was provided as part of Dr Taylor's evidence.

A. Yes.

Q. Do you recall, if you did see it, whether you saw it before it was produced for the coroner or at some stage afterwards?

A. I don't know.

Q. Is there anything in there which, if you had been part of a meeting discussing its formulation, would have troubled you or anything that isn't in there which you

would have preferred to see?
A. No. I think I regarded it as a letter to show that the Trust were concerned about the circumstances around Adam's death and were going to continue making efforts to make sure it didn't happen again, and this was a preliminary statement.
Q. Were you aware --
THE CHAIRMAN: Sorry. Do you mean a preliminary statement or a statement preliminary to further steps which the Trust would take to improve practice?
A. The latter, I think, yes. It says, "The Trust will continue to use its best endeavours, [et cetera]".
MS ANYADIKE-DANES: Were you aware of what those endeavours were?
A. No.
Q. Were you aware that there were any endeavours being made that they were then going to continue?
A. Not at that stage, no.
Q. Were you aware that they instigated such action afterwards?
A. Well, I know in relation to the last paragraph that they did improve the turnaround time for emergency blood samples between the laboratory and the intensive care unit.
Q. Do you know when that happened?

A. No.
Q. Well --
THE CHAIRMAN: Do you know that it happened as a result of Adam's death and the inquest?
A. Yes, I think so. But I think Adam's -- I think that had been an issue before and Adam's death probably highlighted it.
MS ANYADIKE-DANES: Can I just ask: on what basis do you think that it happened as a result of Adam's death?
A. Because I need to be -- I need to be careful because I know that perhaps Dr Crean said there were meetings with Selwyn Nesbitt(?), who was head of the laboratory shortly afterwards and the situation improved. So that may be what I remember from recently rather than from 17 years ago.
Q. That's actually what I meant. Do you recall --
A. I was not involved.
Q. And so you don't recall, at the time, anything happening that was directly related to Adam's death in relation to turnaround times?
A. No.
Q. Do you know if this document was circulated at all --
A. No.
Q. -- within the paediatric department?
A. No, I don't know.

Q. You don't know it was circulated or you do know that it wasn't circulated?
A. I do not think it was circulated.
Q. Thank you. When you came to give your evidence to the coroner, were you -- let's pull it up. 011-015-109. Then the second page, before we get into your answers to questions, 110.

So there is a typed-up version of the answers you gave to questions. But your direct evidence is reflected in the typed part, if I can put it that way. Is it clear there, when you're giving your evidence, that you think that Adam received too much low-sodium fluid too quickly and, as a result, developed dilutional hyponatraemia?
A. No.
Q. Why?
A. Because, as I said before, my advice was to put a strictly factual statement of the areas in which I was involved and not to draw any conclusions because that was the role of the coroner.
Q. I understand.
A. It may not have been wise advice, but that was the advice I had.
Q. As we said before, in relation to your 28 November letter, here you are before the coroner and you do

actually have some factual things to say because you and Dr O'Connor went and looked at the medical notes and records and you identified certain things which are a matter of fact.

A. Yes.

Q. And some of them are a matter of actual record which could have been adduced to the coroner. Is there a reason why you didn't do that?

A. No, but it's perfectly clear from the handwritten --

Q. Yes --

A. -- that I did explore that when asked.

Q. That was in answer to questions. Is there any reason, when you were giving your evidence, why you didn't provide that information to the coroner?

A. There was no reason, but I would have expected the Trust solicitor to explore that with me.

Q. What do you mean, "explore it with you"?

A. Ask me what my view was or, indeed, the coroner or someone.

THE CHAIRMAN: Just to get it right, when you come to give evidence to the coroner, it's the typed statement which is your evidence and then you're asked questions by representatives of the Trust, representatives of the family and by the coroner himself if he wants.

A. That's correct.

THE CHAIRMAN: So when you come to give evidence, it starts off as a page-and-a-half of written statement and that is then supplemented by any oral questioning and answers?

A. Yes. I was immediately asked about his sodium, as you can see.

MS ANYADIKE-DANES: Yes. I appreciate that, and I'm going to pull up the typed-up version, which is much easier to read. The question I simply asked you is why you didn't volunteer that. It's an important consideration. It was what was at the heart of your view as to how that had developed. I am simply asking why you didn't volunteer that to the coroner.

THE CHAIRMAN: The short answer to that is because the statement that we've already looked at earlier this morning became the statement to the coroner and Professor Savage has given his answers about that. So we know that that was topped and tailed, in effect. That became the written statement to the coroner and was then supplemented by the oral evidence.

MS ANYADIKE-DANES: Yes, Mr Chairman, of course that is so. But between 28 November and, on this occasion, Professor Savage has seen much to indicate other positions taken by other people, and it might have made things clearer if he had simply set out some of those

facts in relation to the serum sodium and the fluid.

THE CHAIRMAN: I don't think we need to go down this route. If the coroner wants supplementary statements, he can ask for them. That's the process.

MS ANYADIKE-DANES: Can we then go to 059-001-001? That is a note that Dr Murnaghan makes, his own aide-memoire, it looks as if it is, of him attending the Coroner's Court:

"Generally, the outcome was satisfactory with a fair write-up in Friday's Evening Telegraph. Other issues identified which relate to structure and process of paediatric renal transplant services. Agreed with IWC --"

I think that's Dr Carson, isn't it?"

A. Could be.

THE CHAIRMAN: We were told yesterday that it was.

MS ANYADIKE-DANES: "-- should deal with this as an RM issue and arrange a seminar."

We understand "RM issue" to be a risk management issue.

So before that went out, had you formed the view that there were issues which had been identified relating to the structure and process of the Paediatric Renal Transplant Service?

A. Well, we knew it wasn't perfect.

Q. Well, what were the issues that you think had been

identified that related to the structure and process of the Paediatric Renal Transplant Service?

A. Well, those sorts of issues had been identified and addressed by reviews of renal services in Northern Ireland, both in 1990 and 1995, and were being attended to.

Q. I have a slightly different question. This is something that, as I understand Dr Murnaghan to say, he is taking out of issues that were identified at the inquest.

A. He never communicated that to me.

THE CHAIRMAN: That seems to be the sense in which the note is written. It's in the context of the inquest and it ends up:

"Generally, the outcome was satisfactory. Other issues identified ..."

Which, on a reading, suggests other issues identified in connection with the inquest. But that doesn't mean anything to you?

A. He never discussed it with me.

MS ANYADIKE-DANES: But did you form the view that other issues had been identified "relating to the structure and process of the Paediatric Renal Transplant Service", irrespective of whether Dr Murnaghan mentioned them to you?

A. What do you propose the phrase "structures and process"

means? Because I'm not quite clear. I assume only Dr Murnaghan knows what he means.

Q. So far as you're concerned, did anything come out of the inquest relating to the Paediatric Renal Transplant Service?

A. Well, I think -- I mean, I can draw conclusions at this distance. For instance, it was a very young service in the Children's Hospital. We had relatively inexperienced surgeons on call on occasions, as was the case with Adam's transplant. So yes, we needed to look at all that again and, of course, shortly afterwards, a full-time transplant surgeon was appointed, who took a special interest in transplanting children. So there were issues like that, but --

Q. What do you think he meant by "a risk management issue"?

A. I don't know.

Q. Did you think there were risks?

A. I didn't think there were risks, no. I thought that Adam's situation was unique. And subsequently, we didn't have any other deaths of any similar nature.

Q. I understand that. I have taken you through -- and the reason for doing so is so that I'm in a position to ask you this question. I have taken you through, so far as we have it, all the documentation that relates to the correspondence with you about different people's views

and what was going on and meetings.
A. Yes.
Q. So that's what we understand you to have known, unless you tell us something different. Did you regard that as an investigation into Adam's death?
A. Not a full investigation, no.
Q. Did you regard that as an adequate attempt to investigate Adam's death?
MR FORTUNE: Before that question is answered, is my learned friend saying that the coronial inquiry was not an adequate investigation?
THE CHAIRMAN: There are different sorts of investigations, Mr Fortune. So as I understand the answer -- and maybe Professor Savage will clarify this -- you accept that the coroner did fulfil his remit, but that would not necessarily be the extent of the remit which you would want to be followed within the Royal; is that right?
A. Well, my understanding within the Royal was that Dr Gaston and Dr Murnaghan would complete their investigation, and if they felt that anything needed to be addressed or investigated further, that that would be set up and perhaps that's what this scribbled note means. But that was not communicated to me.
MS ANYADIKE-DANES: I understand that. But I had asked you it in a slightly different way and I think you were

helping me with the answer. I think you said that you didn't believe what you knew of what was happening -- or what happened -- constituted a full investigation.

A. At this distance, I don't think so. At that time, I took the view that if Dr Gaston and Dr Murnaghan, in their respective positions, were satisfied that that was the process in 1995 --

Q. Yes.

A. As I've said, I regret that perhaps I didn't think about that outside the box and think, "This isn't quite what we need, we need something further".

Q. That was going to be my next question. From the correspondence that we've seen, there would appear to be quite a bit of time taken up with positioning the -- well, various positions in relation to the evidence that's going to be given to the inquest, if I can try and put it neutrally in that way, and dealing with slight differences of view.

A. Mm.

Q. But that is a different process to one which I thought you were alluding to, as to the sort of thing that might have been investigated into in Adam's death in the way that you had written to Debbie Strain in February. If we go back to that letter --

A. I remember the letter.

Q. Just for the benefit of others.

THE CHAIRMAN: Sorry, maybe the way to deal with it is this: when you said a few moments ago:

"I regret perhaps I didn't think outside the box and think isn't quite what we need, we need something further."

Looking back on it now, what further do you think now that you he needed at the time?

A. I have listened to the expert witnesses and I have thought about what the process should be. And, of course, there is a very structured process now for risk management within the Trust. My view is that the first step that I needed to take was to check with Bob Taylor that he understood what had gone wrong and accepted it. And I came to the view, as I've said, particularly after the inquest, that that was the case.

I think then there needed to be an independent view taken of that within the Trust. And I believe that Dr Gaston and Dr Murnaghan were undertaking that and had also been satisfied. I think if that was not the case that everyone was satisfied, then you needed to bring in some sort of internal -- sorry, external expert or experts who would review the situation around Adam's death, and if they thought it was necessary to look at the way the transplant service was run, then that might

evolve from it.

But I think that what did happen, that it wasn't continued on after the coroner's inquest. The coroner made his decision, we accepted it, and things seemed to have ended there. What I'm saying is that, with the eye of hindsight and listening to what experts say -- and of course they're talking in 2012, often from ivory towers -- I can see that what they recommend would have been better and certainly would be something I would do today.

THE CHAIRMAN: They weren't really ivory tower experts, professor. The experts were practising. I think it's unfair to say that the inquiry's experts are ivory tower --

A. I withdraw that.

THE CHAIRMAN: Because they are people -- and one of the reasons we went to them was because they're people who are active in these areas and who -- most of them have been active through this period.

A. Mm-hm.

THE CHAIRMAN: We specifically say to them: we are not asking you to look back and apply 2012 standards; we're asking you what was happening, what were you doing, what might have been done better in 1995. There isn't -- I mean, I don't want you to be too defensive about this.

There is not a wholesale attack on your renal transplant service. Far from it. You should understand from the evidence that has been given to date that there are people who are under far closer scrutiny at this inquiry than you are. I don't want you to take away any different impression. But I think it's unfair to the witnesses and a bit unfair to the inquiry to suggest that we have some sort of ivory tower approach.

A. I withdraw that suggestion. It's perhaps overstating the case. But I think if we look at the Bristol inquiry, which has been referred to, to set a standard, the situation in Bristol and in other places was no different to Belfast in 1995.

THE CHAIRMAN: Well --

A. And there are criticisms obviously.

THE CHAIRMAN: There are lots of other places that had lots of problems. Bristol was one, Alder Hey was another. And in different areas, different institutions had different problems.

A. I want to say I'm not trying to be defensive. I would prefer that the best was done to investigate any situation in which I was involved.

THE CHAIRMAN: Okay.

MS ANYADIKE-DANES: Thank you very much indeed.

What I had just taken you to -- we can pull it up,

the second page or the next page of that note. The reference is to RM, we see, and then a seminar. It says:

"With Mulholland, Hicks, Gaston, Taylor, Savage, O'Connor, Keane."

And we believe that to be, "Ian Carson and Dr Murnaghan present. ASAP". Was there any communication with you about a seminar?

A. Not that I remember.

Q. If there had been a suggestion, given that you're wanting to keep Adam's mother informed, if there had been a suggestion that the way in which they were going to deal with some of these broader issues was through a seminar, do you think you would have remembered that?

A. I think I would.

Q. Can you help us with how that would actually work? It's not your document, so you may not be able to help us with it, and maybe a slightly better way of putting it is: if there is going to be some sort of meeting, seminar, conference, call it what you will, afterwards, that is going to explore the wider picture in relation to Adam's death, what would you have thought that should involve?

A. Well, I certainly would have thought that it should have involved an examination of the clinical notes.

Q. Mm-hm.
A. And going through them page by page, and the same with the anaesthetic notes. And I think it would have been wise to have had someone independent doing that and presenting their findings so that they could be further explored. And then -- of course, we were before the days of root cause analysis and so on. But it would be that type of thing that I would have thought would have been useful. I don't know why the word "seminar" is used because it's hardly an appropriate word.
THE CHAIRMAN: In terms of an independent expert, there already was one, wasn't there? So you could bring back Dr Sumner and say, "You know the case, you have already given your evidence. Sit down and let's discuss what lessons there are to be learned".
A. Mm-hm.
MS ANYADIKE-DANES: So that could have happened. And if that had happened, or at least part of that, do you envisage that that would have involved something broader than just the anaesthetists, that there would have been issues there of more general application?
A. Well, as you can see, one of the transplant surgeons is in the list and so are the nephrologists.
Q. Yes, but that might just be exploring --
A. Do you mean --

Q. -- the details in the way that you said, "Let's get the medical notes and records and go through them". I meant coming out of that, do you think that coming out of that you would be trying to reach a broader audience, if I can put it that way, for the lessons being learned than simply the anaesthetists?

A. Well, I've thought about whether the inappropriate use of fifth normal saline in Adam's case would have informed a much broader audience. I think what people were thinking was that this was a unique operation. I don't think we appreciated that there was a problem with fifth normal saline in general and, as you are aware and the chairman, there is a wealth of medical publications relating to what is the appropriate fluid to use in children, which went on for 20 years after Adam, before fifth normal saline fell into disrepute. Because it was the standard maintenance fluid in those days.

Q. It's not so much that element, Professor Savage, that I'm wondering whether you had wanted to tease out. Because if one looks simply at the cause of his cerebral oedema, it was dilutional hyponatraemia and the way that developed was through providing too much low-sodium fluid too quickly. Irrespective of exactly how that had happened, that was, so far as Dr Sumner thought, so far

as Dr Armour thought, and so far as you concluded. And for that matter, Dr Alexander. That was the mechanism for the development of Adam's cerebral oedema. So that particular situation could happen in any number of circumstances. For example, what Dr Armour took out of that is that she had not appreciated that that kind of condition could develop while surgery was ongoing and she said in her evidence that's why she published the paper for other pathologists, to alert them to that. So she has a solution broader than just Solution No. 18 and paediatric anaesthetists.

So what I'm exploring with you is -- and you being another paediatric discipline -- did it occur to you that, if we were going to have a symposium, seminar, whatever it is, where we look at these things, that we could look at them more broadly and see what lessons could be imparted to others about that issue: that giving too much of that type of fluid could produce fatal results and relatively quickly?

A. It obviously did exercise my mind. And as you know, I did subsequently write to the Nephrology Association, the British Paediatric Nephrology Association and communicated with the transplant service to explore whether, in fact, this was a problem that had been seen elsewhere, and you've seen the references that I had

that someone had said to me "I think there are other cases like that".

Q. Was it Mr Postlethwaite?

A. Yes. Then there was an audit carried out and published, but they were unable to determine whether the deaths from overhydration were actually due to hyponatraemia. I certainly alerted the national nephrology professionals and, indeed, of course, Adam's death had such an impact on me that any meeting I went to, I was talking to people and asking: have you seen this before, it was a terrible tragedy in our unit.

Q. That's actually the very -- you're making the very point. You see, Dr Armour had thought: there's something in here for those in my discipline, if I can put it that way. You had thought the same thing. The Trust seems to have thought that about anaesthetists, but it didn't travel very far, if I can put it that way. But what I'm trying to get at is: if people are thinking that it has these other aspects to it that have learning points for others, did it not occur to you that we might, in a concerted way, try and get out the lessons more systematically from Adam's death?

A. No, it didn't because it was one case, it was one situation, and I think that's probably what influenced my thinking. However, it's interesting that when

I subsequently met with Mr Koffman who was carrying out a transplant for us at Great Ormond Street, he was able to tell me about the case that they'd had, and subsequently because of our discussion, they published that case. And certainly I thought afterwards that's something I could have done, I could have published the case in a paediatric journal and alerted other people to the fact that it had happened and that might have stimulated other people to think, "That has happened to us", and it would have helped the momentum of the situation. That did develop in the paediatric literature, where there was increasing questioning of the use of fifth normal saline, until the point when it was removed from normal use.

Q. I was going to ask you about that. You published in the Ulster Medical Journal in 2000, a piece that dealt with -- I think it's from 1984 to 1998, I believe, was the span of years.

A. Yes.

Q. And you did identify in that article that there had been two fatalities.

A. Yes.

Q. One was Adam and one was another death that you identified. Just while we're at it, when did that child die?

A. Some time before, but that child died from respiratory complications.
Q. I understand that, but shortly after or during a renal transplant?
A. Oh no, after renal transplant.
Q. And for a point of comparison, was there any investigation into that child's death?
A. No. We knew the cause of that child's death.
Q. I understand. But the point that I'm making is, you did actually publish and, although you don't refer to him by name, you refer to his case --
A. Yes.
Q. -- but you don't develop anything out of his case in that paper.
A. No.
Q. Is there a reason for that?
A. I think we were just looking overall to see if our results in Belfast were comparable to other national units.
Q. Yes, that's what the paper was addressing.
A. Exactly.
Q. What I meant was: was there a reason why you didn't publish in relation to Adam's case?
A. We didn't mention any specific cases in it. We were looking at how our unit was able to perform and compare

it with places like Great Ormond Street or Manchester or Glasgow. It is part of that audit that you look and say: are we doing as well or better than other people?

Q. I apologise, Professor Savage, I think I have not made myself clear. I know that's what the paper was about, I've read the paper. What I'm asking you is: since you were publishing, did you not think that you could, in the same way as Dr Armour thought, publish about this case?

A. No, I didn't.

Q. Why not?

A. I don't know. Perhaps I didn't have time. Perhaps it didn't occur to me. Perhaps -- I mean, I didn't do it. I could have done it, and as I say, Mr Koffman did with their case, and at that time I thought perhaps that's what we should have done with Adam.

Q. Yes, thank you. Can I pull up the evidence to this inquiry by the coroner? Witness statement 091/1, page 2. The coroner is being asked in the second question the details of the mechanism he believed was in place in 1995 for the dissemination of expert opinions that he obtained for his assistance at inquest to the medical profession. And he says he didn't think there were any.

And there was a discussion at the inquest as to how the views of Dr Sumner could be disseminated amongst the

medical profession in Northern Ireland. The consensus was that there was no effective means of doing so, other through the medical literature.

A. Mm.

Q. And Dr Sumner mentioned that he was the editor of the Journal of Paediatric Anaesthesia and he was going to try and arrange for Professor Arieff to write an editorial.

So it's at that stage it would appear that the coroner is being told: the only really effective way of doing that is for publications. Then that was an avenue that was open to you and that's, in a way, why I'm really asking why you didn't do it.

A. If I remember the sequence of events with Dr Sumner, he wrote to Mr Leckey to say: as a matter of interest and by coincidence, I have had a paper submitted to me in relation to hyponatraemia and because of that paper, I'm going to ask Arieff to also write an editorial. Because this was the developing view within the paediatric community that maybe fifth normal saline was not as safe as it might be. But of course, publishing one case isn't always accepted by a journal. So it is possible that I could have written the case and submitted it, yes, but I didn't do so.

Q. That's all that I wanted --

A. But I was aware, of course, that Sumner had done that in the journal of anaesthesia.

Q. And we have seen that. It's not clear that it's entirely dealing with the situation that you had here with Adam. But in any event, publishing in the Ulster Medical Journal might have been a more direct way of getting it to your colleagues.

A. It might have been.

Q. Yes. And then he goes over the page, witness statement 091/1, page 3:

"I had assumed that the Royal Belfast Hospital for Sick Children would have circulated other hospitals in Northern Ireland with details of the evidence given at the inquest and, possibly, some best practice guidelines. Children are not always treated in a paediatric unit and, in the event of surgery, the anaesthetist may not be a paediatric anaesthetist."

It seems that the coroner is taking the point in relation to Arieff's paper, really, which is that there's more to this than the problem of dilutional hyponatraemia. Whichever mechanism that leads to it, there's more to that than major paediatric surgery. And in any event, there's other surgery taking place in the rest of Northern Ireland.

So what he's suggesting is that the Trust could

have, or the Children's Hospital could have, done that. Was there any suggestion that you were aware of at the time that the Children's Hospital could have done that to have alerted other paediatricians or other anaesthetists, for that matter?

A. Well, if you take the Arieff paper, I think the most significant thing in that paper is that the children identified in it were children who were having minor surgery.

Q. Exactly.

A. Therefore I accept what he's saying, that it would have been beneficial to have circulated that to any anaesthetist in Northern Ireland who was carrying out any form of anaesthesia in children and drawing their attention to Arieff's paper, yes. But I don't know that there was a mechanism to do that. And it would not have been my responsibility; that was for the anaesthetist to do.

Q. I am not suggesting it was your responsibility. The question I asked you is: were you aware if there was there any discussion that that might happen?

A. Not that I know of. Subsequently, of course, there were working parties that were set up to develop the guidelines on fifth normal saline, and I think Northern Ireland led the way on that.

Q. Yes, that's a slightly different point and that's after other children had died.
A. Yes.
Q. The purpose of communicating lessons learned is perhaps to try and avoid that.
A. Exactly, and hopefully it has avoided that and has avoided it across the United Kingdom and the world.
Q. Can I take you back to something that you answered to the Chairman, which is when you were trying to explain why you reached the view or had the view that Dr Taylor had accepted the coroner's verdict. I think you referred to the fact that he said that he was teaching out of a textbook, so the conventional teaching, if I can put it that way. And you also said that he had changed his practice. Did you know that at the time?
A. No.
Q. So that wouldn't have helped reassure you that he was accepting the verdict at that time?
A. No.
Q. Thank you. I would like to move on to something slightly different in terms of the education.
If we just pull up your CV, you have a quite onerous -- I don't say that in the sense that you regard them as being a burden -- teaching responsibilities. If we move on through, if we look, we can see that you became

a professor at the university in June 1990.

A. Mm-hm.

Q. And then, in 1997, you became assistant director for medical education. And then, in 2001, you're director for medical education at the university. Can I ask you how --

A. I think I may have become a professor in 1996, actually.

Q. I think you did correct it before when we showed that. Yes, I beg your pardon. Can I ask you how the connection at an organisational level worked between those at the Trust who were going to provide training and the university, where the students were? How did that work exactly?

A. In 1995?

Q. In 1995. I appreciate it has changed significantly, but in 1995, how did it work?

A. The university has responsibility for undergraduate education --

Q. Yes.

A. -- and to produce safe and competent doctors.

Q. Yes.

A. They are then provisionally registered so that they can practice for one year and continue their education as pre-registration house officers in 1995. There's now what's called the foundation programme, which is two

years. The responsibility for the education of those pre-registration doctors was shared between the university medical school and the postgraduate deanery, or I think it was the Northern Ireland Postgraduate Medical Council then. They took the responsibility primarily for that educational year and it was devolved to them by the university. There are no pre-registration doctors who work in paediatrics.

Q. Okay.

A. So the university, in terms of paediatrics, didn't have any role in the education of pre-registration doctors in paediatrics. People did paediatrics and still do after their pre-registration year --

Q. Yes.

A. -- or after the foundation programme now.

Q. And in terms of how that was actually managed, there was a pre-registration committee, wasn't there, which included the Dean of Medicine, the Postgraduate Dean or professors of medicine and surgery? And that pre-registration committee -- correct me if I'm wrong -- included the approval of the hospitals that were going to participate in providing that training --

A. Yes.

Q. -- monitoring the attachments and the appointment of the clinicians who were going to act as the educational

supervisors; is that right?

A. Yes, for the pre-registration year.

Q. And on the Trust side, though, that had an educational supervisor subcommittee. And did that subcommittee report to the Pre-registration Committee?

A. I think there were members of -- each Trust would have had a member on the Pre-registration Committee. I mean, I don't actually know the exact structure, but it was that type of structure.

Q. Okay. So if we can confine ourselves now to the Trust side because it is going to organise the appropriate training in that pre-registration year, and I presume there's a formal link. Is there a contract or an agreement as to what they have to provide to the university?

A. I don't know what the situation was in 1995.

Q. I understand.

A. Today, there is a very clear structure with postgraduate sub-deaneries, who relate directly to the university --

Q. Okay.

A. -- and they're related to the major trusts in Northern Ireland.

Q. But in 1995, Dr Taylor was on the education subcommittee of ATICS.

A. Mm.

Q. Was there an education subcommittee for paediatrics?
A. Yes.
Q. So on the Trust side, you had these subcommittees of the various -- are they the rotations that the trainees in their pre-registration year would go round?
A. I'm not sure what --
Q. I'm trying to see what the set-up is at the moment.
A. I'm trying to say to you that I had no involvement in the pre-registration year --
Q. Ah, I understand.
A. Because the university had no involvement in the pre-registration year.
Q. So your only link is to do with the undergraduate year?
A. Yes.
Q. Did the university have somebody like you who was overseeing, if I can put it that way, the pre-registration year?
A. The pre-registration year where?
Q. Well, as we understand it, the trainees are coming to the hospital and they are going through their rotations.
A. Yes.
Q. There are subcommittees for each of those rotations.
A. Yes.
Q. There are people who will sit on that. I presume that the clinicians who are providing that training are

discussing how the trainees are managing, whether they're keeping up, whether they're not. That sort of business, if you like. All to deliver an appropriate pre-registration training. And all I'm asking is: did the Trust have somebody higher up above those individual subcommittees that was managing that process so far as you were aware?

A. I think so, yes. I think the Royal Trust had an education committee and probably a director.

Q. And a director of that?

A. Yes.

Q. Thank you.

A. But I want to go back and emphasise that that had no relationship to paediatrics or to the Children's Hospital.

Q. What do you mean, it had no relationship to paediatrics?

A. Because we did not have any pre-registration doctors in paediatrics.

Q. Okay.

A. It's a post-registration training. Sorry, am I not making myself clear?

Q. I didn't understand you at that point in relation to that, no.

A. There are no pre-registration doctors in 1995 undertaking jobs in paediatrics.

Q. Okay. So if they were being trained, they were being trained in their post-registration year?
A. Yes.
Q. And who was involved in that?
A. That was the postgraduate deanery.
Q. And who, on the side of the Trust, would be managing the delivery of that training; is it the same education committee?
A. No, the deanery has a paediatric education subcommittee or, as it was in those days, I think, the Northern Ireland Postgraduate Medical Council, which eventually became the deanery.
Q. And if one wanted to introduce clinical-based learning, how would that happen at either the pre-registration or the post-registration level?
A. That decision would have to be taken by those training committees.
Q. Sorry?
A. That decision would be taken by the training committees.
Q. Yes.
A. And the requirements for training in paediatrics or surgery or whatever are laid down by the deanery and by the Royal colleges.
Q. We know ultimately, for example, that the hyponatraemia guidelines became something that was taught about and

trained about.

A. Yes.

Q. So that did find its way into that process. Short of having a guideline issued by the Chief Medical Officer, is there a way in which the learning that comes out of clinical experience can be channelled through?

A. I can only comment on the undergraduate curriculum.

Q. I understand that.

A. There is no formal method or has not been, whereby the findings, for instance, of a coroner reach the medical school. However, in the case of hyponatraemia, and indeed other cases related to electrolyte problems such as hyperkalaemia, which can also result in fatality, the medical school would pick up on those things and, if necessary, include them in the undergraduate curriculum and they have done that with the hyponatraemia issue. Every medical student has to take the online training that's provided by the British Medical Journal and produce a certificate that they have completed it as well as having core training in managing electrolytes in children.

Q. I understand that, Professor Savage, but that's now and not then. In 1995, if you had wanted to do something like that, what would be the mechanism for getting those case studies, effectively, and the learning out of that,

into the education and training?

A. Well, the undergraduate curriculum is laid down by the GMC in a series of documents called "Tomorrow's Doctors". So they define what should be core medical training to make safe and competent doctors. They do not define that you should have extensive training in intravenous management of children because that is a postgraduate training issue. Nevertheless, medical schools have the freedom to include in their curriculum any issue which they think is pertinent in the local situation. So if for instance you lived in a city where there was a high incidence of tuberculosis, that medical school would probably have considerable emphasis on that, and in Belfast, because of our concerns about hyponatraemia, that has been included in the undergraduate curriculum here.

Q. I understand that because you explained that before. But what is the mechanism of doing that? Is it something that the clinicians who also teach, if I can put it that way, could bring to any of these meetings and say, "Look, this is a very interesting situation we have here, we think we could use it as a teaching example", is that how it would work?

A. I don't think we would particularly use it -- we're teaching principles of management, not --

Q. Yes, but it's --
A. -- examples. You have seen the teaching material --
Q. Yes, I have.
A. -- that's used and it doesn't specify particular cases. It gives you a range of cases where there are electrolyte disturbances in children and asks the students: how would you cope with this, what would the treatment be? And then it gives you the correct answer. So that's part of the core teaching in paediatrics. And even in 1995 -- and I think you have the outline curriculum from then -- it does list electrolyte management in children as being part of what they should learn, the basic principles --
Q. I understand that. The only point I was trying to get at is: if you wanted to get --
THE CHAIRMAN: Sorry, you have to let him finish his answers. It's a number of times, he has been finishing answers, and you say interrupt and say, "I understand that". The professor has to finish.
MS ANYADIKE-DANES: I'm sorry, Mr Chairman, it's because I don't think I'm communicating the question that I'm inviting the professor to answer.
THE CHAIRMAN: It doesn't help me to cut off his answer then.
MS ANYADIKE-DANES: I apologise, professor.

What I'm --

A. The mechanism?

MS ANYADIKE-DANES: Yes. That is what I had meant. You had given the example that, in relation to the hyponatraemia guidelines, they did become part of teaching. So what I'm trying to ascertain is: how does that happen?

A. It happens within the university that, if they feel there is an issue that's relevant to medicine in general or to a local situation, then the education committee of the university would decide that that was going to become part of the core teaching. So in paediatrics, the core teaching is run by the Department of Child Health. And following Adam Strain's death, and following the investigation and production of guidelines for hyponatraemia, the Department of Child Health then acted to -- in fact, they had acted in advance of the instructions from the Patient Safety Agency to put that into undergraduate teaching, despite the fact that it's not a requirement of the GMC.

Q. Thank you. So there was a mechanism for doing that?

A. Yes.

Q. Thank you very much indeed. I'm sorry to cut you off; I'm always so conscious of the time that we have available, and if I don't correctly communicate my question, I then become a little concerned that there

will not be sufficient time to address the points that I really do want to cover with you. So I apologise for cutting you off. It doesn't mean that I'm not interested in what you have to say.

A. I'll try and make my answers shorter.

Q. No, I will try and be clearer about what I want you to answer. If I move then to the point about how the Paediatric Renal Transplant Service came from Belfast City Hospital to the Children's Hospital. You did give, in your evidence, as to why you wanted that to happen. If young children -- which is what you wanted to happen -- were to have the opportunity to be transplanted, then for that to happen in an adult hospital was inappropriate. And it was appropriate for them to be brought over to a children's hospital setting, is what I understood your evidence to be.

A. Yes.

Q. And that what you wanted was to be having children transplanted who were of the age of Adam and maybe even younger. In fact, I think the first transplant that happened in the Children's Hospital was in 1990 --

A. Yes.

Q. -- when there were two. And I think there were there was one in each of the next years and then you had Adam's year of 1995 when actually there were three: one

in September and two in November, including Adam's. What I want to ask you is: when you wanted to extend the service to make it available for children of that age and therefore wanted to bring it to the Children's Hospital, what actually had to happen from an organisational point of view to enable that to take place?

A. Well, I think you have been provided with the Renal Services Review 2002.

Q. Yes.

A. There are renal services reviews that take place regularly, so this one is 1995. There was one in 1990 and one prior to that. In the 1995 one, it makes the point that it has been shown that death rates are lower and graft survival better when children are treated in paediatric units. The conclusion of that report is that a paediatric nephrology unit at RBHSC should be developed as the regional paediatric nephrology unit for Northern Ireland with nephrology beds and a haemodialysis facility and funding for multidisciplinary team, special provision for adolescents, et cetera.

So essentially, the Department of Health are the people who review the renal services and the needs of children and they take evidence and then say, "This is

what should happen and this is what we will fund".

Q. Then what actually happened from those two trusts to make that possible? That's what the Department of Health wants, that's what it perceives as the community's need, if I can put it that way. What then happened between those two trusts for that service to be brought to the Children's Hospital?

A. Initially, as you know, the transplant and dialysis service was developed in co-operation with the adult service --

Q. Yes.

A. -- because it was an enormously successful and innovative service. And it was led by Professor Mary McGeown. So when I started developing a service in Northern Ireland, I worked very closely with her and with the team there. And we started doing the transplants in the older children, we started developing home dialysis for the children, which wasn't available for adults at that time. Until we got to the point where we needed some children to have haemodialysis, which was very stressful for the adult nurses, they weren't used to coping with children who would get a bit distressed. And also, we now had smaller children who did not fit well into an adult environment.

So the budget was there for the renal service for Northern Ireland, we then proposed moving gradually the service for children to the Belfast Children's Hospital and, as that was done, the finance followed the patients so that money moved within the renal budget from the adult service because the children's costs were obviously included in that move to the Children's Hospital.

This report and subsequent reports then said what needed to be developed and what they would fund and how many nurses they would fund, psychologists, how many paediatric nephrologists. For instance, this one says that the previous report had agreed there should be a second nephrologist. It points out that person is about to be appointed, but also recommends that a third one will be appointed. So that's the general mechanism of how it developed.

Q. And those are the resources that the department is going to make available --

A. Yes.

Q. -- and that's its vision, if I can put it that way, for how the service ought to develop. And from the Trust's point of view -- and this is the Royal Hospital Trusts' point of view -- what structures did they put in place, to, if I can put it this way, monitor and develop

what was a fledgling service that was coming over? It was something that you were starting, in terms of the very young children, from scratch.

A. Yes.

Q. So what did the Trust do to put in place the appropriate structures to assist the development of the service for you and for the children?

A. Well, they had appointed me obviously.

Q. Yes.

A. They then appointed renal nurse specialists, they appointed a part-time psychologist, and renal dietician and a social worker with a special interest in the needs of children who were on dialysis, so they set up that structure. They also developed an annex to the major paediatric medical ward where we could carry out haemodialysis, and they also developed an area in the intensive care unit where haemodialysis could also be developed and provided the expensive machinery and infrastructure needed. Because if you're doing dialysis, you have to have special water plants and all sorts of things like that. But in terms of them monitoring the success and safety of the programme, that would have been left to the clinicians involved, reporting as the lead clinician in that area, to the director of paediatrics, who would report further up

through to eventually the chief executive in --

Q. So that was you --

A. Yes.

Q. -- reporting to Dr Mulholland, essentially?

A. Mm.

Q. Was he the person that you had to report to?

A. Yes. He was my immediate line manager, I suppose you would say.

Q. And when you performed a transplant, did you use that as an opportunity to see how well all these structures worked, and so carry out your own mini review of each one, because they don't happen very often?

A. Yes, of course. And as you know, we have a Tuesday morning meeting where we review every patient on dialysis, every patient waiting for a transplant, every patient who has been transplanted. I don't review them all each day, but related to outpatient visits and so on.

Q. And leaving aside the investigation into Adam's death that you envisaged the Trust might carry out, did you, after that, look at it from the point of view of: what are the lessons that we learned and what do we take from this in terms of this paediatric transplant service?

A. Yes, of course we did. As you know, we completely rewrote the protocol to try and make it as safe as

possible.
Q. Yes. Sorry, if I might just pause there.
MR FORTUNE: No, in fairness to the professor, he's trying to answer the question. Unless, sir, you intervene and say this isn't, in fact, going to be an answer to the question, he must be allowed an opportunity.
MS ANYADIKE-DANES: Mr Fortune, he had just literally touched on something that I wanted to direct him as to how I would like him to expand before he goes on to the next point. That is all. Of course I want --
THE CHAIRMAN: I'm sorry. When the witness starts to answer a question in the way which seems to the witness to be appropriate, he should be allowed to give the answer, and if you want then to develop that answer, because it touches on to another area, then that's what happens.
MS ANYADIKE-DANES: Thank you very much, Mr Chairman.
Sorry, Professor Savage.
THE CHAIRMAN: You were about to say that you completely rewrote the protocol to try and make it as safe as possible.
A. Yes, and I think I have answered in the written statements what the key changes were.
THE CHAIRMAN: And Dr O'Connor gave evidence about this as well.
A. So that was one thing we did. We also reviewed --

I certainly reviewed my approach to the transplants and, for instance, the involvement of surgeons so that, subsequent to Adam's death, we tried to make sure that prior to anyone being called for a transplant, the child and the family had met with the surgeon. And that was greatly facilitated by the appointment of Mr John Connolly, the transplant surgeon.

We also would have drawn up then a draft plan for any transplant that was likely to happen in the near future so that was it was in the notes. And finally, on day of the transplant, rather than just having the new transplant protocol in the notes, we would have written an individualised transplant plan in the clinical notes in much more detail than we had ever done before. Does that answer your question to some extent?

MS ANYADIKE-DANES: I think it does.

Can then I go back to the protocol? I think Dr O'Connor had given evidence to the effect that, actually, you had started to use a bit of the Bristol protocol, even before Adam's -- well, actually as part of Adam's surgery. Because the immunosuppressant medication came from that protocol. So I think what she was indicating is that you were already starting to look at the protocol and the extent to which it might be revised. Would that be fair?

A. Well, yes, and I think what she was mainly referring to was that at some time in 1984 or 1985, we were changing from using hydrocortisone to using methylprednisolone intravenously as one of the immunosuppressants. And that certainly was what had become the practice in Bristol. If you remember, they had just rewritten their protocol a few months before.

Q. Yes.

A. So their protocol was extremely up-to-date. We've already discussed whether it was a protocol or a guideline, but certainly it was a guideline and, if we thought there was an improvement, we would start doing that without necessarily rewriting the entire protocol.

Q. Yes.

A. But every few years, we would revise the entire protocol and make sure it was best practice.

Q. That's where I was getting to. When Mr Koffman gave evidence, he said that he thought that, nevertheless, the 1996 protocol -- which is how it finally emerged, in September 1996 -- could have addressed more the issue of the intraoperative fluids, so the fluids actually being administered during the course of the operation. Did you accept that?

A. Well, I'll tell you what I thought about that was that

we had looked at his protocol and taken advice from it. So I think his protocol was the same as the 1996 protocol and I believe that was what he actually implied: that he could have improved his local protocol to have more stringent statements about intravenous fluids.

Q. Yes, I appreciate that. The point that I was getting at is that, actually, it's the intraoperative fluids that have gone awry, if I can put it that way, in Adam's fluid management. So as a direct consequence of Adam's case, did you think about how that might be better addressed, if I can put it that way? There's always an endless development of one's guidelines, as you keep them up-to-date, but did you think about how that might be addressed?

A. Yes, we did, and if you remember, there was no mention in the 1990 protocol of fifth normal saline and dextrose. It mentions half normal saline and dextrose. We were more explicit in the 1996 protocol that fluid replacements should be Hartmann's, normal saline or blood, and that the standard intravenous fluid for a renal transplant patient should be half normal saline and dextrose. And it should also be moderated post-operatively based on urine electrolytes, which was one of the other things that we learned from Adam's

case, that you needed a closer grip on the electrolyte content of urine to help decide which fluids you give.

Q. That was what I was getting at. The mechanism, though, for updating your protocols -- I think you have sometimes said they were a guidance or an aide-memoire or something of that sort. The mechanism for doing that -- I had understood from the evidence that both you and Dr O'Connor gave that it was something that you and she discussed. Did it occur to you that you might involve another discipline? For example, the anaesthetists?

A. I don't think so, no.

Q. The one that she brought over from Bristol also featured a consultant paediatric anaesthetist.

A. Mm.

Q. Is there a reason why you thought, particularly after Adam's case, that might not be helpful?

A. I don't know the answer to that, except that the -- as you say, the protocol from Bristol, which was probably the starting point for our new protocol, had had the advice of an experienced anaesthetist doing renal transplants in a much bigger centre.

THE CHAIRMAN: Therefore, if you were adapting or updating the Royal protocol and you had the Bristol one, which had the imprimatur of an anaesthetist, the need for you

to go to your own in-house anaesthetist was maybe a bit more limited?

A. It was a bit more limited, but I accept that it might have been best to involve the anaesthetists so that they owned the protocol as much as we did.

MS ANYADIKE-DANES: That's where I was going with that. You have, in fact, revised them on successive occasions.

A. Yes.

Q. When you do that now, who is involved in that process?

A. Usually, the paediatric nephrologists, but we would discuss the immunosuppression with the surgeons and we would probably discuss the intraoperative things with the anaesthetist as well. But we don't all sit down together and do it. What would happen is that -- in fact, the most recent one as drawn up by Dr McKeever(?), I think, one of the newer paediatric nephrologists. It's often useful to have someone who has just come from a big centre back to Northern Ireland, so we get them to draw up a protocol and then we sit down and circulate it and refine it until we've one that seems to be the best we can manage.

Q. So the process, as it has evolved now, is actually to take the benefit of a multidisciplinary approach?

A. Yes. And I think, as the Trust has developed its management of protocols, once you have a protocol like

that -- now I've retired, of course, or in the near future -- will have to go to a committee that looks at it independently and decides that, yes, they put their stamp on it as well. And we put it online, that's the other thing.

Q. You said Mr Connelly was appointed and he is now the transplant surgeon?

A. Yes.

Q. When was he appointed?

A. I can't remember.

Q. I suppose we can discern it roughly.

A. Late 1990s, I think.

Q. Was he appointed as just the gradual evolution of the service or because there was an appreciation that it had been perhaps unsatisfactory not to have a dedicated transplant surgeon for the service?

A. I think it's fair to say that we believed that having a dedicated transplant surgeon with that specific skill was much better than having urologists who also did transplants. And of course, we have more than one transplant surgeon now. We have a team of transplant surgeons, but they are hard come by.

THE CHAIRMAN: How many nephrologists are there now?

A. In Children's? Three.

THE CHAIRMAN: You eventually got the three and then when

you retired, you were replaced?

A. I was replaced.

MS ANYADIKE-DANES: I'm sure not!

A. They got someone much prettier!

Q. I think probably I only have one or two more questions to ask, but something struck me in relation to education. It might be that it's not within the area of the education in the university that you deal with, but you might be able to help with it. It comes out of the Royal's annual report, 1995 to 1996. It is to be found at witness statement 061/2, page 101.

Do you have it, Professor Savage?

A. Yes, it has just come up this minute.

Q. If you can see, up at the top right, it says:

"A long-standing close association between the directorate and the Department of Anaesthesia at Queen's University leads to significant anaesthetic research within the Trust."

One point I wanted to ask you about: in addition to the publication of papers, which is one way of advancing matters, research is another way.

A. Mm.

Q. If the things are identified clinically, is there a mechanism whereby research can be done, given the relationship between the Trust and the university?

A. Yes. There's money provided from the Department of Health for clinical research.
Q. And if you had identified hyponatraemia as something that was worthy of research, how would it be progressed at the university end, which is ultimately where it's done?
A. Well, you would have to draw up a research proposal and a hypothesis that you could test. I'm not quite sure how you would do that. You might need to give me half an hour.
Q. Is there any thought, given that at some point the issue of hyponatraemia became a very important and significant one in Northern Ireland, so important that the Chief Medical Officer established a special group to develop guidelines, and prior to that, of course, we had Dr Sumner, who came over for all the inquests and all these children bar one, register at times his maybe concern, disappointment, that there wasn't more broadly based knowledge about the condition. For those of you who were in the Children's Hospital -- and all these children, ultimately, died at the Royal -- was there any thought that, leaving aside whatever the CMO might be doing with guidelines, we could be encouraging further research into this at the university?
A. I'm sure there was, but we didn't develop any specific

proposal. I think it's also fair to say that some of the children who died in the Children's Hospital developed their problems outside the Children's Hospital.

THE CHAIRMAN: Yes.

MS ANYADIKE-DANES: Oh yes, it's just that the Trust obviously has the knowledge of it, so it's the last place one can see the incidence of it more clearly, perhaps, than anywhere else.

A. And I don't think that Dr Sumner has been involved in any research in hyponatraemia, yet he works in Great Ormond Street, which has vastly more facilities.

Q. That wasn't actually what I was seeking to explore with you; it was how it could be done if you wanted to do that.

A. If there was a proposal, yes, it would be considered and pursued within the university.

Q. Then I have one final question for you, and that relates to the relationship between the State Pathology Department and the hospital. Dr Armour had given evidence when I was putting to her the guidelines on autopsy practice, and I had put to her the guidance in relation to intravenous IV lines and devices. 206-004-088, but it doesn't need to be pulled up because I am not really taking you to it as a pathologist.

I was putting to her that the guidance was that if the patient died with tubes and IV lines and cannulae, et cetera, then the cadaver should come to the mortuary for autopsy with all these medical devices in situ and that nursing staff may wish to remove them prior to transfer, but hospital clinical governance guidelines must make it clear those circumstances where such medical devices must not be removed and specify permissible means of facilitating viewing and preventing dislodgement or leaking.

Were you aware of the Trust having established any guidelines of that sort?

A. No.

Q. Were you aware that the State Pathologist Department actually wanted the lines to be left in, if possible?

A. No.

Q. Dr Armour had said that -- it's in her evidence on 13 June 2012 at page 41 -- the State Pathologist Department did say, "Please can you leave the lines in?", but that didn't always happen. Were you aware of that?

A. No. But I believe that when children die in the intensive care unit situation, where they have multiple lines and tubes and so on in place and you're giving that child back to its mother, as happened with Adam and

Debbie, and he was sitting on her knee, I would think that the nurses will have thought it would have been inappropriate to have all sorts of tube and things there whilst she grieved.

Q. That I understand.

A. But I accept that the pathologist might feel that it's important.

Q. I think what it says in the guidelines is if they are to be removed in that way, that some facility be made for viewing so the pathologist, should it turn out to be significant, is actually able to see the line before it's then removed. It's not that we don't appreciate why you would want to remove the lines in those circumstances, what I'm seeking to explore with you is: what was the communication between the State Pathologist's Department and the hospitals about that issue so that guidance could be given to the clinicians?

A. Well, I mean, you've read me the guidance, but I wasn't particularly aware of that and I don't remember that Dr Armour or indeed any pathologist has ever asked me to leave everything in situ.

Q. Sorry, this is the final question now. This is a document that has been referred to before and you've seen, which is the consent, the guidance on consent. It was sent to the Heads of the Trusts on 6 or

7 October 1995. And I think, when you gave your evidence, I think you said that you weren't aware of it.

A. No.

Q. Can you help us with two things then? One, how did you receive notification that new guidance was coming in? What was the mechanism whereby you received it?

A. Eventually?

Q. Yes.

A. I think that was quite clearly cascaded down by the Trust. We would have had e-mails telling us about them, we had samples of the new consent forms circulated and, indeed, I don't know that the very first one was the ultimate one that is in use now, but it is a very -- and it's very similar to the one in that document. So it does list things like asking you to give a list of common complications of a particular procedure and also to identify rare, but serious complications that might exist and so forth. There's a section, for instance, where a child can countersign it if they wish to do so, even if they're not believed to be particularly competent. That's often very useful. Even a 10 year-old who knows they have to have their appendix out or whatever can sign it, they're involved in the whole procedure.

Q. No, what I meant was, and maybe you have answered it, is

routinely when such guidance, guidelines or protocols came over to the Trust, what was the mechanism by which you, the clinicians who were ultimately having to deal with them, received them?

A. Well, there would have been -- as I say, those documents would be copied to us, but of course they wouldn't be particularly useful to copy them to you on 5 October 1995 if you didn't have new forms produced that you could then use.

Q. Exactly.

A. They didn't exist.

Q. Was there any training around those sorts of things?

A. When they eventually came online, yes.

Q. There would be training?

A. There would be. They would be presented at the clinical meetings that we had once a week. Someone would come along and say, "These are the new consent forms. The other ones are binned. You have to use these and this is the way they're filled in", and go over the whole issue of consent.

Q. When you produced anything like your own renal protocol, is that a forum whereby you would introduce: we have a new protocol here, we're going to put it in the department and so on and so forth? Was that the forum for it?

A. There's a rolling clinical meeting once a week every week, and each department is given a slot every three months where they can present either clinical cases or advances or whatever at that. And of course, that is a forum where intravenous fluid management of children has been covered on numerous occasions since Adam's death.
Q. If you didn't know about the new guidance that came over in October 1995, what was the guidance under which you were taking consent?
A. It was probably the guidance I had as a medical student.
Q. Well, were you aware of having been issued guidance by the hospital --
A. No.
Q. -- that this is how we expect patients or their relatives to have matters discussed with them, there was nothing of that sort?
A. I think I understood at that time the best person to take consent was the surgeon undertaking the operation. But as I think Dr Coulthard said, obviously a paediatric nephrologist knows the ins and outs of a transplant procedure, therefore you might take consent, but you'd always expect the surgeon to come along and make sure that, from his point of view, the parents understood all the issues that he had identified.

Q. No, I understood that, Professor Savage. The point that I was getting at is: these issues are ultimately issues that the Trust has to satisfy itself that the care that's being provided to children and their families is appropriate. So ultimately, these are the Trust's responsibilities, which it will account to the board for, but down at the level of the actual clinicians, what I am trying to find out is what was provided to you, what was communicated to you about these matters.

So you have said: well, I certainly hadn't had the October document cascaded down to me. What had the Trust provided to you in relation to how you should take consent or how consent should be taken --

A. I don't think the Trust had communicated anything particular to me, but obviously if one was to read GMC guidelines or guidelines from medical defence organisations, you would know the correct way to take consent and what you should inform people in relation to risks and hazards.

MS ANYADIKE-DANES: Thank you very much.

THE CHAIRMAN: Thank you. Are there any questions?

Questions from MR HUNTER

MR HUNTER: I have a couple of questions for Professor Savage if I could.

The first is in relation to a matter this morning

when it was put to him about his attendance at the autopsy and Adam's appearance as to why he didn't explain to Dr Armour how bloated Adam was.

THE CHAIRMAN: What do you want to ask, which hasn't been developed?

MR HUNTER: I want to ask him that, of course, he had seen Adam immediately after the surgery. And Dr Armour saw Adam about a day-and-a-half later. And during that period, of course Adam had been receiving treatment in relation to that.

A. Yes.

MR HUNTER: I would like to put to the professor could it be the case --

A. That he wasn't as bloated then? I think you are right. Thank you for drawing that to my attention. It is true that Adam continued to pass 1,500 ml of fluid. We restricted his fluid quite dramatically to try and reduce the amount of fluid in his system and we also attempted, with Debbie Strain's help, to do some peritoneal dialysis. So he probably was not quite as bloated by the time Dr Armour saw him as he was immediately post-operatively. You're quite right.

Q. Thank you, professor. The second matter, sir, is in relation to Professor Savage's expressed view that he regrets that he didn't push the matter of a fuller

investigation with the trust at the time. I would like to ask the professor -- I think you were here when Dr Gaston was giving his evidence?

A. Yes.

Q. In fact, Dr Gaston had given evidence that at the time he was concerned about Dr Taylor's welfare and that he was concerned to support Dr Taylor. In fact, he used the phrase, "If [they] had lost Dr Taylor, he would have had concerns about the collapse of the paediatric anaesthetic service at that time".

I would like to ask the professor that since, on the one hand, the trust had your views about what had happened to Adam and, on the other hand, presumably they had Dr Taylor's views, did you get a perception at all that perhaps other people within the trust may have had other priorities and to some extent that superseded your views? Would that be something you could --

A. Well, I mean, I did listen to Dr Gaston saying that. I had completely forgotten that there was any pressure on the anaesthetic service at that time. So no, I don't think I thought that, but I did think the inquiry needed to be pursued and I know that Debbie Strain felt that the anaesthetist involved in Adam's care should be investigated thoroughly, and she did make that point to me on many occasions.

Q. Having heard that now, professor, is it possible that the trust may have had other priorities at the time and that's why your views were not picked up more forcibly?

THE CHAIRMAN: I think that would require the professor to speculate very much, Mr Hunter. I understand your general point.

MR HUNTER: Thank you, sir.

THE CHAIRMAN: Any more questions? Mr Lavery?

MR LAVERY: May I just make one point, Mr Chairman? It's in response to something that Mr Fortune raised again after the break this morning about the conflict of interest between the Trust solicitor and, mainly, Dr Taylor. Just in response to that, and I do hesitate to make it because I do appreciate Ms Anyadike-Danes is going to come back to this next week and presumably it will be dealt with in the course of Dr Murnaghan's evidence, but I would say that the function of an inquest at that time was to establish who the deceased was, when he died, where he died and how he died. It wasn't the function of the inquest, Mr Chairman, to establish either civil or criminal liability, and in those circumstances the suggestion that Dr Taylor should have been cast aside or any of the other clinicians should have been cast aside and told to seek independent advice would not have arisen.

THE CHAIRMAN: Okay. I think that will be something we'll return to. Mr Fortune, do you have any final questions?

MR FORTUNE: I remain staggered by that proposition. I have no questions, thank you, sir.

THE CHAIRMAN: Professor, thank you very much indeed for coming back again to the inquiry.

(The witness withdrew)

Ladies and gentlemen, we'll break now. Mr Williams is to give evidence this afternoon and we'll start at 2.15. Thank you very much indeed.

(1.30 pm)

(The Short Adjournment)

(2.15 pm)

MR NOEL WILLIAMS (called)

Questions from MR STEWART

MR STEWART: Good afternoon, Mr Williams. I'm informed that you are the Co-director of Information Services for the Belfast Health and Social Care Trust.

A. That's right.

Q. You have kindly provided us with two witness statements. Can I take it that you are content that they be adopted by the inquiry as your formal evidence?

A. Yes.

Q. Can I ask for document WS251/1, page 6 to be brought onto the screen before you and if page 7 could also be

brought up beside it?

I'm told that you've been nominated by the Trust to come and assist us with documentary issues and you set out the context of that in the "General" section at the bottom of page 6. You inform us:

"At this time [which I presume is the time of writing], there is no individual employed by the Trust who had responsibility for records management the Children's Hospital in 1995. I am not currently, nor have I ever been, in a role of any organisation or trust where I had responsibility for the management of medical or other records. I have been designated to be a witness to this inquiry because of my senior position as co-director in the directorate of planning and performance, a directorate which has responsibility for records management through the person of the Trust's record manager.

"I have been unable to locate any contemporaneous documentary evidence within the Children's Hospital to support any of the questions above and my answers are based on my understanding of current records management practice."

It all rather begs the question, first of all, why was the Trust's records manager not nominated? Why were you nominated?

A. I suppose when it first -- we were first asked or when my director was first asked to find someone or nominate someone to attend the inquiry, I suppose at that time it wasn't completely clear about what it was that they were expected to answer questions on in detail. And I was asked, because of my senior position, but also because it was felt that I would be able to gather information from various sources and across different disciplines in relation to what was asked. When then the actual areas of questioning became known to us, I began to wonder whether that was a good idea. So therefore, I tried to make it clear in my witness statement the clear limitations of my expertise in this area or my knowledge in this area.

Q. I appreciate that you're going to try to do your best to assist.

A. Yes.

Q. You go on in your statement to say that you have been unable to locate any contemporaneous documentary evidence in the Children's Hospital. Did you mount a search?

A. Yes. Well, I asked the current co-director for paediatric services to do so.

Q. Yes.

A. And what I was asking her to do was locate evidence of

how the policies and procedures governing records management at that time in the Children's Hospital were being disseminated, whether they were being audited, whether practice was being audited in relation to that. And she wasn't able to find anything.

Q. So no documentary trail whatever?

A. No.

Q. Were you able to turn up any other documents, dating to 1995/96? Minutes, anything else?

A. Nothing from that period.

Q. What about a search for documents within the Trust itself?

A. The Trust is -- unless there was a record or a system in place for documenting what records were in the possession of the Trust and where they were located in a systematic way, looking for records in the Trust is a wee bit like looking for a needle in a haystack, particularly from that period. Several changes of staff and changes of organisational structure have taken place. When I say I couldn't find any records, it's absolutely possible that some records exist, it's just that we couldn't locate any.

Q. How many likely places might there be for you to search?

A. Well, I mean, the Trust's estate is vast and they could have -- it's not that we could ... We looked obviously

in the Children's Hospital, but whenever changes took place and people were moving on, whenever they were starting to archive the records, they could have used any facility in the Trust to find a space to put stuff, or they could have destroyed the stuff, reasoning that it was past the time of when it would be useful.

Q. And is the implication of what you say that there's no formalised approach to archiving, no thought-through way of going?

A. At this time, there is. But at that time, there were the two circulars from the Department of Health, one of which gives some guidance in relation to non-medical records.

Q. Yes. We'll come to those in a moment. Sorry to interrupt you. Apart from those two documents of guidance, when did the Trust become more interested in archiving material on a systematic basis?

A. I suppose in 2004, following a period of time when a lot of people appeared to have -- there appears to have been some confusion about the guidance and what pertained. A more comprehensive records management document was introduced by the Department of Health and that was "Good Records, Good Management", and that was published in 2004.

Q. I see. That's been the document which has guided the

approach since then?
A. Yes.
Q. Can we have document 305-035-001? This is a letter to the inquiry from the DLS, responding to a number of queries, and at the second paragraph:
"I am instructed that, prior to March 2008, no formal policy in relation to records management existed ..."
A. Yes.
Q. "... apart from the document provided by ..."
Can you assist why it took four years to introduce the "Good Management, Good Records" [sic] guidance?
A. I can't.
THE CHAIRMAN: Do you think that's right from what you know? Do you think there is a four-year gap between the departmental guidance and the Trust's policy being adopted?
A. I think there's a possibility that it's not right. My understanding is that it would have -- as soon as the guidance was introduced in 2004, the Trust began to implement the guidance. So that's possibly an error.
MR STEWART: Very well. Were you able to find documentary evidence relating to the implementation of the guidance?
A. No.
Q. In fact, could we go to page 5 of your witness

statement, WS251/1, page 5? At 9(a) you inform us:

"In 1995/1996 there was no comprehensive governance framework for the management of records within the Health and Social Care Trusts."

I ask you about that because was there not, in 1995, in fact, a department, a directorate, within the Trust that dealt with records, amongst other things, patient records? Are you aware of the directorate of development information systems and patient records?

A. I'm not.

Q. Could I ask for WS061/2, page 91 to be brought up? This is a page taken from the 1995/1696 annual report. You can see there a report of the Royal Hospitals. You can see, listed amongst the non-clinical directorates, the second one, "Development, information systems and patient records, Mr Evan Bates". From that, it would seem that if there's a directorate dealing with that, there must have been a governance framework. Was there any trace of that directorate left?

A. I was able to speak to people who were -- our current records manager managed to speak to the person who would have been the records manager in the Royal at that time. She's now retired.

Q. Can I ask her name?

A. Her name is ... It'll come back to me.

Q. When it does, please blurt it out.
A. Yes. Ashlyn Carlisle(?).
Q. Thank you.
A. I suppose if I could compare it with the current governance framework for records management. At this point in time, the records management is part of our controlled assurance framework, which involves, every year, a self-assessment questionnaire against a range of standards. It's completed, it's picked up by internal audit. Internal audit will then visit the departments and test some of the assertions made in the self-assessment and produce a report. There's a score given. That score goes through the controls assurance framework within the Trust, so there's a very systematic approach to that led by internal audit.

In 1995, this wasn't the remit of internal audit at that time. They had purely a financial remit. So at that time, there may well have been local efforts made to assure the standards of records management, but I wasn't able to find any documentary evidence as to what that was.

Q. I see. Can I ask if we can go to WS061/2, page 116? This a little further on in the same report from 1995/1996. This is, in fact, the page of the Corporate Affairs Directorate and Development, Information Systems

and Patient Records Directorate, which tells us really not very much about what was going on, but "Patient records", which is the paragraph on the bottom right of the page:

"Work in benchmarking patient records services against cross-channel teaching hospitals was started and is likely to lead to further improvements. An improved format for medical charts developed by the multidisciplinary Medical Records Committee is expected to be introduced next year."

It would seem, at first blush, from that that there certainly was work in benchmarking patient records services, which would suggest an audit.

A. Not formal internal audit. I do agree that -- and certainly the evidence from my conversation with the former medical records manager from that time, who -- just to be clear -- didn't have responsibility for children's, but just for the adult Royal.

Q. Yes.

A. What I'm trying to say is there was activity like that going on, benchmarking local audit activity, the setting of local standards for the availability of records at outpatients, that sort of stuff. But it wasn't a formalised approach and it wasn't as integrated as it is now with the Trust's formal governance

arrangements as I understand it.

Q. As I understand it, benchmarking is a comparative exercise where data taken from one place is compared on a like-for-like basis with another to see how they are faring against each other.

A. Yes.

Q. Would it be possible to conduct a benchmarking exercise unless you have an audit of the services, unless you actually have marked them, as it were, against a --

A. Of course that's true. All I'm saying is that the audit system of medical records now is a much more formal process and it is quite closely integrated with the general governance arrangements within the Trust. And in fact, reports through to the governance committee of the Trust board.

Q. Yes. Have you been able to identify it the successor to this particular directorate? The succession from the Development, Information Systems and Patients Record directorate through to your own department, your own directorate?

A. Right. That's quite a torturous development.

Q. Perhaps don't take up too much of our Friday afternoon on that torturous development, but in terms of the documentation that's been left, where did that end up?

A. I can't answer that question.

THE CHAIRMAN: Sorry, can I -- Mr Williams, so you understand what our concern is: as I understand it, if we came to you now looking for 2011 patient records, or other Trust records, it'd be a fairly straightforward task to find those with any luck at all?

A. With luck, yes.

THE CHAIRMAN: The Trust was formally established in 1993. It had been set up in shadow form before that -- at least from 1992, if not a year or two earlier -- and it looks rather as if this was one of the areas which was identified as being important enough to have its own directorate. And it looks from this report as if, by the standards of the time, some thought was being put into how we are going to look after patient records, and we're going to have to look at them more carefully and in a more coherent way than we have been to date.

A. That's right.

THE CHAIRMAN: If that's what was happening from about 1992 onwards or 1993 onwards formally, it becomes a little difficult for us to understand how patient records just -- some patient records disappear. We have some patient records and we've other records which are missing. Some are more important than others. That's in the patient record side. On the other side, on the governance side, again we have some documents, but we

don't have other documents and we are trying to work out two things. First of all, how this can be and, secondly, where else they might possibly be found.

A. Yes.

THE CHAIRMAN: We are not going back to a time, as is quite clear from the name of this directorate, where no thought was given to these things, we're not back to the 70s or 80s where there was no such thing as a patient records directorate.

A. Yes.

MR STEWART: It is likely that a directorate like this would have left minutes of its meetings and so forth.

A. Yes.

Q. Would those still be kept or would those have been destroyed?

A. Well, according to, certainly, current guidance and guidance from the 1962 circular, which would be the only formal guidance on the retention of records of that kind, they would not have needed to be retained. I've said in my statement that individual managers may well have made their own judgments about whether to retain documents for longer than that. But in the end, they may well have been forced just through constraints of space and storage to dispose of some of them.

Q. I wonder, now you mention that particular advice, can we

go to it? It's at WS251/1, pages 9 and page 10. This takes us back to an earlier era, 1962. This is a memorandum of arrangement for the preservation and disposal of hospital service records, which I suppose is quite distinct from patient records. The covering letter advises in relation to it at page 10:

"Selection and disposal of records. The lists contained in appendices A and B shall be observed as the guide for selection and disposal of hospital service records. Appendix A lists classes which shall not be destroyed at all."

Appendix A is then at page 12. The very top, you see "Classes of documents which are not to be destroyed":

"1. Minute books, including minute books of governing body and their subcommittees. Minute books of hospital committees and subcommittees are included in this category and must not be destroyed."

I read that as meaning that minutes of committees, especially of directorate committees, should be preserved.

A. Yes.

Q. Do you differ?

A. No.

Q. So when earlier, for example, we were discussing that,

the minutes of any committee within the hospital would be caught by that. Whether it's a medical records committee, whether it's an audit committee, whether it's a directorate committee, they would all be caught by it.

A. It would seem from the wording, yes.

Q. So when the annual report that I referred to just a moment ago referred to the multidisciplinary medical records committee, those minutes of that committee should also be with us still.

A. Yes.

Q. Is there an explanation as to why they're not?

A. Either they were destroyed in contravention of the guidance at that time or the committees that you're referring to were not considered to be committees of the trust or major sub-committees.

Q. Well, can I --

A. I'm only speculating. Yes, they should be there. No, they're not.

THE CHAIRMAN: On the face of it, they should be and it's a bit hard to see why they're not there?

A. It is, or else they are there and we can't find them.

MR STEWART: Would it be correct to assume that a directorate of patient records or a medical records committee would be responsible to ensure that records guidance is, in fact, adhered to?

A. Yes.
Q. So if the body responsible to ensuring the guidance is adhered to has its own minutes destroyed, contrary to its own guidance, then you have a situation where nothing remains.
A. I'm not saying they were destroyed; I'm saying they were either destroyed or they still exist, but are not retrievable.
Q. I do understand your position. The inquiry has found it frustrating following a trail of documents which hasn't always been helpful.

Can I ask for document 305-035-001? This was an earlier advice given to us by the DLS. The third paragraph down commencing:

"Prior to December 2004, we were informed in September of last year that there was no specific guidance on destruction or retention of records other than medical records and social care records."

We now see that is incorrect. Were these requests for information about records coming back to your department?
A. I am responsible for that misunderstanding.
Q. You are, I see.
A. And that's why I issued the correction to my statement. I based that -- the information that Wendy Beggs was

using there was based on interviews with records manager -- our current records manager and the former records manager in the Royal. It's only when I read the actual guidance in detail that I realised, which I should have done before making my first statement, I realised that the 1962 circular did indeed, as you have shown, cover the non-medical records.

Q. Yes. Because this issue has, in fact, cropped up over the years from time to time. I see from the documents exhibited to your answers that at least in July 2000 -- I don't need it to be called up, but it's WS251/1, page 19 -- advice was being sought as to whether or not this guidance that we've been discussing was current and the advice came back that it was, at least in part, still current.

In relation to the last paragraph here of this letter:

"You will note that previous correspondence as regards document retention/destruction prior to 2004 makes reference to Trust policy and hospital policy and this may have led to some confusion. I understand that perhaps reference to a practice rather than policy would have been more appropriate."

That refers back to the letter we were discussing, Mr Chairman, this morning, which, if it could be brought

up alongside it, is 305-029-001. This is the letter that has been the subject of discussion. This is where the inquiry was informed that Adam Strain's death -- this is at the end of the first line -- would have been discussed at the paediatric directorate clinical audit meeting in December 1995. Well, might have been, I think, is now the most recent advice, but nobody knows:

"The minutes of this meeting have not been retained. All the Trust audit meetings from that period should have been destroyed by now in accordance with Trust policy."

So we can now read that as saying: all the Trust audit meetings for that period should have been destroyed by now in accordance with Trust practice; is that right?

A. The current Trust policy would allow for records of that age to be destroyed. The 2004 guidance allows for records of that nature to be destroyed, I believe, after two years.

Q. Clinical audit meetings records, if they are contained within the minutes of a clinical audit committee, should, of course, be retained; would you agree with that, if it's a hospital subcommittee?

A. I'm not sure if that's what the 2004 guidance says.

I would need to check that document.

Q. Very well.

THE CHAIRMAN: I think the witness is saying that that might be right under the 1962 guidance, but not under the 2004 guidance.

A. Yes.

MR STEWART: Very well. Can I ask for document 305-018-001, which is another letter from the DLS in a series of letters that have been exchanged? Perhaps you can help with the last paragraph:

"In relation to the Trust board subcommittee meetings dealing with issues relating to quality of patient care, a search in the registry office in the Royal Victoria Hospital has taken place and there are no minutes on file for the audit committee for the period preceding 1999. These minutes were held within the finance department during the time in question and, from an accounting perspective, as the professional code stipulates retaining papers for a seven-year period, these minutes would not have been retained."

A number of questions arise. Why would minutes relating to a subcommittee dealing with quality of patient care be consigned to the finance department?

A. I can't answer that question. Except to say that the internal audit department is part of the finance

department.

Q. Is that confusing financial audit with perhaps clinical audit?

A. Well, internal audit traditionally was financial audit. But more recently, they have audited, not from a clinical point of view, but non-financial matters, including medical records management.

Q. This letter claims that the minutes would have been -- they would not have been retained beyond seven years by reason of professional code. Would that be in relation to financial documents that are kept for seven years?

A. I understand there is a financial records circular, but I haven't studied that, so I can't comment on that.

Q. Because if we were to turn to the schedule attached to that earlier guidance we were looking at in relation to preservation of records, and we could turn to WS251/1, page 14, we see "Classes of documents which may be destroyed". At number 2, we have:

"Audit reports. Six years after the end of the financial year to which they relate."

Which sounds like a seven-year period.

A. Yes.

Q. Could that be the basis upon which these patient care quality reports were destroyed, do you think?

A. I don't believe so because the 1962 -- in 1962, audit

reports, financial audit reports, would have been restricted, as I understand it, to financial matters and not non-financial matters.

Q. Yes, well, we have a confusing picture, which seems that records relating to patient quality, patient care, have ended up in the finance department. And if they were destroyed under the professional code for the financial department, that might be under this particular area, which would, if we go back earlier in the guidance, require a registration and a certification of destruction. So it seems, as though it's a confusing picture, that we may assume that the guidance is simply forgotten about.

A. I mean, a lot of people I've spoken to -- and from my own experience, the retention and destruction of records principally relating to medical records would have been well-known abroad in the Trust. The guidance in relation to non-medical records, possibly less well-known.

Q. Yes.

THE CHAIRMAN: Sorry, could I go back one page for a moment to the previous document? I'm not sure, maybe I just didn't pick it up quite clearly. Three lines up, when it says:

"The professional code."

What professional code -- I think Mr Stewart suggested that would be a financial code. If it's not a financial code, what professional code is it?

A. I assume it's financial, but I can't answer.

THE CHAIRMAN: It's the only apparent answer, isn't it, that it's financial?

A. I don't know.

THE CHAIRMAN: Okay, thank you.

MR STEWART: This morning, we were discussing where we might go to find the minutes of the paediatric directorate clinical audit meetings for the period of 1996. Having been present this afternoon and listening to this debate, can you think of any further places you might go back to and search to see if the inquiry can be assisted?

A. Well, if I can just describe ... Recently, we had occasion to audit some disused facilities within the Trust, just to check that they were properly secured and whether the information and the records contained in them were properly looked after and under a proper security. And just from the experience of that, you could find records of any nature, given the transition from directly managed units through to the Royal Trust through to the now Belfast Trust. You can find records relating to finance, clinical records, personnel

records. They've been stored, for want of a better expression, everywhere in the Trust.

THE CHAIRMAN: Is that the Beaver Park experience you're referring to?

A. I'm relating to that, I'm alluding to that, but then the subsequent actions beyond that. Records storage has been a problem for this Trust and its predecessors for many years. And there's no registry of where all the records are stored. I will go back to my earlier phrase that it would be looking for a needle in a haystack. If you said to me, "Can you try and find for me the minutes of the audit committee in July 1995?", if they're there, I don't know if they're there. If they're there, it could take me years to find them, possibly.

MR STEWART: That's helpful, if discouraging. So really, the picture you're drawing for us is one of a confusing and fairly unstructured archive system, if it is a system at all.

A. Yes.

MR STEWART: Thank you, Mr Williams.

THE CHAIRMAN: So it's your job to try and pull it together?

A. I'll try and sort it out.

THE CHAIRMAN: Lucky you!

Any questions? No? Mr Williams, thank you very much for coming along. You're free to go.

(The witness withdrew)

Timetabling discussion

THE CHAIRMAN: Ladies and gentlemen, that brings us to an end for today's hearing. Could I look forward with you over the next two weeks? Because we've been looking at the schedule. We are going to hear from Dr Murnaghan on Monday. He's the sole witness on Monday.

On Tuesday, we're scheduled to have Ms Duffin, who was the director of nursing and patient services from 1993 to 1997. As you will have seen from her statement, she was not involved in Adam's case, but she has some evidence which will not probably be very lengthy to give about governance issues.

We were also scheduled to call Dr McKaigue on Monday. We've been considering that on the inquiry team over the last day or two. Dr McKaigue's relevance is that he was a paediatric anaesthetist and he was involved, to some extent, in the preparation of the statements that we've been referring to over the last few days.

My own view is that at this stage we've already heard from doctors Gaston, Crean and Taylor and the value of hearing from Dr McKaigue is not obvious to us. Does anybody have any contrary view on that or do you think we have heard enough on that? We've heard from

the head of ATICS and we've heard from two of the three paediatric anaesthetists.

MR McBRIEN: Do you need an immediate answer, sir?

THE CHAIRMAN: If we're going to cancel Dr McKaigue, which you now know is my inclination, I'd like to give him notice of that rather than do it at some point on Monday, Mr McBrien.

MR McBRIEN: Could you give us 20 minutes?

THE CHAIRMAN: Well, does anyone else have anything to say on that? Okay. I'm going to be here anyway, so I'll let Mr McBrien come back.

Then on Wednesday, we're having Mr McKee and Dr Carson. I should say, there's a possibility that that evidence will spill into Thursday. Otherwise, we will not be sitting on Thursday, except to finish the evidence of Mr McKee and Dr Carson if it isn't finished. It might be, with luck. We won't be sitting on Friday.

Then the final two days -- Monday 2 July, Tuesday 3 July -- we have Mr Ramsden and Mr Mullan. We had obtained a report from Mr Ramsden and then we obtained a more developed report from Mr Mullan. Again, looking at this now, our instinct is that the value of bringing over Mr Ramsden to add orally to his written report is questionable. But our inclination is that we should bring over Mr Mullan on Tuesday. Does anybody have any

thoughts on that or any objections or reservations? If we don't call Mr Ramsden, he's like other witnesses who have provided statements: their evidence is not ignored, it is just that we don't bring witnesses to give evidence unnecessarily or we try not to do it unnecessarily, and we will still have Mr Mullan to give governance evidence on Tuesday the 3rd. There are no objections to that? At least at this stage?

I think some of the representatives have left already, so what we might do is we might -- I will lay down that marker and we'll finalise the position about Mr Ramsden on Monday. That's Monday the 25th. Unless anybody else has anything to say, we'll finish now. My inclination, unless I have some persuasive reason from the representatives of Adam's family, is that we will not bring Dr McKaigue on Tuesday, but we can confirm that later on.

MR LAVERY: Sir, can I say this in relation to the request earlier in respect of further documentation regarding the clinical meetings of July, August and September? I should say that my solicitor has just informed me that the offices of the Eastern Board have been evacuated this morning because of flooding, so it may take a little longer to obtain that documentation than might otherwise have been the case.

THE CHAIRMAN: Well, I won't get into conspiracy theories!

Thank you.

(3.00 pm)

(The hearing adjourned until 10.00 am on Monday 25 June)

I N D E X