Wednesday, 29 May 2013

(10.00 am)

(Delay in proceedings)

(10.08 am)

THE CHAIRMAN: Good morning. Ms Anyadike-Danes?

MS ANYADIKE-DANES: Thank you. Good morning, Mr Chairman. Could I call Dr Chisakuta, please?

DR ANTHONY CHISAKUTA (called)

Questions from MS ANYADIKE-DANES

MS ANYADIKE-DANES: Good morning.

A. Hello.

Q. Dr Chisakuta, do you have a copy of your CV there?

A. Yes, I have it here.

Q. Thank you very much indeed. I'm going to refer you to the various statements that you've made and ask you whether you adopt those statements as your evidence, subject to anything that you may say in this hearing. The first is a signed statement that you gave to the Trust, it's dated 9 May 2003, and the reference is 062-037-076. So that's the first of them.

Then you made a statement to the PSNI on 14 March, which is --

THE CHAIRMAN: Sorry, is it not on?

A. No.

THE CHAIRMAN: One second, Ms Anyadike-Danes. (Pause).

A. Okay.

MS ANYADIKE-DANES: Do you see that there?

A. Yes.

Q. You made a statement to the PSNI dated 14 March, which is essentially the same as that statement, and the reference for that is 115-028-001.

A. Yes.

Q. You've now made three statements to the inquiry: the first is dated 29 November 2012, the second is 22 January 2013, and the third is dated 28 May of this year.

A. Yes.

Q. The reference for all those statements is series 283. Do you adopt all those statements as your evidence subject to anything that you say now?

A. I do.

Q. Thank you very much. Can I ask you, before you provided any of those statements, did you have discussions with your colleagues about what had happened in relation to Lucy?

A. No.

Q. So those statements are made without the benefit of any discussions with your colleagues?

A. Yes.

Q. Did you know they were making statements?

A. I did.

Q. Was that a decision that you took that you intentionally didn't want to discuss or did it just happen that way?

A. I think it just happened that way.

Q. Then if I go to the CV that you've provided to us. That can be found at 315-012-001, but if we go to 003, which really deals with your appointments. As at the time of Lucy's death in April 2000, you had been a doctor for about 16 years.

A. I presume so. I have to work it out.

Q. I can understand that. Let's bring it closer in time. You had been a consultant for about three years. You say you were a consultant on 1 August 1997; is that correct?

A. That's correct.

Q. And so you were first a consultant at the Children's Hospital?

A. That's correct.

Q. But then one looks down at your past appointments. Prior to that, you were a registrar in anaesthetics at the Altnagelvin Hospital; is that right?

A. That's correct.

Q. For a year?

A. I was there twice.

Q. Yes, as a senior registrar?

A. As a senior registrar, the last one for six months, and the first one, I was a registrar for a year.

Q. I wonder if you could help: is there any particular reason why you had those two stints at the Altnagelvin Hospital?

A. The way the anaesthetics training is structured is that we tend to rotate through all the hospitals. So that was just the rotation I was assigned.

Q. Was that part of your rotation as you went up a grade, if I can put it that way?

A. Yes.

Q. I see your last position for six months was in 1997?

A. Yes, I think from February to the end of July.

Q. That's correct. Then you went on -- and I'm going to ask you about this a little bit in a moment, but I wonder if it's connected at all. You were invited to give a talk in 1998 at the inaugural meeting of the Western Anaesthetic Society. I think the talk you gave was in September 1998. The Altnagelvin Hospital would be within that catchment, wouldn't it?

A. It is. That's the hospital where I was working.

Q. Yes. Is part of the reason you might have been invited because you were known to people already?

A. Maybe, or because I was also a consultant in paediatric anaesthesia.

Q. Sorry?
A. Or because I was a consultant in paediatric anaesthesia.
Q. You had just become a consultant at that stage?
A. In paediatric anaesthesia as I had been for three years.
Q. In a little while I'm going to ask you about that presentation and thank you for providing a statement about it, but if we can stick now to you helping us understand how the PICU worked at that time in 2000.
How many consultants on average at any given time would you have there in PICU?
THE CHAIRMAN: On duty.
MS ANYADIKE-DANES: On duty. Sorry, I should have said that, on duty.
A. On a particular day?
Q. Yes.
A. There would be one who would work from say 8.30 to -- for 18 hours and then the on-call doctor would take over for the night.
Q. And that would be a consultant paediatric anaesthetist?
A. That would be a consultant paediatric anaesthetist.
Q. Would there be consultants in other disciplines as well?
A. There would be consultants in other disciplines, but they don't -- unless they're asked for consultation into the PICU, they wouldn't necessarily come to the PICU.
Q. For example, Dr Hanrahan, in the case of Lucy, was asked

by Dr Crean to come and give a neurological assessment of Lucy; is that the sort of thing you mean?
A. I believe that's what happened.
Q. Yes. And where would such a doctor be other than in PICU?
A. Either in their respective wards looking at their patients or in the clinics.
Q. And would there be registrars that were based in PICU --
A. We had, yes --
Q. -- at that time?
A. Yes, we would have had probably a senior house officer and a registrar.
Q. When you were working in Altnagelvin, were you aware of there being any ward protocols in relation to the administration of fluids to post-operative paediatric patients?
A. I can't recollect that, no. I'm not sure.
Q. Would you, when you were working there, have prescribed fluids in the immediate post-operative phase for a child?
A. What would normally happen is I would probably would have prescribed some fluid, but that doesn't necessarily mean that's what was going to happen in the ward when the child went to the ward. In most cases what tended to happen was that when the child went to the ward, the

fluids would be stopped by the paediatrician. Whatever they thought they would want to use, I had no influence over that.
Q. Were you aware that's something that happened at that time or is that something you have become aware of subsequently?
A. It happened at that time. I mean, my practice would be to go and see my patients afterwards, you know. Either that day and the day after, depending on the case I have done. Then you'd note that something had been changed.
Q. Is that something that you experienced in other hospitals or was that something that was -- for example, I note that you were a senior registrar in paediatric intensive care at Great Ormond Street.
A. It was slightly different because there I was just -- purely I spent most of my time in the intensive care unit, so I wasn't necessarily working in theatre, so ...
Q. I understand. But were you aware from working in other hospitals as to whether an anaesthetist could prescribe a fluid that was thought to be appropriate in the immediate post-operative phase and then have that fluid changed when the child reached the ward? Were you aware of that from other hospitals?
A. Yes.
Q. Did it concern you that that could happen?

A. Yes.
Q. Did you make your concerns known when you were at Altnagelvin?
A. Not necessarily in Altnagelvin, but on a particular patient, depending on wherever I was, if I felt that particular fluid they were using for that patient was unsuitable, I would change it.
Q. Was it ever explained to you when you were at Altnagelvin the rationale for that, for that practice, that a paediatric anaesthetist could prescribe what they thought was an appropriate fluid and have that changed when the child got on to the ward?
A. At that time when I was working in Altnagelvin I was a trainee, I wasn't necessarily a paediatric anaesthetist; I was just -- I was training in anaesthesia.
Q. I see.
THE CHAIRMAN: Doctor, let me be very clear about this. One of the areas of major concern in Raychel's case is that the paediatric anaesthetist was discouraged from prescribing post-operative fluids on the basis that responsibility for the post-operative fluids would be taken by the doctors who were on the ward. You have described a few moments ago how you would prescribe post-operative fluids and then find that, when the child

was back on the ward, at some point they had been changed to whatever the relevant paediatrician wanted; isn't that right?
A. That's right.
THE CHAIRMAN: When you were in Altnagelvin, were you ever in a situation where you were discouraged from prescribing or you didn't prescribe what the post-operative fluids would be and instead you were advised that you should leave the prescription of those fluids to the doctors on the ward?
A. I do not recollect that incident.
THE CHAIRMAN: So so far as you can recall, when you were in Altnagelvin, you prescribed the post-operative fluids, the child who had been operated on would have started to receive the post-operative fluids and later, at some point later, those fluids would be changed by a paediatrician to whatever that paediatrician decided was appropriate?
A. Especially if the fluids which I had prescribed in theatre ran out, then they might start whatever they think is appropriate, yes.
THE CHAIRMAN: So when you prescribed the post-operative fluids in effect they're time-limited because you will prescribe a certain amount of post-operative fluid, and when that fluid runs out, or perhaps before that point,

somebody on the ward will take responsibility for whatever the child is to receive next?
A. That's correct.
THE CHAIRMAN: Thank you.
MS ANYADIKE-DANES: Can I ask, did you have a particular post-operative fluid that you generally prescribed?
A. We tended -- I tended to prescribe a salt-based solution, things like Hartmann's solution, Ringer's lactate or just normal saline -- 0.9 per cent saline I mean.
Q. I understand. Were you aware of what the fluid was that was used on the paediatric ward whilst you were at Altnagelvin?
A. Not offhand. It's difficult for me to answer that question in that I know that, in most cases, most paediatricians tended to use 0.18 saline with 4 per cent dextrose because it was a solution that was felt to be suitable for a maintenance period.
Q. Yes. And just to sort of round off something that the chairman was asking you, I think you had said that if you had a concern that, from your point of view, the child's fluids were not the appropriate fluids by the time you saw what they were on on the ward, I don't recall whether you had said whether a situation like that ever arisen when you were at Altnagelvin.

A. No, I don't -- you see, in Altnagelvin I anaesthetised both children and adults, so it depended on whichever patient I went to see. If I found that that patient -- probably the fluid that they have given him is not the fluid that I agree with, I would have changed it to what I have thought they should be on.
Q. Yes, that is why I was asking you that. Had you ever come across a situation where you had had to do that whilst you were at Altnagelvin?
A. I do not recollect over the years, but it could have happened. It probably did happen.
Q. Thank you. In fairness, I should ask you this: did you meet any resistance when you made your feelings known that you didn't think that the fluids that the child had been changed to were appropriate for the child?
A. Not when I explained the rationale why I'm doing it.
Q. Thank you. I'm just trying to check whether you were at -- I think you were at the Royal when Adam Strain, the first of the children whose death is inquiry is investigating, was admitted. I think you were at the Royal from 1 November 1994 to 31 January 1996.
A. Yes.
Q. And we had asked you whether you recollected that case; do you have any recollection at all?
A. No.

Q. Is that because of the passage of time or do you think it's not the kind of case that you would come to your attention?
A. It wouldn't have come to my attention because I wasn't working in paediatrics at that time.
Q. And then in relation to Claire's case, she died in 1996, October 1996; you were in Great Ormond Street at that time.
A. Yes.
Q. You came back to Altnagelvin as opposed to the Children's Hospital.
A. The Children's Hospital.
Q. When you came back to the Children's Hospital, which you did at the beginning of August 1997, so that would be just over six months after Claire had been admitted and died, do you recollect any discussion at all about her case?
A. No.
Q. There had been a concern in relation to Adam's case about the fluid regime he was on, and by the time you come back, you do come back to the Children's Hospital. As a result of that, a statement was offered to the coroner during his inquest in the summer of 1996, which was explaining how matters are going to be addressed. I'm just going to take you to that

statement, if you give me one moment, to see whether you ever recall seeing it.

Perhaps can we pull up 011-014-107A? This is a statement which was seen and endorsed by the consultant paediatric anaesthetists in 1996. You see the date down there, "20 June 1996" down at the bottom. I wonder if you could just have a read of that statement. (Pause).

If I take you to the middle paragraph:

"In future all patients undergoing major paediatric surgery who have a potential for electrolyte imbalance will be carefully monitored according to their clinical needs and, where necessary, intensive monitoring of their electrolyte values will be undertaken. Furthermore, the now known complications of hyponatraemia in some of these cases will continue to be assessed in each patient and all anaesthetic staff will be made aware of these particular phenomena and advised to act appropriately."

When you came back to the Children's Hospital on 1 August 1997 as a paediatric anaesthetist, you would be anaesthetising children for major surgery, isn't that correct?

A. That's correct.

Q. Just while we are there, how do you define major

surgery?

A. You can define it in terms of the length of time it takes for the operation or the actual procedure which is taking place, depending on if they're going into the body cavity, intra-abdominal, the chest or if it's spinal type surgery. Any surgery that takes over an hour probably may be regarded as major surgery.

Q. And brings with it certain risks?

A. Yes.

Q. So you would be engaged in that. Was any statement of this type ever communicated to you when you came back?

A. This is the first time I'm seeing this statement.

Q. Did you even know such a thing had been produced?

A. No.

Q. Was any guidance given to you at all when you came back about the now known complications of hyponatraemia, leaving aside what you may already have recognised yourself from your own teaching and research? Did anybody at the Children's Hospital provide any guidance on the now known complications of hyponatraemia?

A. Not that I can recollect.

Q. Were you aware of any guidance of that sort being provided to trainees? You came back as a consultant, or at least were appointed as a consultant as you came back, but were you aware of that kind of guidance being

provided to trainees?

A. I think trainees probably would have been taught about the risks of using different types of intravenous fluids and, yes, hyponatraemia.

Q. Do you think that because you think it was a good idea and logical that they were or do you think that because you have some basis in recollection for saying that?

A. I have no basis of recollection, but I mean, these are people in training or undergoing training and the only way that they can be -- they can learn is by either, formal or informally, by somebody telling them because there are lectures that are held or seminars that are held and some of them are on IV fluids, so this would have been pointed out to them.

Q. From your point of view, that would have been a prudent thing to be communicating to trainees?

A. Yes.

THE CHAIRMAN: Were you alerted to the fact that the Royal had had a particular incident, let's call it, as a result of which there was heightened awareness among anaesthetists about hyponatraemia?

A. No.

THE CHAIRMAN: So if the trainees were receiving guidance and advice because of this heightened awareness, it wasn't something which was being communicated to you as

the consultant?

A. I think it wasn't communicated to me as such, but I would imagine the assumption would have been I would have known that using certain types of fluid would cause hyponatraemia.

THE CHAIRMAN: Yes, but the point about Adam's case, doctor, is that this note was produced in order to show to the coroner that the paediatric anaesthetists in the Royal had learnt something from Adam's treatment and death and, in order to reassure the coroner, that henceforth there would be a closer eye kept on electrolyte monitoring in order to avoid hyponatraemia.

A. This was not part of my induction. I didn't see this.

THE CHAIRMAN: Thank you.

MS ANYADIKE-DANES: Thank you. But in fact, you did go on to give a talk at the inaugural meeting and, in your third statement to the inquiry, 283/3, you include that. If we go to your statement, which is very short, 283/3, page 2. You say:

"On the evening of 30 September I was invited ..."

That's when you actually gave the talk?

A. Yes.

Q. So you gave that talk to the inaugural meetings of the Western Anaesthetic Society in Derry. From your recollection, members of that society would have come

from the Altnagelvin Hospital, the Mid-Ulster Hospital and Tyrone County Hospital?

A. Yes, including probably Letterkenny Hospital, but it's in another jurisdiction.

Q. Sorry?

A. Including Letterkenny Hospital, but that's --

Q. Do you actually recollect anybody who actually attended that? I know it's a while ago.

A. No, but I think at that time the chairperson used to be a Dr Neville Hamilton.

Q. So Dr Hamilton would have been there?

A. He would have been. I know because he was the one who was the chairperson and he has organised the meetings.

Q. Yes. In terms of your expectations as to who would be coming, the anaesthetists from these hospitals you would expect some of them would come. At what level were you really pitching your talk? Was it to the consultants, to trainees, or was it intended to be a general talk to which really any grade could attend?

A. I think the people who attended were mainly consultants.

Q. Mainly consultants?

A. Yes.

Q. Then you say that the lecture you gave was on recent advances in paediatric anaesthesia and I'm going to take you to that part in a minute, a part of your talk

prompted by a recent paper by Professor Arieff. He had just published his second paper, really, in 1998.

A. Yes.

Q. But before I come to that detail, you say that the purpose of telling the inquiry about that paper that you gave is to show that consultant anaesthetists at the Children's Hospital were actively involved in sharing their knowledge with other anaesthetists and also to establish that that particular topic of post-operative hyponatraemic encephalopathy was being brought to the attention of anaesthetists as early as 1998.

But if we go to the first reason for telling us about it, was there any more formal encouragement given to the specialists at the Children's Hospital to engage in this kind of outreach or dissemination of information that you can recall from 2000?

A. I mean -- by "formal" meaning something coming from management saying you should be doing this?

Q. Yes. Were you actively encouraged to do it?

A. Not necessarily from management, but from the anaesthetic, you know, the paediatric, the Association of Paediatric Anaesthetists, they do encourage us to work as networks, to form links with -- because each hospital, each big hospital where there are anaesthetic students, there should be a lead paediatrician.

In fact, I have just forgotten, there was actually a paper that was produced in Northern Ireland from the Department of Health that was actually also encouraging us to be doing those type of links.

Q. And you have just recollected it now, but would you be able to inform the inquiry of what that paper was so that we could try and obtain it? I don't necessarily mean literally now; maybe in one of the breaks.

A. I know that ... I can't remember the actual detail of the title, but I do remember me talking about it because it was talking about these links and associations between ... Or what should be happening in the district hospitals.

Q. Can you remember roughly when that was being suggested?

A. I mean, I know at that time in 1998, when I was doing this talk, that paper was around. I did talk about it.

Q. Yes, so was you giving that talk part of responding to that initiative, if I can put it that way?

A. Possibly, yes, but also ... I think it was felt it was a good idea that we should be sharing information.

Q. Is that something that you did regularly?

A. I mean, I didn't ... Personally, yes, I did give lectures wherever I was asked to do, but I did not also that -- there was a liaison group which, I think, at that time -- it was either Dr McKaigue or Dr Crean --

used to be responsible with meeting other lead paediatric anaesthetists in other district hospitals and they used to sort of meet and talk about whatever, I don't know.

Q. Maybe you could help: what sorts of things did you discuss at those kinds of meetings?

A. I mean, those meetings, the liaison one I never attended. As for the lecture, it depended on what I had to talk on.

Q. So topical issues?

A. I think for the liaison group I really wouldn't want to comment on them since I didn't take part. For me, if I was asked to give a talk, it would probably be on a topical issue or depending on whatever people wanted to know.

Q. So far as you're aware, were the other consultant paediatric anaesthetists giving similar talks? Not similar in terms of the subject matter, but approaching the dissemination of information in a similar way.

A. Yes.

Q. And then the other reason you gave was to let the inquiry know that the topic of post-operative hyponatraemic encephalopathy was being brought to the attention of anaesthetists perhaps outside the Children's Hospital as early as 1998. When you gave

that paper, were you doing so recognising that what you're really talking about in terms of the post-operative side of things was innovative, new in any way, or was it by way of refreshing people's recollection as to the potential significance of this?

A. I think the reason why I included that -- I don't know if you have the -- I'm not sure if you have my ...

Q. I have the actual paper.

A. It goes through the list of various topics and then I came to controversies. I was just trying to point out to the audience that this is being talked about and be careful whenever you're using this type of fluid, you may encounter such a problem.

Q. We can pull up your paper now. It starts at witness statement 283/3, page 5. That's the substantive part of it. You actually deal with five main issues, the first three are here:

"Fasting guidelines, preoperative medication, and parental presence at induction."

When one looks at the papers that you're citing, they're all fairly recent.

A. Yes. That's because the topic was recent advances.

Q. So you're trying to alert people who may not otherwise have an opportunity to look at the published material themselves, the new things coming out?

A. That's correct.

Q. And just while we pause there because there is an issue for the inquiry in another case in relation to midazolam. You refer to midazolam under that "preoperative medication". You're referring to midazolam there for use as a sedative.

A. Yes, and an anxiolytic agent.

Q. If we then go --

THE CHAIRMAN: I'm sorry, I couldn't make out your last answer.

A. To reduce anxiety in children.

THE CHAIRMAN: Thank you very much.

MS ANYADIKE-DANES: Reducing anxiety. So not just as an anaesthetic?

A. No, it's -- there are times when you go and see a child and you find they're apprehensive and don't want to go to theatre. So you might prescribe some midazolam to calm them down.

Q. How familiar were you with midazolam and its administration in 1998?

A. Quite familiar with it because, I mean, I prescribed it to children if I felt they needed it.

Q. Apart from its use as an anaesthetic agent, its use to calm children down who may be anxious, were you aware of it having a use with children who were thought perhaps

to have seizures?

A. Being a consultant also working in paediatric intensive care, yes, I know it is used for seizures.

Q. And in 1998, was it being used in that way in the Children's Hospital?

A. I can't remember. It's not -- I know ... I think the correct answer would be I can't remember.

Q. Thank you. So then if we go to page 7 of this paper, you deal with fluid therapy under (d), which is in a section called "Controversies".

A. Yes.

Q. I'm going to ask you a little bit about what you were dealing with under fluid therapy. Why did you include fluid therapy in a section called "Controversies"?

A. Because the things I'm talking about there is like withdrawal of consent for surgery whereby a child, all of a sudden, refuses to go to surgery, so what am I going to do about that? Anaesthesia for a child with upper respiratory tract infection, there are times when, you know, people may not necessarily agree with what is happening or what to do. Coming to fluid therapy, there are times -- I mean, you might decide -- depending on the length of the procedure, you may decide to either give or not give fluids for that particular child, so it's not something that people tend to do all

the time. The first reason I'm giving there, giving where we are giving 20 ml per kilogram of fluid as a bolus, not everybody does that.

Q. Let me pull up the second page then you'll have all the points that you were seeking to cover in that paper at one glance. Can we pull up page 8 next to this? Can you identify what in these three main points that you were seeking to cover under "Fluid therapy" you thought could be considered controversial?

A. All of them. In the first one I've mentioned, the second one, using 0.18 per cent saline in 4 per cent dextrose, the reason why I put it there is because it was a new thing and it was being discussed in the literature that children could have post-op hyponatraemic encephalopathy. Then if you go to the third one, not every anaesthetist agrees in using human albumin as a solution for resuscitation.

Q. Yes. Well, if we stay with the second one for the moment, which is the paediatric anaesthesia, that's referring to a paper by Allen Arieff, Professor Arieff. We can pull up the first page of that paper, 070-023h-235. This is the first page of it. Perhaps we can pull up the second page, 236, next to it. How had you become aware of this paper?

A. Scanning the journals.

Q. Just your own normal research?
A. Yes.
Q. And what about this struck you as something that was worthy of communicating to other anaesthetists?
A. I beg your pardon?
Q. Why did you identify this as something that you ought to be communicating to other anaesthetists?
A. I think it can be very upsetting when you do a procedure and something, you know, untoward happens. You use a solution which you think is safe, but ends up in disaster like what has been reported.
Q. What did you understand was being communicated by this paper? Actually, I'm trying to find out what it is you would have been communicating to the audience.
A. I would have been telling the audience be careful when you use a solution that is low, that has a sodium content of less than 130, or in fact less than 154 because -- less than 130 because Hartmann's is 130 -- because you may end up having problems.
Q. When you're telling them to be careful, what are you really saying? Are you saying it's probably not a good idea to use it at all in the immediate post-operative phase? What exactly would be the message?
A. That is the message I'm trying to convey. As I say, in the immediate post-operative period because of the

stress of surgery, we know that there are other stress hormones in place that are in place, you're retaining water and then you are giving somebody a solution that contains less sodium, so you might end up having problems with post-operative hyponatraemia.
Q. Would you be giving any guidance as to how long you thought that phase was likely to last? Because that might be important to people's fluid management regimes.
A. I'm not sure I would have given guidance at that time, but what we would tend to do normally, whenever we're prescribing fluids, is we try and use a salt-based solution in the post-op period.
Q. In presenting this paper to them, am I understanding that what you're really doing is explaining, insofar as Professor Arieff has set it out here, the mechanism by which this becomes a potential risk to children so that it's not just that you'd be telling them it's not a very good idea, but trying to explain so that they would understand why it's not a very good idea?
A. I would have probably done that since that's what the paper -- it's an editorial, that's what it is saying, some of the reasons why we shouldn't be using it.
Q. Yes.
THE CHAIRMAN: I'm sorry, just to help me with this, doctor, the fact that this paper's headed "Editorial", does that

give it added weight in the journal?
A. Yes.
THE CHAIRMAN: And can you expand on that for me? Is the journal monthly or quarterly?
A. Yes, it's a monthly journal, Paediatric Anaesthesia. Obviously, the editorial board would have decided that this gentleman appears to have maybe done a bit of work on this particular topic, let's give him the opportunity to give his information. That's why maybe Arieff wrote this paper.
THE CHAIRMAN: Then would that month's journal also include other papers?
A. Yes, there would be other papers, yes.
THE CHAIRMAN: So the fact that it appears under the heading "Editorial", means that it is particularly significant?
A. Yes, and it's the first one you encounter.
THE CHAIRMAN: Thank you.
MS ANYADIKE-DANES: Just to follow on from that, it's a monthly journal and given that it's headed up "Paediatric Anaesthesia", how common was it, as a journal, to be available to anaesthetists in hospitals?
A. It -- most of us subscribe to it, so I used to get it every month. I didn't expect every anaesthetist to subscribe to it, but if there was a library, maybe the

library would have held a copy.
Q. Would you expect the library in the Children's Hospital for example to subscribe to Paediatric Anaesthesia?
A. Yes.
Q. And would you have thought that a library in Altnagelvin, which is a teaching hospital, to have subscribed to it?
A. Yes.
THE CHAIRMAN: And did they?
A. I don't know. I can't remember.
MS ANYADIKE-DANES: Is it a common journal for consultant paediatric anaesthetists to subscribe personally to?
A. Yes. At that time what used to happen is, if you were a member of the Association of Paediatric Anaesthetists, you used to get the journal.
Q. Were you aware of any earlier papers that Professor Arieff had written on this topic?
A. I know there's a paper which was published in the British Medical Journal in 1992.
Q. Yes. In fact, just so that you see it, it's cited in this paper. If we go to 238. If you look at footnote 6:
"Arieff, Ayus and Fraser. Hyponatraemia and death or permanent brain damage in healthy children, British Medical Journal, 1992."

A. Yes.
Q. The statement that I had shown you originally, which was one that was produced after Adam had died, that refers to that very paper. In fact, that's part of what prompted the action that they describe in the first paragraph. That wasn't just about the risks of hyponatraemia for the post operative child, that was hyponatraemia and death, as it says, or permanent brain damage in healthy children, not necessarily in the post-operative phase. Were you aware of that at the time?
A. In 1998?
Q. 1998 when you were writing that paper.
A. Yes.
Q. Were you aware of it?
A. I was aware of it. In fact, I used this paper in some of my lectures.
Q. The 1992 paper?
A. The 1992 paper.
Q. When you say "some of your lectures", do you mean some of your lectures in Belfast or do you mean some of your lectures where you were asked to give papers?
A. In Belfast.
Q. Can I ask where you gave those lectures?
A. During the induction period, induction of trainees in

paediatrics.
Q. So there would be a series of lectures, courses for trainees to attend, and you and others could give papers during that and this topic was one that you gave to trainees?
A. Yes. Usually, trainees change every six months, so twice a year I would give a paper and I would refer to this paper.
Q. Can you remember when you started doing that?
A. I'm not sure exactly, but ...
Q. I'm just looking from your CV. This has particular relevance to paediatricians. You didn't actually start work in the Children's Hospital until 1997; is that correct?
A. 1997, yes.
Q. So do you think it's something that you're unlikely to have given an induction on before 1997?
A. Unlikely.
Q. So more or less from when you came in as a consultant, this issue would have been part of what you would have given talks to the trainees about?
A. Correct because I know there was a colleague of mine who used to give a lecture and there was once when I got some PowerPoint presentation and this reference was there. That came from him.

Q. Do you know who that colleague was?
A. Dr Paul Loan.
Q. Does that mean that you regarded this issue of hyponatraemia and its risks to children as a particularly important one? Is that why you were giving that as part of the lectures to trainees?
A. Yes.
Q. If you were doing that in 1997, was there any indication at all that hyponatraemia and its risks to children is something that the Children's Hospital had had any kind of experience of?
A. I didn't give the lecture in 1997.
Q. Sorry?
A. I did not -- I mean, you alluded to me giving a lecture. I think I started giving induction lectures not necessarily in 1997. It could have been maybe 2000 or thereabouts.
Q. I see. In 2000 or thereabouts?
A. Mm-hm.
Q. When you were giving it, I presume that's something that you discuss amongst your colleagues?
A. That I'm giving a lecture?
Q. Well, just topics.
A. Yes, I mean, I would say, "I'm giving an induction lecture, it's on IV fluids".

Q. Yes. What I'm trying to get from you is if a series of lectures is being provided to trainees, presumably they're going to make sure they have a broad range of important topics. I was assuming there would be some sort of discussion amongst those who are going to give the lectures and they will say, "Well, I'll do one on IV fluids", for example; is that how it might work?
A. Um ... You see, the way ... Let me explain the teaching of our trainees, the form of teaching. We have morning seminars held twice a week and there are a series of topics. Usually, the trainees are the ones who prepare the topics, but us consultants will sit in to listen to the talk and then chip in, but those are anaesthetic trainees. I'm not sure what happens with the other trainees.
Q. Let's just focus on the anaesthetic ones. Those are the ones you'd be giving an induction talk to.
A. No, the induction ones are for the paediatricians in training who are coming to the Children's Hospital --
Q. I see.
A. -- which happened twice a year.
Q. What I was really asking you is: when you decided that this was a topic worthy of giving as an induction talk to trainees, did you have any discussion with your colleagues about the talk on hyponatraemia?

A. I think the answer is yes, because if somebody says, "Listen, can you give a series of talks and this is the topic which you will give", so there would have been some discussion.
Q. And in that discussion, are you saying that nobody communicated to you that the Children's Hospital had actually had some adverse incidents involving hyponatraemia?
A. Not that I can recollect.
Q. Thank you. Can I then move on to the issue of Solution No. 18 in relation to the use of it in the Children's Hospital? You'll be aware that Dr Nesbitt says that, after a child called Raychel had died at Altnagelvin, he was alerted to the fact that the Children's Hospital had changed its practice in relation to the use of Solution No. 18. I pull up this document to orientate you. It's 026-005-006. This is Dr Nesbitt. In 2001, he was clinical director. Do you remember him from when you were at Altnagelvin?
A. I do.
Q. So he's writing to Dr Fulton, who at that time was the medical director. The child called Raychel has very, very recently died and he says:
"I contacted several hospitals, including the Children's Hospital, and made enquiries about

perioperative fluid management. The Children's Hospital anaesthetists have recently changed their practice and have moved away from No. 18 Solution (fifth-normal saline in 4 per cent dextrose) to Hartmann's solution. This change occurred six months ago and followed several deaths involving No. 18 solution."
Firstly, were you aware, in or around 2001, that, there had been several deaths at the Children's Hospital involving No. 18 Solution?
A. No.
THE CHAIRMAN: Do you think that's right? Do you think that there were several deaths involving No. 18 Solution in the Children's Hospital?
A. If there were -- I would have known had there been several deaths.
MS ANYADIKE-DANES: That's what I was about to ask you. You're a consultant there in the Children's Hospital from 1997. If there had been several deaths involving Solution No. 18, is that something that you would expect to have known about?
A. I would have known about it. Somebody would have said this is happening.
Q. And what would have been the response if there had been several deaths involving No. 18 Solution at the Children's Hospital?

A. Obviously, we would have taken steps to try and prevent that from happening.
Q. What might that have involved?
A. I'm speculating now, but it would have meant stopping using the thing that is causing the problem, which in this case might have been No. 18 Solution.
Q. So if there had been several deaths involving that, then stopping using it is a possible response?
A. It's a possible response.
Q. But in any event, you weren't aware that there were several deaths?
A. No.
Q. Were you aware that there had been any adverse incidents at all, even if they hadn't led to actual deaths, involving Solution No. 18 at that time?
A. Nothing comes to mind that this has happened because of Solution No. 18. I mean, it's only later that I learned about the Adam Strain case or the ...
Q. Sorry?
A. It's only later on. In fact I didn't even know about Adam Strain until much, much later, whenever the inquiry started.
Q. It's a very clear statement he has made to his medical director and in fact part of the reason he's making it is because he's advocating a change at Altnagelvin as

well. So on foot of it he is proposing that Altnagelvin change its practice.
A. I know I was asked in the inquiry because he mentioned my name, that he had spoken to me. This is the first time that I'm seeing this letter. I wasn't even provided anything in -- any evidence, nor did I look after Raychel, so I don't know where he got that information from.
Q. He then made it again in a statement he had made to the police, the PSNI. That's a statement that he made in March 2006, so much later on. One sees the reference to you at 095-010-040. If you look down, he's reciting again what he did, and we see that starting a few lines down from the top. So Raychel has died and he says:
"I believe I made telephone calls on 13 June and spoke to [his] anaesthetic colleagues."
He doesn't list all the hospitals he contacted, but he told them what had happened roughly. Then he comes down to where he says:
"I spoke to Dr Chisakuta, a consultant in paediatric anaesthesia and intensive care at the Children's Hospital about their use of Solution No. 18 in post-operative surgical children and he informed me that they had been using precisely the same regime as Altnagelvin Hospital, but had changed from

Solution No. 18 six months previously because of concerns about the possibility of low sodium levels."

If you pause there for the minute, that kind of concern was the subject matter of your talk in September 1998; is that right?

A. Correct.

Q. Yes. So the concern that you had been discussing on foot of Arieff's paper is actually what he's saying here had led to a change -- not then, but more recently -- in the Children's Hospital's use of Solution No. 18?

A. Yes, but I don't recollect this conversation.

Q. Yes. You have said you haven't recollected it, but could it nonetheless be the case? So even if you don't recollect it, could it be so?

A. I don't follow the question.

Q. Well, you can't remember it --

A. I can't remember the conversation.

Q. -- but Dr Nesbitt seems to remember it. He put it in a letter within a day or so of Raychel having died and he has recited it -- not your name in the letter, but the practice -- and he has then recited it, but with your name now in a statement he made to the police, so he clearly has remembered it. Could that be so?

A. I mean, I don't want to doubt his integrity if he says that's happened, that could be so, but I don't remember

the conversation.

Q. Well, if it could be so, if that is something that he could have been told, then what sort of thing could have been happening round about the beginning of the year, which would take it to about six months, when he's talking about contacting the hospital in June 2001, so what sort of thing might have happened, say, at the beginning of 2001 or the end of 2000?

A. What do you mean? What sort of things? I don't follow the question.

Q. Are you aware of anything that happened round about that time frame, the end of 2000 or the beginning of 2001, that could have led to that kind of information being given to Dr Nesbitt?

A. Not that I can remember.

Q. Well, when you're asked about the practice from your point of view, and you say it in your witness statement at 283/1 at page 7, you say right down at the bottom, the answer to question 8 -- in fact, if we could bring up page 8 as well. But we'll start with the beginning of your answer. The question is:

"Did the Children's Hospital cease the practice of prescribing No. 18 Solution to post-operative children?"

You say:

"I do not recall a formal protocol or directive

requiring clinicians to cease prescribing No. 18 Solution to post-operative children."

If we stop with that. Leaving aside whether there was anything formal by way of protocol or directive, could there have been a practice whereby paediatricians just stopped prescribing it?

A. Paediatricians?

Q. Sorry, I beg your pardon, paediatric anaesthetists. Could there have been a practice?

A. Yes. I mean, from what I recollect, when I was in training, we used to use a 0.18 per cent saline in 4 per cent dextrose. When I was a consultant, when I came back, I think most of us had stopped using 0.18 per cent solution.

Q. When you say "most of us", do you mean most of the paediatric anaesthetists at the Children's Hospital weren't using Solution No. 18 by the time you came there as a consultant?

A. Correct.

Q. Yes.

THE CHAIRMAN: Sorry, was that because of something you learned at Great Ormond Street or was that because of the literature such as Professor Arieff's article?

A. Yes, Mr Chairman, you are correct because of what I learned in Great Ormond Street and the fact that

in the literature we were reading more and more about the dangers of 0.18 per cent.

THE CHAIRMAN: I know there's an argument that Solution No. 18 is an appropriate fluid in some certain situations, but on a more general level had they stopped using Solution No. 18 in Great Ormond Street or had they cut back significantly on using Solution No. 18?

A. I don't think they had stopped using it. I did see them using it. I can't quantify as to how much they had reduced it, its usage. I know it was -- it used to be used.

THE CHAIRMAN: By the time you were a consultant, which is about a year after you left Great Ormond Street, by that time you were not using Solution No. 18?

A. As an anaesthetist, it's not the solution that I would have prescribed in the post-op period.

THE CHAIRMAN: Sorry, I thought you suggested a moment ago that that was partly as a result of what you had learned in Great Ormond Street.

A. Yes, I mean, wherever it comes from, you gather knowledge.

THE CHAIRMAN: Yes. Sorry, maybe I didn't make myself clear, doctor. Was your knowledge being gathered both from reading the literature and from what was happening in Great Ormond Street or only from the literature?

A. I think from both.
THE CHAIRMAN: From both. So in Great Ormond Street can I take it then that there was a debate or a change in trend about the extent to which Solution No. 18 would be used?
A. I would say yes. I mean, there's a discussion among the anaesthetists there.
THE CHAIRMAN: So over a period of time, Solution No. 18 was being used less in Great Ormond Street and was being warned against in the literature?
A. Yes. The reason why I'm hesitating is I can't quantify just how less they were using it, but I know it used to be used, but whether it was getting less and less, I can't quantify that.
THE CHAIRMAN: Thank you.
MS ANYADIKE-DANES: But in any event, when you came to the Children's Hospital, you weren't using it as a post-operative fluid?
A. No.
Q. And you wouldn't use it during the operation itself, that isn't a fluid you would use in particular?
A. No.
Q. And if you had to prescribe a fluid to a child preoperatively because you might have, if you visited the child, been a little bit concerned about their

hydration levels, I take it that's not a fluid you would be prescribing in the preoperative phase?
A. It would depend on ... It would depend on what the child was suffering from before they went to theatre.
Q. I understand. It's probably too general a statement, sorry.
A. Yes, but offhand it's not the solution that I would have picked up and started prescribing and giving.
Q. So when you came back and it's not really a solution that you would be prescribing, was that something shared by the other consultant paediatric anaesthetists, or were you alone in that view?
A. I think ... It's difficult to say. I mean, I believe, I wouldn't have just been the only one not using it, but ... We're all responsible, I suppose, for our own practices.
Q. Yes.
A. I tended not to use it as much as maybe some of my colleagues did.
Q. Would you have considered it to be in common usage amongst the paediatric anaesthetists by the time you got back?
A. No.
Q. If that's the position amongst the anaesthetists, some might use it but you wouldn't by any means say it was

common, what, so far as you can recall, when you got back to the Children's Hospital in 1997, was the use of Solution No. 18? So I'm not just confining it now to the prescribing patterns of paediatric anaesthetists but generally what was your impression about the incidence of its use?
A. In the wards it was used quite a bit.
Q. In the Children's Hospital?
A. By the paediatricians, yes.
Q. In the same way as the chairman had put to you that there was some discussion in Great Ormond Street amongst the anaesthetists and that might have led to a decreasing use of it, were you aware of that happening amongst the paediatricians in the Children's Hospital?
A. Um ... I find it difficult to comment on that since it's not something that I had looked at.
Q. Well, you'd be aware if you prescribed Hartmann's for a child, the child gets back to the ward in the Children's Hospital and those fluids are changed to Solution No. 18.
A. I'd be aware, yes.
Q. Yes, that's why I'm asking you. So far as you can help us with it, what's the incidence of the use of Solution No. 18 on the ward by the time you got back in 1997?

A. It was being used.
Q. Yes.
A. I can't sort of quantify, I can't say.
Q. I understand.
A. But it was being used, yes.
Q. Did you become aware of that usage lessening?
A. I'm not sure how to answer that. I don't know.
Q. Then if we go to page 8, you say that Solution No. 18 -- firstly, you say:
"I don't recall the discussion that Dr Nesbitt refers to or the scenario that he describes. Solution No. 18 was available, ie physically present, on the wards in the Children's Hospital until around 2008."
Then you go on to say, to pick up a point the chairman made:
"It is still available for specialised use in PICU and the renal unit."
So does that mean, if I understand you correctly, that you, from your perspective, didn't really see any change in the use of Solution No. 18 more generally up until about 2008?
A. Correct.
Q. And do you know what prompted that change in 2008?
A. We had, as I have answered there, the National Patient Safety Agency alert/warning and then the circular from

the Department of Health. I think those are the two things that prompted it being withdrawn from the wards.

Q. Were you aware in 2002 that the Chief Medical Officer in Northern Ireland had issued guidelines in relation to hyponatraemia?

A. Yes, I was aware.

Q. And that happened in -- I think it was, March 2002.

A. Mm.

Q. Did that have any impact at all on the use of Solution No. 18?

A. It might have had, but I'm not sure, again, how much. I can't quantify what impact it had.

Q. When those guidelines were issued, do you recollect whether there was any discussion amongst your consultant colleagues as to whether that was likely to have any impact on prescribing practices of Solution No. 18?

A. I don't recollect that.

Q. Well, do you recall if there were any meetings amongst your consultant colleagues as to how to respond to those guidelines?

A. I did not attend any such meeting.

Q. Well, were there any, so far as you're aware?

A. I'm not sure.

THE CHAIRMAN: How did you implement them, the 2002 guidelines from the department? How did you use them in

your practice?

A. It didn't affect me that much since I didn't use 0.18 per cent saline in 4 per cent dextrose.

THE CHAIRMAN: What strikes me as being difficult to understand from my perspective is if, through Great Ormond Street and the literature, there's a growing awareness that there are risks involved in using Solution No. 18 post-operatively and you pick that up from your training in Great Ormond Street and you pick it up from your reading and you lecture to the Western Anaesthesia Group about it, is there no discussion within the Children's Hospital about this?

A. Mr Chairman, there would have been discussion, but it just -- I wasn't aware of it. There would have been a discussion, I'm sure there -- not "I'm sure"; there probably was, but it's not that I was aware of.

THE CHAIRMAN: If there was some discussion then that should have led, it seems to me, to either a reduction in its use or anaesthetists being more careful with its use, or perhaps a combination of both.

A. Yes. As I explained, Mr Chairman, most anaesthetists wouldn't have used 0.18 per cent saline. I think the question -- in the wards, its use was reduced. Again, I can't say. Possibly.

THE CHAIRMAN: Then let's move on to the figures,

Ms Anyadike-Danes.

MS ANYADIKE-DANES: Yes. The inquiry sought from the Trust the figures for the use of Solution No. 18 in a period from January 2000 to July 2001, trying to capture the six-month period that Dr Nesbitt had talked about. If I pull up firstly an explanation for the figures, that's in 319-087c-001. Alongside of that, could you please pull up 319-087a-001?

A. Is this a letter?

Q. Yes, it is. So we had sought the information and the first response came back on 17 May, saying:

"I am instructed by the Trust that there were no orders placed with the pharmacy by the Children's Hospital in respect of Solution No. 18 [in that period that I just mentioned to you]. Therefore it appears that No. 18 Solution was not used in the Children's Hospital during the period January 2000 and July 2001."

They have since retracted that and you can see that from the letter on the left-hand side. But were you asked about the use of Solution No. 18 in that period for the purposes of responding to the inquiry?

A. Not that I recall.

Q. Sorry?

A. Not that I recall.

Q. Well, it would have happened very recently. The first

letter is dated 17 May 2013. Did anybody ask you to comment on the use of Solution No. 18 in the Children's Hospital over the period January 2000 to July 2001?

A. No one asked me.

Q. Nobody asked you?

A. No.

Q. And in fact, if we go back to your CV, we don't literally have to go back, I'm going to refer you back to it, you were lead clinician of PICU from January 2000 to December 2002, so over this period you were the lead clinician in PICU.

A. I was.

Q. If we then go to the letter on the left hand side, the retraction letter, they say it's incorrect because of the way they interrogated the system, if I can sum it up in that way. So what they now say is that the pharmacy department supplied a total of 6,493 bags of Solution No. 18 in that period, 1 January 2000 to 31 July 2001, and a chart is enclosed. If we go to that chart, which is at 319-087c-003.

When I was asking you about the use of Solution No. 18, you caveated it, but your main view seems to have been that whatever the paediatric anaesthetists were doing, the impression you had was that there really wasn't very much change in the use of

Solution No. 18 until the response to Alert No. 22 in about 2008; is that right?

A. Yes, that's correct.

Q. If you look at this chart here -- and it is just a snapshot, we accept that -- but it starts off at, as you can see, 359 bags in January 2000. And it stays in or thereabouts, in the 300s/400s, until you get to February 2001 when it drops more significantly than it has done, down to 242. There's a rise in March, then there's a fall again in April, a little bit of a rise in May, and then quite a dramatic fall in June, until, by July 2001, there's only six bags actually being ordered for the whole of the Children's Hospital --

A. Mm-hm.

Q. -- from the pharmacy. Can you explain that, what was happening?

A. Obviously, they've reduced their usage of 0.18 per cent saline in 4 per cent dextrose in the wards.

Q. Yes. When I had put to you Dr Nesbitt's police statement and you had said, "Well, if there had been incidents of that sort, a reduction in the use would have been a reasonable response", you don't know whether there was or not, but that's the sort of thing that the Children's Hospital might do. When you look now at this pattern of usage, does that not perhaps seem to suggest

to you that Dr Nesbitt might have been told that there was a reduction in the use at the Children's Hospital?

A. Looking at this, it's possible, yes, you could infer that. But I think we were referring to what anaesthetists did and what the wards did, and I think I was talking about what anaesthetists did. Obviously, looking at this, it seems also in the inpatient areas they had also reduced the usage of No. 18 per cent solution.

Q. Yes. Although in fairness to Dr Nesbitt, he actually wasn't asking something as specific as what paediatric anaesthetists were doing; what he was relaying was that he was being told that the Children's Hospital itself had reduced its use of Solution No. 18. And that's why, when you told me about the position in relation to anaesthetists, I asked you about the Children's Hospital, the position on the ward.

A. Unless somebody has sort of this type of information or you have maybe been in contact with the pharmacy department, I can't imagine anybody commenting about what's happening in the wards. I surely wouldn't have commented about this because this is the first time I am even seeing this reduction in the usage of No. 18 Solution.

Q. You may not have been able to comment on what the

ordering patterns were of the pharmacy, but a fall-off in use from 137 to 6 within the space of May 2001 to July 2001 might be the kind of use that could be marked.

A. Yes.

Q. Yes.

THE CHAIRMAN: Sorry, the fall-off is far more significant than that because, all through 2000, the monthly ordering forms are in the 300s/400s and sometimes over 500. They're still high in January 2001 and, with the exception of March, they plummet, so there's effectively no Solution No. 18 being ordered for the Royal in June and July 2001. What we're asking you, doctor, is to help the inquiry by understanding what brought that about.

Dr Nesbitt gave two versions of it. His letter at the time said that he was told by you that there were several deaths. His statement to the police said that this wasn't because of deaths, but it spoke about concerns about Solution No. 18.

Unless there is some other explanation which will come from the Royal about this virtual wipeout of Solution No. 18 in the Royal, I'm left to infer that for some reason, even if there was no formal directive issued or there was no new protocol issued, that the use

of Solution No. 18 in the Royal virtually came to a halt in the spring of 2001. And what I would like to know is whether you can help the inquiry by explaining why that happened.

A. I don't know why that happened.

THE CHAIRMAN: Thank you.

MS ANYADIKE-DANES: One final question and then I will move on from that.

If you had had a call from a colleague -- you say you knew Dr Nesbitt from when you were at Altnagelvin -- and he particularly wanted to know what the pattern of use of fluids was in the post-operative period or even on the ward for children, apart from telling him about what you did, how would you go about finding an answer for him?

A. I'd probably speak to the pharmacy. Like in the PICU, there is a pharmacy person attached to the PICU, they would the people I would ask, or maybe speak to the sister in charge of the ward because they're the people who order the fluids.

Q. So when you said you wouldn't know, but if a colleague has asked you, there are ways in which you could try and help provide that kind of information --

A. Yes.

Q. -- which would involve going to the very source of this

information?
A. Yes.
MS ANYADIKE-DANES: Thank you. I'm going to move on now to talk about the morning of 13 April when Lucy was transferred to the Children's Hospital. Mr Chairman, I'm conscious of the time.
THE CHAIRMAN: Yes. We have to take a break for the stenographer, doctor, so we'll come back at 11.45. Thank you.
(11.34 am)
(A short break)
(11.45 am)
MS ANYADIKE-DANES: Dr Chisakuta, I want to ask you a little bit about the consultants who would have been in charge on April 13th, when Lucy was admitted to PICU, and also the 14th, which is the day on which she died.
Lucy's admission sheet has the consultant on it as Dr Crean. I can just show it to you, 061-013-037. So she's admitted and the consultant who is allocated to her is Dr Crean. What did you understand, in 2000, was the implications of Dr Crean being allocated to her as her consultant?
A. I suppose --
Q. I should have said, sorry, in terms of the management of her care.

A. He would have been the one -- say, for instance, if Lucy had stayed in the ICU as a long-term patient, the named consultant is the one who follows up, whom we delegate to talk to the parents, so not all of us are speaking to the parents all the time. That would be the significance of him being there.
In actual fact, there should also be the name of either paediatrician or, if it's a surgical patient, the name of a surgeon in conjunction with the intensivist. Whenever a patient leaves the ICU, they have to be looked after by either a paediatrician or surgeon. That's why usually two people should be -- that's how we operated. Usually two people should be in charge of a particular patient in the PICU.
Q. Being a consultant in terms of your professional obligations before the GMC and so forth, that has a certain significance if you are a patient's consultant.
A. Mm-hm.
Q. And if you are named as the patient's consultant then is that a significance that carries on until that is changed so far as you're aware?
A. I presume so. But looking at the way our ICU, our paediatric intensive care, works you have five consultants who work in the PICU each week, so each day

there will be a different consultant looking after that particular patient.
Q. Yes. That's actually particularly why I'm asking you that. Who retains overall responsibility for the child?
A. The way I think we worked it in the Children's Hospital, it's the person to where the will would be discharged to. So it would be either a surgeon or a paediatrician, not necessarily the intensivist.
Q. But all the time the child is in PICU, is it the intensivist who has overall responsibility for the management of the child's care, even if he or she brings in specialists for certain aspects of that care? Does the person named, like Dr Crean here, have overall responsibility for the child's care?
A. Um ... In practice, I don't think so because, for instance, if, say, this patient came in on the day when Dr Crean was working and I'm working on a day like a Friday, it's not as if he's going to say, "Dr Chisakuta, I do not agree with the line of management you're using, I'm the lead consultant, I want you to change to this", I don't think it would go to that extent. So I'm not sure ...
Q. Let me just help you. Firstly maybe you can help us with this point: Dr Crean, in a witness statement in another child, Claire, said -- the reference for it is

witness statement 168/2, page 12 -- that in 1996 and for several years afterwards his name appeared on all hospital admission slips for children admitted directly to PICU at the Children's Hospital for administrative reasons, and irrespective of whether he had any direct involvement in their care; do you remember that?
A. Probably that would have been the case, yes.
Q. And is that what happened when you were lead in PICU, which was January 2000 to December 2002?
A. Yes. I mean, people are stuck in their way they work. Sometimes they used to put his name as --
Q. Sorry, let me just be clear about this, okay? In fact, let's put it up, it's witness statement 168/2, page 12. You can see it in the answer to question 55:
"In 1996, and for several years subsequently, my name appeared on all hospital admission slips, the yellow flimsy, when a child was admitted directly to PICU. My name also appeared on all hospital discharge summaries from PICU. This occurred irrespective of whether I had any direct involvement in a child's care."
Okay? So that's the position that he was relaying to the inquiry when effectively he was lead clinician. The point that I'm putting to you is you were lead clinician in PICU from January 2000 to December 2002; is that what happened for children admitted directly

into PICU, did they all come in with your name?
A. I can't recollect whether all of them came under my name.
Q. Well, do you recognise the practice that Dr Crean has described in his witness statement?
A. I do, yes.
Q. Well, given that you were the lead clinician at the time when Lucy was admitted, can you help us with why Dr Crean is allocated to Lucy as her consultant?
A. I think just because Dr Crean was working on the Thursday, so maybe that's why his name appeared in that, because my belief would have been that since -- when Lucy was being transferred from the Erne Hospital to the paediatric intensive care hospital, the consultant they had spoken to had been Dr McKaigue, it would have been Dr McKaigue's name that should have been appearing there.
Q. Yes. Well, it seems that the practice that Dr Crean has described there isn't something that applied whilst you were lead clinician, otherwise she would have had your name. Because what Dr Crean is really saying is, irrespective of whether he was on duty or not on duty, that child would be admitted under his name.
A. Yes.
Q. That's what he's described there. So it would seem

that, given that you were the lead clinician in PICU at the time that Lucy came in and she hasn't got your name on her admission sheet, that wasn't a practice that was in operation when you were lead?
A. Probably not, but again, just to repeat myself, the reason why Dr Crean's name is appearing is because he took over from 8.30 working in the PICU on the 13th. Maybe that is why his name is appearing on the flimsy.
Q. And then I think you were saying, when I was asking you earlier, that given that the consultants changed each day, I think you were saying that your view was that the management would fall to whoever happened to be the consultant on duty that day irrespective of the named consultant on the child's admission form; is that correct?
A. Correct.
Q. The management might, but what about the responsibility for the child's care?
A. I would take the view each consultant working on that particular day also has the responsibility for the child's care.
Q. For whatever that consultant does, yes, but for the overall management of the child's care who should come in as a specialist, who should perhaps speak to the parents, overall are you saying that that responsibility

could change day by day depending on who the consultant was in PICU at the time?
A. Unfortunately, that's the problem with the way we worked where we changed every day, yes.
Q. And how would that change be registered? How would anybody know, without going back and looking at rosters, that although it says that the child is under Dr Crean as the consultant, in fact the child wasn't on any other particular day because some other consultant was on duty then? How would anybody know that?
A. All of us have fixed days on which we work in the PICU, so people tend to know on a particular day and so on. That's how people would know.
Q. But there's no formal transfer of responsibility from one to the other?
A. Whenever you are leaving the PICU -- suppose you finish your day at 18 hours and you are handing over to the night person, you would formally hand over. And then also that person was working the night the following morning would also formally hand over.
Q. I didn't mean a handover in terms of appraising somebody of what has happened with a child during the time you're on duty; I meant a formal handover of responsibility. Maybe if I pull something up from another consultant in Claire's case you can see the point that I'm making.

There was an issue in Claire's case as to whether the responsibility for her care had moved from the paediatrician to the paediatric neurologist. The child had come in under the name of the paediatrician and, for various reasons, that paediatrician had not seen the child, but a neurologist had and there was an issue as to whether that neurologist had now taken over the responsibility for the child's care.

What the paediatrician said in her evidence to the inquiry -- we don't need to pull it up, but for reference purposes it is the transcript of 15 October 2012, page 94. She says:

"Until it's formally taken over and there is a formal transfer, Dr Webb [who was the paediatric neurologist] and I discuss it, I remain the named consultant."

Then the inquiry's expert in hospital management and governance, Dr MacFaul, said in the same case, but in his expert report at 238-002-106 at paragraph 441:

"A consultant takes responsibility for all patients admitted under their care either by planned or acute admission and then responsibility for continuing care of patients admitted on their day on call and for ongoing care during that admission and the subsequent follow-up."

So what Dr MacFaul was describing was if a child comes under your name, you have responsibility for that child -- and he goes on elsewhere in his report to detail it -- until there is a formal transfer, which he thought ought to be recorded in writing.

A. Yes. That might apply to, say, the paediatrician in the ward or to the surgeon in the ward. In the PICU it works slightly differently.

Q. So in PICU the way it works is whoever is on duty at the time has responsibility for the child's care?

A. Yes.

Q. Thank you. You also, I think, did say that you thought there should be two names. There should be the intensivist and the name of either a paediatrician or a surgeon, which is going to be, assuming the child survives, the ward where the child will be transferred to.

A. Correct.

Q. And when does that happen? At what stage do you get assigned to consultants?

A. On the day of admission, just when the child is getting admitted. For instance, if I am working in the PICU on that day, my name will be appearing, and then the name of -- depending on the patient's condition, if it's a medical condition, the name of the paediatrician on

call will happen. So there will be two names appearing.

THE CHAIRMAN: Does that happening even if it's already clear that the child has really no prospect of surviving?

A. Yes.

MS ANYADIKE-DANES: So for Lucy, who would those two names have been, from your experience and how the system worked?

A. I am not sure as to who the paediatrician was on call that particular day, but the first name would have been Dr McKaigue. I don't know who the paediatrician would have been on call. I don't know if it was Dr Hanrahan who was the one on call that particular day and that's why his name was appearing.

Q. So your understanding of it is it shouldn't have been Dr Crean on the admission sheet, it should have been Dr McKaigue --

A. Dr McKaigue.

Q. -- with, if Dr Hanrahan was the paediatrician, his name?

A. Yes.

Q. And those two names would have stayed on the admission sheets and, even though there was movement back and forwards -- what's the significance of those two names if the intensivist's responsibilities, or at least the person with those responsibilities, is going to change

from day-to-day?

A. As I've explained, especially if we have a patient who is in the ICU for a -- for long-stay patients, the named consultant is the one who is delegated to do most of the communicating with the parents. Otherwise it causes a lot of confusion as everybody's coming to talk to the parents. For communication purposes, we like to have one individual, but then when that patient leaves the intensive care unit, he or she has to be looked after by a paediatrician or a surgeon. That's the significance of having the second named consultant.

Q. As it happened, Lucy was only in PICU for the 13th up until the 14th. She died on the 14th.

A. Yes.

Q. Do you still say in those circumstances she would have had two named consultants in your view?

A. In my view, yes.

Q. And given what actually happened to her, she, I think -- the general consensus is she arrived in a moribund state, you examined her on the 14th, so you know the state she was in when you examined her, and that's how she remained for the two days. What then would you say was the responsibility of those two named consultants in your understanding of how the system would have worked? What would they have been responsible for?

A. I mean, the first name obviously, if he was working on that particular day, would have been looking after the physiological, the resuscitation of that particular patient. The second name, like in this case Dr Hanrahan, was doing his expertise, his neurological expertise, trying to make a diagnosis and what not. And usually, like in this case, sadly Lucy passed away, you know. He would have -- in this case, he was the one who phoned the coroner, but at the same time, had I been free, I might have said, if I wasn't doing any work, I might have maybe phoned the coroner myself. We sort of divide responsibilities as to what one can do or cannot do.

Q. When you portray it in that way, it sounds like there's quite a bit of discussion between the two consultants in their joint management, if I can put it that way, of the child's care?

A. There is discussion, yes.

Q. That's necessary, isn't it, to make sure that the child is being cared for appropriately?

A. Yes.

Q. And does that mean when things have to be done like, for example, a decision when the child has died as to whether the coroner is going to be informed and, if so, what the cause of death is that's going to be explained

to the coroner, if a death certificate has to be issued, what's the cause of death to be inserted there, if there's going to be a referral to a pathologist, what should be being described to the pathologist on the autopsy referral form, those sorts of times when decisions have to be made, is that the sort of thing you would expect the two consultants to be discussing?

A. I mean, take for instance in this case myself on the Friday. I was working in the intensive care unit with Dr Hanrahan. We did the brainstem test. He told me he was going to call the coroner. I said, "Fine". I didn't ask him, "What are you going to tell him?", because I expected him to narrate the story of the child's, you know, illness, why she was in the PICU, you know.

Q. Had you had sufficient discussions with him so that you, from your point of view, would be pretty clear what he would be telling the coroner?

A. We are both consultants; I can't imagine I'd be telling him, "You go and tell the coroner this".

Q. No, no, no, no, that wasn't the question I put to you. I said: had you had sufficient discussions with him on Lucy's condition so that you would be pretty clear what you would expecting him to be telling the coroner?

A. No.

Q. You hadn't had sufficient discussions with him?

A. The thing is, we -- I knew what had happened and expected him to know what happened, so the discussion -- I didn't tell him "You go and tell the coroner this". We didn't have that discussion.

Q. The what did you think had happened?

A. What do you mean, "What did I think happened"?

Q. Well, exactly that. What did you think had happened, which if you were in the position of telling the coroner, you'd be telling the coroner?

A. I would be narrating exactly what had happened, that Lucy had been in one hospital where she was given -- or appeared to have been given -- had this particular illness, received IV fluids, seemed to have had a seizure, they noticed that her pupils were fixed and dilated, she came to the hospital, the electrolytes dropped from whatever they were, 137 to 127. I would have narrated the story to the coroner.

Q. And what in all of that would have made that a case that should be referred to the coroner?

A. The reason why the case should have been referred to the coroner is because of the unexpectedness of what happened to Lucy. Nobody would have expected somebody coming into the hospital the way she was to end up in the state in which she ended.

Q. So the unexpectedness is one reason. If you're trying to explain to the coroner what you thought the cause of her death was --

A. I don't know. That's why I'm reporting to you, Mr Coroner, to try and help me find out the cause of this child's death.

THE CHAIRMAN: Did you have a clue what the cause of her death was?

A. Oh, yes, we had a clue what the cause of her death was: the fact that she coned.

THE CHAIRMAN: Right. Why did she cone?

A. She had developed cerebral oedema.

THE CHAIRMAN: Why did she have a cerebral oedema?

A. It could have been a combination of things and we were trying to find out, but that's why there was a bit of differential diagnosis, but one thing that she had was that she had had lots of fluids in the other hospital.

MS ANYADIKE-DANES: So you would have at least had that as a possibility?

A. Correct.

Q. Just before you answered the chairman, you were saying we didn't know why she had died. If you didn't know, is that not something that would prompt you even more to have a discussion amongst your colleagues? To see if, if you pool your experiences and your knowledge, maybe

you can get a better refinement as to what the likely cause could have been.

A. If you have a discussion with -- the child has died, you have done your best endeavours, you have had a discussion. I'm not going to put words in my colleague's mind to say, "You go and tell the coroner this". But at the same time I expected him to narrate exactly what had happened.

Q. No, that wasn't quite what I was asking you. I'm not asking you to say whether you would have told Dr Hanrahan, "Go and tell the coroner this". It turns out that although you had some thought that fluids might be implicated in the development of her fatal cerebral oedema, you weren't entirely sure because there were other things that could have given rise to that; that's why you had differential diagnoses. Dr Hanrahan said he didn't exactly know either why she had died. Is that not the very circumstance in which colleagues, before they start talking to the coroner, who won't have at that stage a clue about what happened to the child -- is that not the very circumstance when colleagues discuss with each other to see if they can get a better idea of what has happened to the child?

A. Correct.

Q. Yes. And when you were having those discussions, who

would you have been discussing with?
A. The two of us, myself and Dr Hanrahan, because we were the consultants in the unit at that particular time.
Q. Well, would it have occurred to you to, for example, discuss with Dr Crean -- Dr Crean was there when he came in, fairly shortly after he came in, and he had the initial examination of her and management of her during the 13th. Would it have occurred to you, let's bring him in? He's an experienced consultant paediatric anaesthetist.
A. Dr Crean may not have been available at that particular time.
Q. Whether he was or not, would you have wanted to discuss with someone like him to try and see if you can get a better idea as to what has happened to Lucy?
A. You could do that if you -- I suppose if you're not sure.
Q. Well, you weren't sure.
A. If ... It's not something that ... Unless you're really in the dark, that's when you would probably call Dr Crean, "Can you come and help us out here?" In this case I don't think Lucy's case was such a case that you needed Dr Crean to come and tell you to figure out what had happened.
Q. What had you figured out?

A. I had stated that before.
THE CHAIRMAN: And you said that the clue you had was that she had died because of coning, and that was due to cerebral oedema, and that was due to lots of fluid in the other hospital.
A. Yes.
THE CHAIRMAN: Do I take it from that that you were conscious of the possibility that a possible or probable cause of Lucy's death was the volume of fluid that she had been given in the Erne?
A. Yes.
THE CHAIRMAN: And that's why in your eyes it was entirely appropriate for Dr Hanrahan to contact the coroner?
A. Yes.
THE CHAIRMAN: Does it follow from that, doctor, that not only was it an unexpected death, but there was in your mind a concern about the standard of the treatment which she had received in the Erne?
A. You could say that.
THE CHAIRMAN: Well, I'm asking you that.
A. Yes.
THE CHAIRMAN: Do you agree?
A. Yes.
THE CHAIRMAN: And that was apparent to you on Friday the 14th?

A. It was.
THE CHAIRMAN: Thank you.
MS ANYADIKE-DANES: So if you are talking about the possibility that too much fluid has been given or too much of the wrong sort has been given, let's be clear, you're talking about an iatrogenic event?
A. Yes.
Q. So far as you can recall, from your discussions with Dr Hanrahan, do you think he shared that view?
A. I do not recall us having had a conversation where I shared that view, no.
Q. You didn't share with him that you were concerned that there might have been, let's call it human intervention, as part of the reason why Lucy had deteriorated in that way?
A. No.
Q. Did you not think that would be appropriate to do?
A. Dr Hanrahan had been looking after Lucy anyway a day before me, so he had a view and when I came in on the Friday, I had a view, you know. He should have, in my view, known that fact.
Q. Yes, maybe he should have done, but you'd reached the view, so did you not think it appropriate to share the view that you had reached with him?
A. I don't ... I can't recollect us having had such

a conversation, no.
Q. What would have been your response if Dr Hanrahan didn't feel it necessary to report to the coroner?
A. I would have strongly advised him to.
Q. Advised him or would you have done it?
A. I would have done it.
Q. You would have done it?
A. Yes.
Q. So you're happy that the appropriate step is being taken, the coroner is to be informed, but you're not entirely clear what the coroner is going to be informed and you are trusting or assuming that Dr Hanrahan has come to the same conclusion as you have?
A. Yes.
THE CHAIRMAN: Sorry, doctor, can I clarify this? When you formed the view that Lucy's death was due to a questionable standard of treatment in the Erne, you did that on the basis of what you read from the notes which were available on the Friday?
A. And what had been handed over to me.
THE CHAIRMAN: When you say "what had been handed over to you", do you mean in terms of what you had discussed with any other doctor?
A. Yes.
THE CHAIRMAN: And with what other doctor had you discussed

what brought about Lucy's condition?
A. I was handed over -- I mean, the person who had been looking after Lucy on the Thursday was Dr Crean, so I would have had a chat with Dr Crean.
THE CHAIRMAN: Do I take it from that that Dr Crean, from what you gathered from him, he had a similar concern about what had happened in the Erne Hospital?
A. I think he had similar concerns.
THE CHAIRMAN: So you and Dr Crean share a concern that Lucy's death is coming about because of the way in which she has been treated in the Erne Hospital, right?
A. Yes.
THE CHAIRMAN: And Dr Hanrahan is going to contact the coroner?
A. Yes.
THE CHAIRMAN: If you don't speak to Dr Hanrahan about this, how do you know that Dr Hanrahan is going to tell the coroner or his agent that there is a concern in the Royal about the standard of treatment which Lucy received in the Erne?
A. We have had -- I have had communication with Dr Hanrahan.
THE CHAIRMAN: Did he, at that time, share the view that there was a concern about the standard of treatment which Lucy received in the Erne?

A. I would have presumed so, but he did not -- I mean, he did not share a view that this didn't happen.
THE CHAIRMAN: Sorry, when you say you spoke to Dr Hanrahan at the time, does that mean that you told him that, however you phrased it, that it was your view and Dr Crean's view that something had gone wrong in the Erne or that she didn't receive good enough treatment in the Erne?
A. I'm not sure I'd have put it exactly like that, but yes.
THE CHAIRMAN: But there was an issue to be investigated about what happened in the Erne?
A. I had worked in the PICU and I know from past experiences that if you're not sure about a death, you have to call the coroner, and that's what we've done in the past.
THE CHAIRMAN: You go to the coroner because it's an unexpected death. This is a girl who's 17-months old, who on the face of things should not have died.
A. No.
THE CHAIRMAN: And that's the reason why you report her death to the coroner.
A. Yes.
THE CHAIRMAN: But over and above that, in Lucy's case, you and Dr Crean had a concern about the standard of treatment which she had received in the Erne.

A. Yes.
THE CHAIRMAN: So it wasn't this child has died, it's a complete mystery how she's died. Your thinking was this child has died, that is unexpected, but over and above that I'm worried about the standard of treatment which she got in the Erne?
A. Yes, it's not a complete mystery, but at the same time we're not sure of -- because of the differential diagnosis we are not sure of exactly what the other problems would have been.
THE CHAIRMAN: And that's what -- if you had been reporting Lucy's death to the coroner, is that what you would have been reporting?
A. I would have -- my views is I would have narrated everything that was in the notes, including the fact that Lucy had received a lot of fluid. In fact, Lucy, you know ... Even though we don't know what the actual diagnosis is, this differentials, but this had happened, I would narrate everything that's in the notes.
THE CHAIRMAN: Thank you.
MS ANYADIKE-DANES: Just to finish off that point about the opportunities for you to discuss matters with Dr Hanrahan, both you and Dr Hanrahan conduct the diagnosis of brain death and you're the second named doctor on that brainstem death form.

A. Correct.
Q. Can we pull that up? 061-019-070. There we are. You're familiar with this type of form?
A. Yes.
Q. You have to go through, as it indicates, a number of tests so that the two of you can be satisfied that there is brainstem death, so you have to eliminate a number of things to make sure that her presentation isn't caused by underlying factors which could actually be addressed if treated.
A. Correct.
Q. So that's part of the task you have to go through. And if you look under the first of those, which is headed up "drugs and hypothermia". So you're looking to make sure there are no muscle relaxants and that accounts for her physical presence and so on. Then one of the things you are to look at under (f) is:
"Could the patient's condition be due to a metabolic/endocrine disorder?"
And you have to be able to say no. It is usually under that that there is an attempt made to get the electrolytes, for example, within the normal bound, if we're talking about serum sodium, of 135to 145, to make sure that there's nothing underlying there that could be accounting for the presentation. That's correct, isn't

it?
A. That's correct.
Q. If you're there and going through that exercise, you would, of course, have been acknowledging the fact that Lucy's electrolytes had been deranged before she was admitted to PICU.
A. Yes, before she came to PICU, but not when we are doing the test.
Q. No, that's not where I'm going with this.
Before she came, yes, and they had started off with a normal tariff of 137 and they had fallen over a period of time to 127. So if you are discussing Lucy and going through these things to be able to tick what you have to tick, does that not provide you with an opportunity to discuss the fact that you were just describing to the chairman then about a concern over her fluids because you knew her serum sodium levels had been deranged? Doesn't that give you a good opportunity to discuss her previous care?
A. Yes, but whenever you're doing the tests you are looking at the electrolytes at that particular time.
Q. Yes, you had brought her up -- not necessarily you personally, but her care in PICU had brought her electrolytes within normal bounds. But that gives you, I suggest to you, an opportunity to discuss her

condition. And given at that stage you would have known from Dr Hanrahan's entry in the notes that he is thinking:
"If Lucy succumbs, she is a coroner's case."
And we don't need to pull up -- I can give you the reference, 061-018-066 -- what he writes in her notes, which was there on the 13th, and therefore available for you to see on the 14th:
"If she succumbs, a post-mortem will be desirable. Coroner will have to be informed."
That's what he records. So you'd have known that going into the brainstem test that he already has in mind that, if and when Lucy dies, which he believes is inevitable, that the coroner is going to have to be contacted.
A. I would have known.
Q. Exactly. So standing there, and that is where this is going because she's going to fail these tests in your view, I presume, so the next step then is a decision as to when life will be pronounced extinct, when the ventilators will be switched off and so forth, after her parents have been spoken to, and the next step is to contact the coroner?
A. Correct.
Q. That's why I'm pressing you a little bit on the extent

to which the two of you would have this -- one or other of two is going to have to do this and the extent to which the two of you would have discussed what to tell the coroner in a way to sort of succinctly present the concerns that you have that are giving rise to that report. I'm suggesting this would be an opportunity when you could have been doing that.
A. Yes, but at the same time, like I've said, when you are doing the tests, you are looking at the results there, which are within normal range. That's why you're doing the tests in this particular time.
Q. When you have done it and she's failed the test, there's a discussion --
A. Yes.
Q. -- that's going to have to be held with the parents.
A. Yes.
Q. The two of you are on duty at that time in PICU. You're the consultant paediatric anaesthetist, he's the intensivist. Is there any discussion between you as to what you're going to tell the parents?
A. No. I mean, the thing is, what we're going to tell the parents, the child has failed the test, so you're going to tell the parents, "I'm sorry, your child's tests we're doing are negative".
Q. But an inevitable question is likely to be, "Why? Why

has our child died?", and if you've already got as a possibility the care in relation to fluid management that she received at the Erne, isn't that something that you would naturally be discussing with Dr Hanrahan as part of gathering your thoughts together for what we should tell these parents or what these parents should be told?
A. I would be telling the parents exactly what I think would have been wrong, what might have happened. Like I said before.
Q. Including the possibility that her fluid management at the Erne may not have been to the appropriate standard?
A. Correct.
Q. And in fact, may have been responsible for the development of her cerebral oedema?
A. Correct.
Q. And that's the same thing that you say, had you been the one to report it to the coroner, that's what you would have been telling the coroner?
A. That's what I would have been telling the coroner.
Q. Can I ask you this: at this stage, I should have said, by April 2000, had you had to report cases to the coroner?
A. I'm not sure, but I would imagine probably I did, yes.

Q. Do you think you had done that from your position in the Children's Hospital?
A. Yes, as a consultant working in the PICU, I have spoken to the coroner several times, yes.
Q. When you have to make a report to the coroner, what in your view are you providing the coroner with in terms of information?
A. I'm trying to narrate to him the story of this patient's clinical condition that led to the death.
Q. How much detail do you provide the coroner with and how do you do it?
A. I would try and give him as much detail as I can.
Q. Is it something that's done solely by telephone or do you do that and follow up with anything in writing? How does it work?
A. Telephone.
Q. Telephone?
A. Telephone.
Q. And when you say "as much detail", does that mean you're likely to have had the notes with you and going through the notes?
A. Yes, I have notes by my side.
Q. Would you consider that important to have the notes by you if you're making a report like that to the coroner?
A. It's very important, yes.

Q. And what, from Lucy's notes, gave rise to that concern that you've just described to the chairman? What exactly in her notes?
A. I think by that time we had had some faxed medical notes from the Erne, which showed a little bit about the amount of fluid that she had had.
Q. Do you remember seeing her notes?
A. I do remember seeing her notes.
Q. We have tried to summarise, in a schedule form, what was in her notes. As soon as I find it I'm going to take you to it and see if you can help us with -- just give me one moment -- with what, from there, you understood to be the problem. Can we pull up 325-006-001? This is a schedule of the information from the notes that were faxed over from the Erne.
The first piece of information there -- firstly, do you have any recollection of what was in Lucy's notes at all?
A. I wouldn't have recollected now, but if I look at the notes I would have said, "Oh yeah".
Q. Okay. So some of this --
A. It's only when I refer to the notes, but independently I wouldn't recollect what was in the notes.
Q. Then if we start with the capillary refill is greater than two seconds on admission; do you remember noting

that?
A. I mean, if it was written, yes.
Q. Yes, well, it is written. Would that have been relevant --
A. Yes.
Q. -- to you? And what would that have signified to you?
A. A child -- there is a little bit of delayed perfusion, so some element of shock.
Q. Would it have told you anything about the child's hydration levels?
A. The child would be probably dehydrated.
Q. Would you have been able, just from that note there, to have had any view about how dehydrated you would have assessed her to be?
A. I would want a bit more information. I know the capillary refill is delayed, is there anything else? What's the skin texture like? Is the tongue moist and all those things? It depends on who the observer is and where they actually did the test.
Q. Yes. You say you would have wanted a bit more information to be able to assess the significance of that.
A. Yes.
Q. But you would have seen it as a relevant entry?
A. Yes.

Q. And then you see that, on admission, her sodium is 137 and that her IV line is inserted at 2300 hours. Then you've got some further information from the clinical notes. So the IV line is inserted at 2300 hours and she's rigid from a seizure, one assumes, at approximately 3 o'clock in the morning. As we're running down there, can you be identifying for me any of these things that you would have been picking up on and would have been alerting you to the possibility that her fluid management may have played a part in her deterioration?
A. Looking at this, you can't say anything about the fluids since you don't know the rate. There's nothing about the rate of the fluids that she has been given, nor is there the type of fluid that she's been given.
Q. Let's turn to the next page then, 002. Under the staff nurse's notes, you see the IV fluids, "No. 18 Solution at 22.30 at 100 ml an hour". So that's the type of fluid and that's the rate, but all this is information that was in the notes that were faxed over. You would also have seen, if you just see above, that at some stage that rate was changed so that she received, over an hour, 500 ml of normal saline. In fact, if you run down the nursing notes you can see the order in which it happens. She starts off with 100 ml an hour of

Solution No. 18, then she has a large vomit at just slightly after midnight, IV fluids remaining at 100 ml an hour. Then she has, at 2.30, a large bowel motion. Then at 3 o'clock she has her seizure. Then, after that, her IV fluids are changed, although it doesn't say when, to normal saline, running freely. I presume you could pick that up with what's above to see that she actually had an hour's worth of that.

After that happens, the consultants are in attendance and they do the repeat U&Es, which produces the result of 127. So this is information gleaned from the notes, the reference along the second column tells you where in the notes one finds it. But what is it that you were seeing in the information in the notes that led you to think that there had been some element of fluid mismanagement, if I can put it that way?

A. Why am I giving -- why are the fluids being given at such a high rate for a child who is -- depending on what the weight is.

Q. No, I am asking you it slightly differently, although I understand the question that you have posed. You have told the chairman that of the range of things that could have contributed to her cerebral oedema you were particularly concerned that it was the fluid regime that she had been on at the Erne. What I was asking you

is: what was it you saw in the notes to allow you to have that concern?

A. She's been given a solution, inappropriate solution in my view, for -- I don't know whether this is for resuscitation or maintenance or what it is, but the volume or rate is a little on the high side.

Q. Why did you consider it to be inappropriate?

A. You showed me the first slide where there was a capillary refill of greater than 2 seconds, so one would infer that probably this child might have been shocked. If you were giving fluids to try and correct that, you would be using 0.9 per cent saline to try and control that problem. The 0.18 per cent, you'd probably be using it for maintenance, not necessarily for resuscitation.

Q. So from your point of view, the wrong fluid has been used --

A. The wrong fluid has been used.

Q. -- if they're trying to address the question of the slow capillary refill?

A. Correct.

Q. So that's one thing that you would have noticed and that might have given rise to that concern, although I think you said you weren't entirely sure what they were trying to do. Was there anything else?

THE CHAIRMAN: You said the volume.

MS ANYADIKE-DANES: What was the problem with the volume?

A. Her weight. I believe her weight was 9.4 kilograms. We normally use a 4-2-1 formula for calculating fluid. If you calculate that, I think she might have been given more than she should have been receiving per hour .

Q. Are you likely to have performed that calculation when you're trying to figure out what has happened?

A. As an anaesthetist it's second nature.

Q. So you would have done that?

A. Yes.

Q. When you read her notes, you'd have been trying to calculate what you can infer about the fluids that she received at the Erne?

A. Yes.

Q. A number of doctors, and for that matter the inquiry's experts, have said that her notes aren't entirely clear.

A. No.

Q. If you sit down and scrutinise them, you can get the information from them to at least get as far as it wasn't an ideal fluid management regime and you formed a rather critical view of it. Did it occur to you to contact her consultant in the Erne to find out or get a better understanding of what her regime had been and why?

A. When would I have done that? Because on the Thursday I only put in the arterial line and central line, I. Wasn't looking after Lucy on that particular day, I had my own theatre list to go to. On Friday we were doing brainstem testing.

Q. You were going to do the brainstem testing on Friday, but nonetheless you'd formed a significant view in terms of what had happened, or the possibility of what had happened.

A. Just to add on, I know that Dr Crean had been speaking to the consultant, I suppose.

Q. How did you know that?

A. He said so himself.

Q. No. How did you, at the time, know that Dr Crean had been speaking to the consultant?

A. Well, at that time?

Q. Yes.

A. When I would have been handing over, he would have told me.

Q. So when he would have handed over to you on the morning of the 14th?

A. No. Probably the evening. I don't know whether Dr Crean was working that night.

Q. Okay. So in any event, at the end of his shift, you're saying he told you --

A. I'm not saying categorically that he did; I'm saying he probably would have mentioned what his worries were or what his feelings were.

THE CHAIRMAN: How worried was Dr Crean about what had happened in the Erne?

A. It's so many years ago, Mr Chairman, that it's difficult to know, but I'm sure he was worried enough to phone the doctor who had been looking after her to try and clarify as to what Lucy had had or the type of fluid and the rate at which it was given.

THE CHAIRMAN: And he was worried enough to express to you his concern about the treatment which she had received in the Erne?

A. Again, it's difficult for me to say. I'm thinking that he probably did tell me because by the time -- I was ... I was looking after Lucy, I was confident enough to know I knew what had happened to Lucy and what the problems were.

MS ANYADIKE-DANES: Are you conscious of him having told you what the response was from Lucy's consultant at the Erne?

A. Offhand I wouldn't know, but it's there in the notes. Only by referring to the notes is how I can tell you now. I can't remember at that time what he would have said.

Q. Yes, but the notes that you'll be referring to to tell you about that are not notes that Dr Crean wrote; it's a note that Lucy's consultant at the Erne wrote after the event. It's not Dr Crean's note.

A. Again it's just something I found out while I was preparing for this.

Q. That is why I want to be a little bit careful.

Maybe help us with this: do you think at the time, so either in the evening of the 13th or at some point on the 14th, you were aware that Dr Crean had contacted the Erne to try and get clarity on Lucy's fluid regime?

A. I cannot remember that he had done that, but referring from looking at the notes, the fact that he had -- if he said that he had spoken to that gentleman, he would have relayed that information to me.

Q. I understand. Okay. So leaving aside that point, can you recollect Dr Crean expressing to you his concern about Lucy's treatment at the Erne?

A. That I cannot recollect.

Q. That you can recollect?

A. I cannot.

Q. You can't?

A. No.

Q. So can you recollect anybody expressing concern to you about Lucy's treatment at the Erne?

A. I mean, you would appreciate it's so long ago that it's very difficult to remember, but when you go back to the notes, you know, I'd be very surprised that whoever had looked -- I mean, especially Dr Crean who has looked after Lucy on the 13th, that he wouldn't have expressed some worry when he was handing over to me. I cannot recollect the fact that he did that, but I'm just ... I suppose it's an assumption I'm trying to make.

Q. I understand that and I can understand why you are making that assumption, but there's not a single thing in writing to indicate that.

A. No.

Q. And if that's the case, that senior -- and in the case of Dr Crean a very senior -- consultant, has formed a view that part of the reason for his patient's demise is the care that she received in relation to her fluids at the referring hospital, and you yourself have formed a similar sort of view. I'm asking you why that isn't recorded anywhere.

A. I don't know, because I think ... I think I made a note the following day, but I do not think I recorded anything to that effect.

Q. Well, do you not think that would be an appropriate thing to record?

A. It would have.

Q. It would have?

A. Yes.

Q. And do you think you should have recorded it?

A. I probably should have, yes. But I mean, I'm not sure on the Friday when I've certifying somebody -- not certifying somebody dead, I am doing brainstem testing that ... It's doing something after an event has already happened.

Q. Even doing something after the event has a value if it means that people start to consider and investigate how these things happen and therefore what might be done to prevent them happening again. It at least has that value.

A. True, but at the same time the reason why I'm referring to the coroner is to try and see if they can help me find out what the problem is here.

Q. You're not referring to the coroner, Dr Hanrahan is referring to the coroner, and you've already said that we weren't actually sure and you assumed the basis upon which he would be discussing with the coroner.

A. I wasn't -- I haven't referred -- the thing is, we've had a discussion. He's speaking to the coroner with a view of trying to find out what the problem -- what has happened to this child.

Q. At that stage on 14 April, you're the anaesthetist with

the responsibility for Lucy's care. And she ends up dying on your watch, if I can put it that way. So if you've got a concern as to why she's died, I think you have just conceded that it would have been appropriate for you to have recorded that in her notes.

A. Probably.

Q. Yes. You've talked, just before we started this line of questioning, about the parents being told; is it a concern that in your view at that time is something that should have been shared with the parents?

A. I remember speaking to the parents, but it's unfortunate that we didn't write in the notes what was said.

Q. No. Is that the kind of concern that you think should have been shared with the parents?

A. Yes.

THE CHAIRMAN: Can I take it, doctor, that you have no recollection of Mr and Mrs Crawford being told that you and any other doctor in the Royal had a concern about the way in which Lucy had been treated in the Erne?

A. I don't remember that, no.

THE CHAIRMAN: Because that would have involved you in telling the parents of a dead child that you and your hospital think that there might be serious questions to be raised about the treatment in another hospital.

A. I do remember vaguely -- I mean, again, it's very

difficult, but my practice would be, especially after we had done the test or even before we do the tests, I would speak to the parents and then, when we do the tests, depending on the result, go and speak to the parents again. But I'm not sure that at that time I would have been elaborating as to why this had happened. Maybe if they asked me a direct question as to what I think would have happened, I would have gone on to try and explain and say maybe it could have been this or maybe it could have been that.

THE CHAIRMAN: So parents who don't know much about medicine and who don't ask you the direct question, they will not be given the information?

A. That isn't entirely ...

THE CHAIRMAN: How will the parents get the information? If there is a view that was held by you that not only is Lucy's death unexpected, but that there's a concern about the treatment she has received in the Erne, how are the parents told that information if they don't ask for it directly?

A. I mean, the way I practise, my practice would be to try and tell them.

THE CHAIRMAN: Sorry, doctor, you said a moment ago that if they asked you directly, you would have told them.

A. Yes.

THE CHAIRMAN: If they don't ask you directly, does that --

A. Maybe that wasn't entirely -- I mean, when I go to speak to parents after an event has happened, I will try and explain to them what I think the problem has been or has led to that particular thing. I'm not ... I probably would have done that with Lucy, but I'm not sure we did that.

THE CHAIRMAN: Let me put it this way -- and we have to be very careful about crossing lines here because Mr and Mrs Crawford are not part of the inquiry -- but we know from the documents that they did make a complaint after Lucy's death about the way in which Lucy had been treated in the Erne. And they had assistance in making that complaint from a man called Stanley Millar, who worked for the Western Health Council. At no point in their complaint did they suggest that they were informed by anybody in the Royal that there was reason to believe that Lucy's treatment in the Erne wasn't up to standard; right?

A. Right.

THE CHAIRMAN: If they had been given that information, it's inevitable that they would have included that in their complaint against the Erne; isn't that right?

A. That's right.

THE CHAIRMAN: So if they don't include that information in

their complaint against the Erne, it strongly suggests that they were not told by anybody in the Royal that anybody in the Royal had concerns about the Erne.

A. Maybe that might be the inference.

THE CHAIRMAN: Yes. And if that's right, do you agree that that's just not good enough?

A. It isn't good enough.

THE CHAIRMAN: Thank you.

MS ANYADIKE-DANES: The result of the communication with the coroner is that there's to be no inquest. Dr Hanrahan told you that, didn't he?

A. He did.

Q. What was your response to that?

A. I was surprised.

Q. Did you ask him why?

A. I don't remember asking him why, but I was surprised that such a case wasn't going to be a coroner's inquest or a coroner's investigation.

Q. Well, if you were surprised, did you not seek to find out the basis upon which the coroner's office had decided that a case that you thought was a clear case to be reported was not one that the coroner was going to pursue?

A. I think because there had been a suggestion that we should proceed with a consent post-mortem, I thought --

to me, that's the next best thing, let's go for this.
Q. Before we get to the consent post-mortem, let's stick to the fact that a case you thought was an entirely appropriate one to report for the two reasons that the chairman has just been discussing with you -- one, it was an unexpected death, she died very quickly in a way you wouldn't have supposed she would and, secondly, because there is a concern about the fluid regime that she was on. Two very good reasons to report that case to the coroner. And as far as you were concerned, you were in agreement with Dr Hanrahan, although you hadn't actually discussed it, that those were the bases on which it was appropriate to report it. He comes back and tells you "I have reported it, but there's going to be no inquest". I'm asking you, did you not want to find out why not?
A. I don't remember whether I asked him or whether he told me why, but I was surprised anyway that we didn't have it.
Q. Would you not have wanted to know the reason?
A. I would have wanted to know the reason probably.
Q. Exactly. Not least for your own education because it might say something about the circumstances in which you were to refer deaths. So you would have wanted to know the reason?

A. Yes.
Q. Do you think, therefore, it's likely that you asked him? Even if you can't specifically remember any conversation, do you think it's likely you asked him?
A. I probably did, but again, like I say, I can't remember.
Q. And then you said if you're not going to have an inquest, an autopsy is the next best thing.
A. Correct.
Q. That's, I think, what you just said. When did you discuss that you were going to have an autopsy?
A. I think, first of all, whenever I finished the conversation, I think there had been a suggestion to him that he should try and get a hospital post-mortem.
Q. Right. Did you discuss that with each other? "The coroner is not going to hold an inquest into this child's death", did you discuss, "then we really should be seeing if we should persuade the parents to consent to an autopsy"; did you discuss that?
A. I believe we did.
Q. If you discussed that, why were you discussing that?
A. Because we -- I mean, remember, with Dr Hanrahan himself, he had differential diagnosis, we were trying to -- we wanted to know exactly what is it that went wrong, what was it that led to Lucy passing on.
Q. If it had been left to you, could you have filled in

a death certificate at that stage?
A. It's difficult, again, in that I would have been uneasy trying to fill in a death certificate when I don't know what to write on it.
Q. You would have been uneasy doing that?
A. Yes.
Q. And you know that if you are uneasy doing it and if you can't do it, then you have to go back to the coroner.
A. It's only now -- I mean, the thing is the coroner's refused me -- I mean, I have tried to speak to them and said, "Let's do it", and they have said, "Go away". I didn't know I could go back to him and say, "But, but, but".
Q. So far as you can recollect and pull together, was the rationale for your discussing with Dr Hanrahan the possibilities of a hospital post-mortem so that you could get sufficient clarity to have a death certificate completed?
A. Correct.
Q. That was your understanding of it, that was the purpose of it?
A. That is my understanding.
Q. Did you discuss at all then -- because the next step is, if that's what you need and what you want, then there will have to be an explanation to the parents because

the parents will have to agree to that. You can't have a hospital post-mortem just because you need one; the parents have to give consent.
A. I don't remember having had a discussion, but probably we must have had.
Q. But you knew that would be the next step?
A. Yes.
Q. And if they consented, then there would be an autopsy request form?
A. Yes.
Q. And the autopsy request form would be providing certain information to the pathologist to enable him or her to make a start on investigations?
A. Correct.
Q. Have you ever completed one of those yourself while you were at the Children's Hospital?
A. I leave it to my juniors to do it.
Q. Do you ever discuss with them how they complete it to make sure the pathologist is best assisted?
A. I try and tell them to make it as detailed as possible.
Q. In fact, it fell to Dr Stewart to complete that, who was a registrar at the time. Firstly, what would you expect to accompany the autopsy request form? What should go to the pathologist?
A. The patient's notes, X-rays, and whatever else would be

required.
Q. Did you regard that as fairly standard?
A. Yes.
Q. Thank you. Then if I take you to this particular part of the request form. It's a three-page form. The first page has the clinical presentation and a history. Then there's notes and then there's a third page, which I'm going to pull up now, 061-022-075. This is where the clinician has an opportunity to assist the pathologist by identifying, for the pathologist, the problems, the clinical problems, that have been noted. It says here they're to be listed in order of importance, but in any event we see these four things that Dr Stewart has distilled.
Firstly, "vomiting and diarrhoea". Do you have a view as to whether that's an appropriate insertion in Lucy's autopsy request form?
A. That's fine.
Q. Would you have put that?
A. Yes.
Q. Then "dehydration".
A. Yes.
Q. Appropriate?
A. Yes.
Q. "Hyponatraemia"?

A. Yes.
Q. "Seizure and unresponsiveness, leading to brainstem death"?
A. It sounds reasonable to me.
Q. Sounds reasonable. What's the link between 3 and 4?
A. Hyponatraemia leading to seizure. Obviously, what has happened in between there, there has been cerebral oedema.
Q. Cerebral oedema. And how do you get to that from dehydration?
A. You are trying to correct -- obviously you think this child is dehydrated so you're trying to give this child IV fluids, oral fluids or whatever to try and correct the problem.
Q. Just to pose those problems in that order -- as what you're suggesting is that it has been the attempt to deal with the dehydration that has led to the hyponatraemia?
A. Probably, yes.
Q. Well, I'm asking you.
A. Yes.
Q. If you translate that into the clinical facts of Lucy's case, as you knew them on 14 April, is that how you would have interpreted that?
A. Yes.

Q. That that is actually reflecting the fluid management concern that you had?
A. Yes, even though we haven't mentioned the type and volume of fluid that has been used, but yes.
Q. Well, would you have expected that to be mentioned if you were guiding your registrar?
A. Probably, but I suppose because of the limited space, maybe that's why that wasn't inserted.
Q. In fairness to Dr Stewart, we should pull up the first page, which is 061-022-073. Maybe just put it alongside this one so as not to lose this entirely. This is her narrative, if I can put it that way:
"Acute illness, vomiting, then diarrhoea for 24 to 34 hours."
That was her clinical presentation:
"Admitted to the Erne. Clinically dehydrated and drowsy. Given IV fluids, No. 18 and normal saline."
She has her seizure at 3 am on the 13th:
"Unresponsive afterwards. Pupils fixed and dilated."
Then she requires respiratory assistance. She's transferred to PICU. She gets there at 7.45 in the morning. No response. Negative brainstem tests on that day, the 14th.
Then past medical history:

"Nil of note. Healthy toddler. No medication."
And then there's the investigations. There's the fall in serum sodium, 136 and she's got it to 126. A CT scan, which is going to show coning, EEG:
"Clinical diagnosis: dehydration and hyponatraemia. Cerebral oedema leading to acute coning and brainstem death."
So the dehydration to hyponatraemia in between there, are you saying what really should have been inserted -- I don't mean should -- this is how one might have interpreted that, inappropriate fluid management?
A. Yes, she's mentioned this at the top, the IV fluids. The only thing she hasn't mentioned is the volume of fluid that was given in the period of time that it was given.
Q. So reflected in there is the concern that you have about her fluid regime?
A. Correct.
Q. Were those lists of problems on the left-hand side discussed with you?
A. I think my response has been I don't remember having had a conversation, but then when I reviewed the notes and everything, probably would have agreed with what was written.
Q. Would you have wanted the fluid management problem to be

more expressly stated in that list of problems?
A. Yes.
Q. Then there is the post-mortem results, there's a post-mortem report. Do you recall ever seeing Lucy's post-mortem report?
A. No. What normally tends to happen is, after the post-mortem, the preliminary report or even the final report is normally sent to the consultant. Like in this case it would be Dr Hanrahan, so I never saw the report.
Q. Well, would you expect Dr Hanrahan, since you had cared for Lucy and you had both performed the brainstem tests, you had discussed, you both had a common view about reporting to the coroner, and you both had a common view about an autopsy to try and see if you could get clarity on what had caused her death. When he actually gets the report, would you have expected him to have told you what the result of it was?
A. Yes, but I mean, he was busy or I was busy, but it didn't happen.
Q. I appreciate you said it didn't happen. My question was different: would you have expected it?
A. Yes.
Q. Did you want to know what had happened?
A. I think I'd have wanted to know, but I probably maybe got busy doing other things, you know. I didn't follow

up the case.
Q. This is a child who has died when you were the consultant anaesthetist. You weren't entirely clear why she had died, but you thought there might have been something awry at the Erne. Did you not want to know?
A. Yes, but I mean, I would have wanted to know, but at the same time I mean if -- it can be so busy that you're doing other things, you just get overwhelmed.
THE CHAIRMAN: It's all a bit embarrassing, doctor, isn't it, because the concern is this child may have died because of failings on the part of fellow doctors in another hospital?
A. Mm-hm.
THE CHAIRMAN: The parents don't seem to be told what the concerns are, a note goes off, and the autopsy request form, which certainly doesn't highlight the issue about fluid management, if it raises it at all, and then the post-mortem result comes back and it all just fades away? What would you say if I had a concern that it was allowed to fade away because it really was a bit inconvenient for the problem about fluid management to be highlighted? I'm asking you, I should say, as the first of a number of witnesses because whatever happened in the Royal, this all faded away so that Lucy's death was stumbled over and picked up by one man a number of

years later, Stanley Millar.
A. I think it's very difficult for me to try and answer that as exactly why things happened the way they happened. I would have hoped things would have been better.
THE CHAIRMAN: Thank you. Let's move on.
MS ANYADIKE-DANES: Yes. Well, the post-mortem report doesn't actually clarify the position and it certainly doesn't highlight the issue that was of concern to you. It may be that without the assistance of the clinicians, the pathologists actually can't address a fluid management concern like that. When we were dealing with Claire's case, which was also a hospital post-mortem, the experts that we had there, Dr Squier, who's the paediatric neuropathologist, and Professor Lucas said what you'd expect to happen in those sorts of cases is that there is discussion between the pathologist on the one hand, who is able to describe what he or she sees on examination, and the clinicians on the other hand, who know how the child presented and what treatment was provided, and there's a discussion, and as a result of that discussion there is a view as to what is actually the cause of the child's death because that's the sort of thing that's prompting a hospital post-mortem in the first place.

In fact, in Claire's case they said they did exactly that: they had a thing called a grand round where they invited the consultants, and although nobody can remember what happened, they describe that as a robust exchange between clinicians to try and understand what had happened.
We have a slightly similar position with Lucy. You have got certain concerns, they're not entirely expressed on the face of the autopsy request form. The pathologist comes back and he seems to have picked up bilateral bronchopneumonia as the problem, not entirely fitting with what you thought had happened. Are you aware of any means by which, in a hospital post-mortem, the pathologists and the clinicians actually discuss the results to refine the cause of death, from both disciplines, they think is likely?
A. I think it is encouraged that if a post-mortem is taking place, a physician or somebody who was looking after the child would go and witness the post-mortem, then they can have a discussion.
Q. So far as we're aware, nobody actually did witness the post-mortem.
A. No.
Q. In fact, I think there's -- you're quite right, there's a particular bit on the sheet where you can identify or

you can notify the pathologist as to whether you want to. We don't need to pull it up, but the reference is 061-022-075. It says:

"Will you or a colleague be attending the review session at 1.45 on the day of the autopsy?"

And "no" has been circled. There doesn't seem to be any indication that anyone is going to be attending the autopsy examination. But leaving aside that, even if you're not going to be there when the autopsy is actually being carried out, are you aware of any forum or system in place at that time, in 2000, for the pathologists and the clinicians to discuss together the results of the post-mortem?

A. Before the report is given?

Q. Before it's finalised.

A. Apart from what I said, no, because I've ... I mean, I can't remember. I have never witnessed or heard of anybody going to the pathologist to see if they can try and figure out what has happened.

Q. Are you aware of any meetings after the post-mortem --

A. No --

Q. -- where the pathologists and clinicians discuss?

A. No.

Q. I take it from that that means you have never attended one.

A. No.

THE CHAIRMAN: As a matter of interest, is that still the same today? We're talking now about 2000, but is that still the same today?

A. I believe so.

THE CHAIRMAN: Thank you.

MS ANYADIKE-DANES: So the neurological grand round that Dr Herron and Dr Mirakhur discussed, who were the neuropathologists in Claire's case in 1996, they were discussing something that you're not familiar with?

A. No. At least nobody has ever invited me or written to me to say, "We're having such-and-such, will you attend?"

Q. Would you have thought it an appropriate thing to do when you have got an outcome that is not entirely conclusive? Would you have thought that appropriate?

A. It would be appropriate, but you have to know also when, what and -- when such a meeting was going to take place.

Q. Obviously. But as far as you're concerned, you have never been contacted with a view to attending any such meeting?

A. No.

Q. Thank you. You say that you don't think that the post-mortem report was given to you. You have seen it since, haven't you?

A. Only when I was preparing the reports, yes.

Q. So you have seen it?

A. I have.

Q. Did it surprise you, the results?

A. It did.

Q. If you had seen it at the time, what would have been your response?

A. I would have said it doesn't make sense.

Q. And then what would you have done?

A. I don't know whether I can go back to the pathologist and say, "What are you saying?"

Q. Why did you think it didn't make sense?

A. Because of what was written. I can't remember offhand, but I think there was something like -- I can't even remember, cerebral oedema, was it dehydration and gastroenteritis? Something like that.

Q. I think we can find it at -- 062-048-114 is one place. Here we are. Let's see what happens if we pull up the next page. There's the commentary. Obviously you have the anatomical findings and summary. Then there's the commentary and then you've got:

"The autopsy also revealed extensive bronchopneumonia. This was well-developed and well-established and certainly gives the impression of having been present for some 24 hours at least. There

is no doubt that this pneumonic lesion within the lungs is important in the ultimate cause of the death, the changes being widespread throughout both lungs."

And so on. Is that what surprised you? Sorry, is that what you thought didn't make sense?

A. I think it was what was written on the death certificate.

Q. The death certificate? Okay. Just give me a moment and I'll pull that up for you. So as a result of the initial post-mortem results, Dr O'Donoghue issues the death certificate. And this is it. When did you see this first?

A. Again, when I was preparing for the statement.

Q. And this didn't make sense to you?

A. No.

Q. What about it didn't make sense?

A. Cerebral oedema, dehydration, gastroenteritis. What are you saying? Unless you are saying the dehydration -- your treatment of the dehydration is the thing that's led to the cerebral oedema. And it's also saying the gastroenteritis obviously led to the dehydration. It just doesn't tie up.

Q. Your concern is the gap between dehydration and cerebral oedema, which on this is unexplained?

A. No.

THE CHAIRMAN: Put it simply, she didn't die of dehydration; isn't that right.
A. No.
THE CHAIRMAN: If there's one thing Lucy didn't die of, it's being dehydrated and she didn't die of gastroenteritis.
A. No.
THE CHAIRMAN: So the cerebral oedema is not due to dehydration. And I think Professor Lucas has said it's just irrational to put that.
A. No.
THE CHAIRMAN: How long does it take you, looking at that, to realise that that document makes no sense? Is it an immediate reaction?
A. It would be, probably.
THE CHAIRMAN: Thank you.
MS ANYADIKE-DANES: Then the last few things I want to deal with relate to, if I can call it, audit and just the aftermath, what happens after a child has died. Lucy's death was discussed in the mortality section of the Children's Hospital audit meeting. That meeting was chaired by Dr Taylor, who's a consultant paediatric anaesthetist. You knew Dr Taylor?
A. I do.
Q. Were you aware that that was going to happen?
A. I do not recollect it. I don't know.

Q. Well, would you expect to be aware of a discussion about her death when you had been the consultant in charge of her care on the final day?
A. Yes, I would expect it to be ...
Q. Yes. And if you have a meeting like that, what, so far as you understand, happens at a meeting like that?
A. The lead consultant sort of presents the case.
Q. And who, from your point of view, would have been the lead consultant for Lucy?
A. Dr Hanrahan.
Q. So in your view, Dr Hanrahan would have presented the case?
A. Yes.
Q. And so from your understanding of the discussions that you had with him and your knowledge of what happened to Lucy, what should have been being presented about Lucy?
A. I mean, what we tend to do -- when you are presenting a case, you more or less summarise the clinical history. So it would have been like a summary of the events that happened in the Erne Hospital or what happened in the Belfast hospital and also, if there's somebody from the pathology department, they'll also give their bit.
Q. What's the purpose of the meeting?
A. We're trying to learn.
Q. Sorry?

A. We're trying to learn what happened.
Q. And if the learning had been this child's fluid regime at the Erne Hospital was wholly inappropriate, if that had been the result of all of that, what happens then?
A. Well, obviously the people who will be there would learn about it.
Q. And what happens about the people who had been responsible, if I can put it that way, for the fluid management at the Erne? Is there any communication with them?
A. I don't believe that that happens. It can happen nowadays. Before it didn't happen, but nowadays it can happen.
Q. Let me put it this way: if you all in the Royal are of the view that there was something amiss with her fluid regime, so you could form that view, it's not a regime that any of you would have subscribed to, you can see it was deficient, people who need to know that, is it not the case, are those people in the Erne, who maybe inadvertently had administered an inappropriate fluid regime?
A. True.
Q. So if you don't have a system that communicates that to them, is that not a rather deficient system?
A. It's deficient, but it has changed now. Nowadays we

tend to inform them of what happens.
Q. Yes, but let's stay with 2000.
A. Okay.
Q. I didn't really have to get to the end of that sentence for you to have appreciated that that was a deficient system. So it could be recognised in 2000 that that's a deficient system. Why would you not communicate with the Erne Hospital?
A. I have no response to that.
Q. Well, what could possibly be the explanation?
THE CHAIRMAN: Let me interpret that as Dr Chisakuta saying there's no good reason not to communicate with the Erne.
A. I mean, for instance nowadays we easily do it. I don't see why we shouldn't have done it then.
THE CHAIRMAN: Please tell me how it happens now.
A. Nowadays when a child comes, we have video conferencing every two weeks, we video conference and we talk with them and we discuss, like in this case, Lucy's condition, and we discuss with the paediatricians there, the people who transferred the child, and us in the PICU.
THE CHAIRMAN: Sorry, is that only with the Erne or does that include Altnagelvin and Craigavon and so on?
A. The way we do it is our system can only take so many calls, so we would -- we alternate. We deal with

Altnagelvin, Antrim and Craigavon, and then the other week we deal with the Causeway, Daisy Hill and the Erne.

THE CHAIRMAN: Thank you. And that has been in place since, roughly?

A. I can't remember, Mr Chairman. It has been going on, I think, for the last five or six years.

THE CHAIRMAN: So in the fortnight that you're in contact with Altnagelvin, Antrim and Craigavon, you'll be dealing with any cases which are relevant to those hospitals?

A. Yes.

THE CHAIRMAN: But do you also then tell them what you have learned within the Royal in other cases?

A. If there's something, we'll share that such-and-such happened.

THE CHAIRMAN: Thank you very much.

MS ANYADIKE-DANES: But in 2000, patients had discharge letters.

A. Yes.

Q. And even if a patient had died, there would be a discharge letter that went to the GP.

A. Yes.

Q. We can't find Lucy's discharge letter.

A. So I'm led to believe.

Q. Yes. But that would have been a vehicle for

communicating the concerns that had been had about Lucy's treatment at the Erne.

A. Yes.

Q. And even though you didn't have a formal system in the way that you do now, would you have thought it appropriate to have included something like that in the discharge letter to Lucy's GP?

A. It would have been appropriate. Again, nowadays, things have changed. We have a system where every time a child is leaving the unit, we generate a discharge letter that goes to the GP.

Q. I appreciate that, but I want to be clear: do you think it would have been appropriate in 2000 to have done that?

A. It would have been appropriate.

Q. Finally now, you, at that time, were the chairman of the critical incident review group.

A. I was.

Q. And you, in fact, were the chairman from January 2000.

A. About March, I think.

Q. Well, yes. I wondered if you could help us with that because in your witness statement, you said March, but then when I looked at your CV, your CV seems to say something different.

A. It says January. If I may ask the thing to correct --

it was just an error.

Q. Which one is correct?

A. It would be from about March, not January. From about March.

Q. So the CV is incorrect?

A. The first bit of the CV, yes.

Q. In any event, you become chairman of it just before Lucy's admission?

A. Correct.

Q. And you've been a member of it since its inception?

A. Correct.

Q. The purpose of it, you described in your statement, your second witness statement at 283/2 at page 2, you say that the purpose of it is:

"it is a multidisciplinary group which reviewed most of the critical incidents reported weekly in the Children's Hospital with a view to identifying lessons learned and disseminating those lessons in the Children's Hospital and the rest of the Trust via the Risk Management Directorate."

A. Correct.

Q. And given it was a multi-disciplinary role, your particular position within that was to bring a medical perspective to the deliberation on critical incidents with a view to learning lessons.

A. Correct.

Q. You have said that that responsibility would have included following up incidents involving medical personnel, sharing the findings with the individuals involved and then, every three months, taking turns with the other members of the review group to present critical incidents and lessons learned at audit meetings held in the Children's Hospital.

A. Correct.

Q. Lucy's death wasn't referred to that group.

A. No.

Q. And why is that?

A. Because I don't believe a critical incident form was filled in.

Q. Sorry?

A. I don't believe a critical incident form was filled in.

Q. So if that group is going to discuss a death, it requires a critical incident form to be filled in and provided?

A. That's the only way we can identify that a critical incident has happened.

Q. And who has the responsibility of filling that form in?

A. Like in this case, if it had happened in the ICU, somebody in the ICU would have filled in the critical --

Q. Who?

A. I suppose myself or Dr Hanrahan.
Q. Well, it could be Dr Hanrahan because, in the latter stages of her time there, he had taken a sort of more prominent role, one might say that. It could be you because you shared responsibility for her care on her final day. It could have been you because you were lead clinician of PICU.
A. Yes.
Q. So if, when you came to look at matters each week and you didn't see a critical incident form for Lucy, why didn't you fill one in?
A. I suppose probably I would have -- I took a view that the incident happened in another hospital, not necessarily our hospital.
Q. So if I just pause there. You took that view. Was there any guidance as to whether that was the view that was to be taken for how the group should work?
A. No.
Q. So there was nothing that said, "Well, if [as Dr Hanrahan called it] the sentinel event happens in the referring hospital, it can't be part of our critical incident review group"? There was no guidance that said that.
A. No. Having said that, things have changed nowadays.
Q. Hang on, stick with what happened in 2000. In 2000,

there was no guidance that said that?
A. Not that I can remember.
Q. So there would have been nothing that stopped you, knowing what you did and having the concerns that you had about Lucy, there would have been absolutely nothing to have stopped you completing a critical incident request form and having her death part of the review?
A. No, but because obviously I must have thought because the incident happened in another hospital it --
Q. I appreciate that but --
THE CHAIRMAN: There are lessons to be learned in all hospitals if mistakes are made in one hospital, aren't there?
A. I do agree.
THE CHAIRMAN: The fact that a mistake is made in the Erne or Craigavon or Daisy Hill doesn't mean you can't learn lessons in the Royal.
A. I do agree. That is why nowadays we do it.
THE CHAIRMAN: Okay.
MS ANYADIKE-DANES: You didn't need nowadays to be able to see that in 2000.
A. I mean ...
Q. But you were the chairman of that group at the time that Lucy died and you took a decision not to include her death in the work of the group.

A. No, I did not take a decision not to include that death because at the time -- I mean, when I went to the critical incident review, I was reviewing the critical incidents that had been reported.
Q. Sorry, you're quite right; I framed that very badly. Not seeing a critical incident form for Lucy, you took a view not to complete one yourself.
A. I don't think -- I mean, the way you frame it is as if I took a deliberate view that I'm not going to fill in a form.
Q. As the chairman had put to you, did you not think that there were lessons that might be learned, there was a discussion that might be had about Lucy's care in the interests of everyone? You're the chairman of the group, "I'm looking at the forms coming in for the week, I don't see for one Lucy, I'll complete one"?
A. At that time I didn't do it, but things have changed nowadays, we do fill in a form.
Q. And the reason you said you didn't do it at the time -- and it's in your witness statement, 283/2, page 3. You said:
"It was not our role in the critical incident review group to decide what constituted a critical incident."
So if we pause there. As I understand the evidence you have given so far, what decided whether you reviewed

a critical incident was whether or not a critical incident form had been completed?
A. True, yes.
Q. So in other words, any consultant could define for themselves, "This is a critical incident. I'm filling in this form because I'm concerned about the death of this child". Is that what that meant?
A. Correct.
Q. Once that form had gone in, then your group would look at it?
A. Correct.
Q. Then you say:
"I would observe, however, that it appears that if there was a critical incident in this case, it might be deemed to have happened in the Erne Hospital rather than the Children's Hospital."
I pause there for the moment. "If there was a critical incident". Did you regard Lucy's death as being a critical incident?
A. I don't remember at the time whether I regarded it as a critical incident or not.
Q. Anyway, what you say is:
"It might have been deemed to have happened in the Erne Hospital rather than the Royal, so that might have affected whether or not it was treated as a critical

incident within the Children's Hospital."

What you have just explained is, it might have affected your view as to whether you would fill out a critical incident form; is that right?

A. Correct.

Q. Yes. And the rationale for that is what, that you assume that the referring hospital is carrying out that kind of review and therefore we don't need to do it at the Children's Hospital?

A. I do not see the connection.

Q. Well, unless you know that the hospital that referred her is carrying out such a review, then it may be that the learning that might be had from her death is lost because if they're not doing it and you're not doing it, then nobody's considering it?

A. That's true. That's why now things have changed.

THE CHAIRMAN: In what way?.

A. Nowadays, Mr Chairman, if a child comes in, if any event happens, even during the transfer to a hospital, I would fill in a critical incident.

THE CHAIRMAN: Okay. So you're no longer worried about the point at which things went wrong, it will still become a critical incident for you in the Royal?

A. Yes.

THE CHAIRMAN: Thank you.

MS ANYADIKE-DANES: Were you involved at all in that change of approach, if I can put it that way?

A. It has been an evolution. I'm not sure whether I have been, but I have been part of the group.

Q. Well, the only reason I ask you is because you are part of the group and have always been part of the group, so were you party to any of the discussions that led to that change?

A. I presume so. I can't remember any such discussions, but things have changed, we do it nowadays.

MS ANYADIKE-DANES: Mr Chairman, if I may take a couple of minutes just to ask?

THE CHAIRMAN: We'll do it from the floor. Are there any questions from the floor? No?

Doctor, unless you have anything that you want to add to the evidence you have been giving during the morning, that brings an end to your evidence.

Do you have anything else you want to say or not? You don't have to.

A. No, Mr Chairman.

THE CHAIRMAN: Thank you very much for your assistance.

Ladies and gentlemen, we'll start at 2.15.

(1.40 pm)

(The Short Adjournment)

(2.15 pm)

(Delay in proceedings)

(2.21 pm)

THE CHAIRMAN: Just before we start: Mr Simpson, there was an issue raised yesterday, which I'm sure you have been alerted to, about a Western Trust claim for privilege for two files, the inquest and litigation files.

MR SIMPSON: Yes.

THE CHAIRMAN: Do I understand it correctly that, in respect of the litigation file, that that is no longer the position?

MR SIMPSON: It's not any longer the position, no -- the litigation file?

THE CHAIRMAN: Is there still a claim for privilege for that?

MR SIMPSON: As far as I'm aware, yes.

THE CHAIRMAN: And what about the inquest file?

MR SIMPSON: The inquest file at the moment, both the DLS file and the Trust inquest file are separately being gone through by myself and Ms Simpson in order to finalise that today if possible or tomorrow at the latest.

THE CHAIRMAN: So that we can see something tomorrow with luck?

MR SIMPSON: Yes. I don't want to be a hostage to fortune, but I'm hoping so, yes.

THE CHAIRMAN: Then we'll pick up the issue and also pick up, Mr McAlinden, the issue about what was the Royal -- now the Belfast Trust -- Brangam Bagnall file in Lucy's inquest.

MR McALINDEN: I'm not sure what the situation is in relation to that --

THE CHAIRMAN: We were given a file on Friday afternoon which had documents removed with a page saying "privilege claimed", so -- I'm not sure ... You'll know that previously we've had some unhappy experiences about claims for privilege which were scrutinised and then, at least, reduced so we'll need to sort that out this week if at all possible.

MR McALINDEN: I will certainly do everything I can to have that sorted out by the end of the week.

THE CHAIRMAN: Ms Anyadike-Danes?

MS ANYADIKE-DANES: Could I please call Dr Caroline Stewart?

DR CAROLINE STEWART (called)

Questions from MS ANYADIKE-DANES

MS ANYADIKE-DANES: Good afternoon. Dr Stewart, do you have your CV there?

A. Yes, I do.

Q. Can you confirm to us that the statements you've previously made, you rely on, subject to anything that you say now? I will tell you what they are so you know

what you're confirming. There's a PSNI statement dated 2 February. The reference for that, which we don't need to pull up, is 115-023-001.

THE CHAIRMAN: 2 February?

MS ANYADIKE-DANES: 2005, I beg your pardon.

There's also one dated 7 April 2005. That is 115-022-001. Then there are two inquiry witness statements with the series 282. The first one is dated 5 November 2012, the second one is dated 25 January 2013.

A. That's correct.

Q. Do you wish to rely on those, subject to anything that you say?

A. That's correct.

Q. You also gave an interview, perhaps impromptu, to Trevor Birney at UTV on 14 October 2004; is that right?

A. That was a telephone call to my home.

Q. Yes. And there's a transcript of that.

A. I understand that, but I haven't seen it.

Q. The reference for it is 069-001-001. So I'm going to go through, very quickly, some things in your curriculum vitae. If we can pull up, not literally the first page, but it is your professional experience I am going to turn to, 315-013-002. There we are. It's sort of working backwards, if I can put it that way. So

you'd been a consultant paediatrician for 11 years now at Antrim Hospital.

A. That's correct.

Q. For two of those years you were lead paediatrician in Antrim; is that correct?

A. Yes.

Q. And also lead consultant for paediatric diabetes?

A. Yes.

Q. Is that your specialist area?

A. That's correct.

Q. Prior to that, if we just pull up the next page, 003, this deals with your specialist registrar training.

A. Yes.

Q. So we can see, by rotation, what you have done and when you have done it, if I can put it that way. So you were at Cupar Street in the diabetic clinic and you had 6 months there, 2001 to 2002. Then you were in paediatrics in the Antrim Hospital and you have 12 months there.

A. Yes.

Q. That brings us to when your period of time coincides with Lucy's admission. That is your specialist registrar paediatrics in your fourth year at the Children's Hospital, February 2000 to August 2000.

A. That's correct.

Q. So you had been there really just a couple of months before Lucy is admitted. And before that, you were at the maternity hospital. We don't need to go through it all, except to see the last time you were at the Children's Hospital. Prior to that period, when you were in your fourth specialist year, is it correct that you were at the Children's Hospital for six months in February 1998 to August 1998 when you were a specialist registrar, hospital paediatrics, in your second year?

A. That's correct, for a year.

Q. Yes, I will give the reference, but we don't need to pull it up, 315-013-004. Just prior to that, you were still in the Children's Hospital but you spent six months in paediatric cardiology.

A. Correct.

Q. If I can just ask you briefly about that. That was your experience with, as you called it acute and chronic problems post-operative care and so forth. Were you aware of what the fluid regime was for those post-operative paediatric children?

A. For post-operative cardiac children they were managed in cardiac intensive care and, once they were stabilised, they were transferred back to the Clarke Clinic ward in the Children's Hospital. They may or may not have

been on intravenous fluids, but we would have certainly taken guidance from the paediatric cardiac anaesthetists and the cardiologists regarding their fluid regimes. And because they were cardiac children, their fluids would have been very carefully monitored.

Q. Were you aware of there being what one might call a sort of default fluid type, Solution No. 18 or Hartmann's, for example?

A. I would have been aware of all those fluids, working in general paediatrics and in cardiology.

Q. When you're at the Children's Hospital at the time of Raychel's admission, which is that six months when you're in your fourth year, what was your understanding of what the fluids were in PICU then for children? IV fluids, I should say.

A. We would have used a wide range of intravenous fluids and very much, case by case, what the children required, whether it was a resuscitation fluid, a replacement fluid, if they had been dehydrated and required replacement fluid, or whether it was maintenance fluid. And according to the age of the child, we would also have determined what type of fluid to use. A lot of very young babies would also come through paediatric intensive care, and for neonates it might be a different regime than older children. Burns cases would have been

different. So there was a wide range of fluids in use at that time.

Q. Yes. Were you aware at all of the use of Solution No. 18 perhaps being reduced in favour of a fluid with a higher concentration of sodium, Hartmann's for example?

A. I think Solution No. 18 would have been seen by many of us as being quite widely used as a maintenance fluid in paediatrics. It would not have been widely used as a resuscitation fluid.

THE CHAIRMAN: What do you meam when you say resuscitation --

A. Resuscitation or replacement fluid.

THE CHAIRMAN: Is that the same thing?

A. No.

MS ANYADIKE-DANES: Do you want to explain?

A. Resuscitation would be a bolus, really, to correct shock and the deficit would be calculated and probably replaced over 24 or 48 hours as an add-on to what would be normal maintenance fluid.

Q. Yes. Just while we're there, I picked up something that you had said in that telephone interview with Trevor Birney. It's just in relation to the use of fluids in terms of type. If I can pull up 069-001-051. I do appreciate that you weren't aware that you were

going to be interviewed on that occasion. I understand that and that is clear throughout the transcript.

THE CHAIRMAN: Were you aware that you were being recorded?

A. No, and I specifically asked him, "Are you recording this conversation?", and he said, "No, I'm not".

THE CHAIRMAN: Thank you.

MS ANYADIKE-DANES: Thank you. That puts that clearly in context.

His questions are in the bold type. Your responses are in the lighter type. You are talking about the type of fluid:

"We constantly revise these things and whilst different hospitals might have different protocols, we certainly did use No. 18 widely in paediatric practice for maintenance solution."

I think at that time, to be fair to you, you're referring to what the practice might have been in 2000. Then you say:

"And I mean that was general practice, but over the last few years, we've been using half-normal saline as a maintenance solution."

That's the sort of thing I meant. Can you recollect when that shift happened?

A. My memory is that that shift might have happened from about 2002, and certainly in my time in Antrim we have

really stopped using No. 18 and have gone to either half-normal or normal saline for maintenance fluids and, from the year 2002 onwards, I'm aware some of my colleagues were very much involved in drawing up regional guidance for intravenous fluids and that sort of thing.

Q. The CMO established a group which ultimately produced a set of guidelines which is issued and published in March 2002. Just to help you benchmark it, this transcript is taken from a conversation, I think, in October 2004. Is it possible that the change had started even before the working group started their work in relation to the formation of guidelines?

A. It is possible. Again, I can't remember specific dates. I'm also aware that we felt it was -- probably a lot of children were started on intravenous fluids that may have been managed with oral-fluid rehydration and we were maybe having a general shift towards trying to use oral rehydration and give a tube feed to children that we might have previously used intravenous fluids. So there was a general shift maybe in general paediatric wards not to put everybody on IV fluids if we could give a trial of oral rehydration before intravenous rehydration was necessary. So that shift also probably coincided.

Q. So first to consider whether the child really needs to be an IV fluids at all?

A. Correct.

Q. And if the child does, maybe a little more careful thinking about what precisely those fluids ought to be?

A. Yes.

Q. And that is something that may have happened -- well certainly happened after the work of the working party, but may have actually started before then to the best of your recollection?

A. Yes, it could have been.

Q. You probably are aware that when a child called Raychel was admitted and treated -- and you're aware of that case, Raychel Ferguson?

A. Yes, I'm aware of it.

Q. Raychel Ferguson was treated in the Altnagelvin, she suffered a collapse, she was transferred to PICU and she died there, not having ever rallied from that collapse if I can put it that way. The upshot of that is that Dr Nesbitt -- are you aware of him?

A. No, not until the inquiry.

Q. Okay. Dr Nesbitt was consultant paediatric anaesthetist and he was tasked to, or at least took it upon himself, to make some calls to see whether the fluid regime they were using there, how that compared with other

hospitals. The result of all of that is, after he had made a call to the Children's Hospital, he was told that the Children's Hospital had actually stopped using Solution No. 18 about six months before Raychel.

Raychel is June, June 2001, so about six months before that, the Children's Hospital had stopped. In two different places he gives slightly different reasons for that. One is because --

THE CHAIRMAN: It's okay. Let's move on. Sorry, were you here for this morning's evidence, Dr Stewart?

A. Most of it, yes.

THE CHAIRMAN: Did you hear Ms Anyadike-Danes going through with Dr Chisakuta the exchanges between him and Dr Chisakuta and Dr Nesbitt?

A. Yes.

THE CHAIRMAN: So you know the background is that Dr Nesbitt has written that he was told by Dr Chisakuta that Solution No. 18 had been stopped in the Royal, the Royal initially said, yes, that's right it had stopped, then it said, no, it hadn't stopped, but produced figures that showed in the spring of 2000 its use had tailed off considerably.

A. Yes.

THE CHAIRMAN: Were you in the Royal at that time?

A. Yes, I would have been there until the end of July or

beginning of August.

THE CHAIRMAN: Can you help on the tailing off or the reduction of the use Solution No. 18?

A. I don't particularly remember, but part of it may have been that we were trying to use more oral rehydration in a lot of -- particularly young babies with respiratory problems, we tried not to use intravenous fluids as much.

MS ANYADIKE-DANES: That might have been part of it, but it's quite a significant fall. Are you able to help in any way as to what might have prompted it?

A. I wasn't really aware of, you know, such a dramatic fall in the actual prescription of the No. 18 bags from the pharmacy.

Q. Does that mean, so far as you're concerned, there was no real discussion? If there was a change like that, so far as you're concerned, there was no discussion around it?

A. I don't remember.

Q. Were you aware of any of the literature? The early part of it was by Professor Arieff and colleagues in 1992, then he published a paper in 1998, and there is another paper published in 2000, the early part of 2001. Were you aware of that literature on the risks of low-sodium fluids?

A. No, I wasn't aware of that at the time.

Q. But you did appreciate that there were risks if you used low-sodium fluids as replacement therapy as opposed to maintenance therapy?

A. Yes.

Q. And in fact, to your credit, you make that extremely clear in that transcript of your interview about the dangers of doing that. So you had no doubt that that posed a potential risk to a child if you were using that for any period or at any volume?

A. Yes, correct.

Q. And you're a registrar at that stage. Would you say that that was something that you would expect your colleagues to have realised in 2000?

A. Yes, I think that would have been very standard paediatric practice.

Q. And how did you come about that knowledge?

A. Probably initially it would have been case by case, learning from seniors that I worked with on the ward, probably a lot of personal study and reading, preparing for exams, learning about biochemistry and about fluid requirements for different children, different ages and different conditions.

I'm also aware that it would have been part of the advanced paediatric life support training, which I did

as a registrar, that we would have had slightly more formal instruction. But it has changed a lot in the last -- you know, since the year 2000. So it's difficult to exactly remember what my thinking would have been about fluid prescriptions back then as opposed to the way I think about them in my practice nowadays.

Q. Yes. And that is why the interview is rather useful because it comes, albeit not immediately after the event, but it's 2004, so it's closer to it than the witness statements that you've given to us. We don't need to pull it up, but I will give you a reference for it, 069-001-028, and you quite clearly say there is a difference between maintenance fluid and replacement fluid, and that Solution No. 18 is not to be used as replacement fluid, that's a fluid for maintenance, and you're quite clear in the interview. So would it be a reasonable assumption that you would have been pretty clear in 2000 about the significance of that difference?

A. I would think so, yes.

Q. And if you saw notes or anybody had told you that one of your colleagues was proposing to use Solution No. 18 for both replacement and maintenance, am I understanding you that it wouldn't have taken you very long to see that that would be an error?

A. Yes, that would be inappropriate.

Q. Then you see Lucy quite early on in her admission. When you do see her, you at that stage, I don't think, had access to her notes.
A. That's correct. I was on call the night that we got a telephone call to say she was coming and I recollect that I saw her in intensive care before the end of my shift.
Q. What you did have was the transfer letter --
A. Yes.
Q. -- and you would have had the transfer sheet. Did you have access [sic] to speaking to the transfer team?
A. I can't remember whether or not I spoke to the team.
Q. But you were aware they were there?
A. Yes.
Q. If we just stick with the transfer sheet and letter that you would have seen.
The transfer letter is at 061-014-038. If we pull up the second page to it. So that's the first bit of information that you might have seen, quite apart from whether you had any discussion with Dr O'Donohoe. How did you interpret the information that is being provided on that transfer letter? What do you think you learnt from it, if I can put it that way?
A. I can't remember what my thoughts were when I read the letter. I suppose now, when I'm reading it, I feel it's

maybe quite brief.
Q. Yes.
A. It doesn't contain a lot of information. Working now in a peripheral general hospital, we are frequently transferring children to a central unit and we would make sure all the information was copied, all the notes were copied, all the fluid balance and things like that, and we use a different sort of transfer form.
Q. I'm going to come to that in a minute. If we just look at this because we're trying to get ourselves back to 2000 and what the clinicians might reasonably be expected to have understood.
You've got her capillary refill, you'd have known that, you'd have known that she had IV fluids, although I don't think from this you can really tell what those IV fluids were. You would have seen what her initial serum sodium level was. You'd have known when she collapsed, you'd have known when she started her IV. You'd have known that she had episodes of diarrhoea and so on. And you'd have known that she required ventilatory support and that she had a clear chest X-ray.
A. Yes.
Q. And that she had been administered mannitol and that had produced a brisk diuresis. That is what you get from

that. Are there any immediate thoughts that you would be thinking about the child, quite apart from the presentation of the child to you?
A. I suppose, given a history of fever followed by a seizure, we would wonder was this an atypical febrile convulsion, a prolonged convulsion, or was there something like an encephalitis or ... It certainly had the picture of a very sick child. I think when he has written, "Capillary refill greater than 2 seconds", that could have been clarified -- was it 3, 4, 5 seconds? -- because that could be important to try to ascertain how shocked she was when she presented to them.
Q. If Dr O'Donohoe had been available for any of the clinicians there when Lucy was admitted, is that the sort of thing that you would have wanted to find out from him?
A. I'm not sure, I can't remember.
Q. No, no, I'm not saying whether you did, but given you have raised the significance of that, because it would tell you something as to how dehydrated she was and since it doesn't spell that out on the form, if he's available, is that something that, in your view, would have been helpful to take up with him?
A. It would have been very helpful information.
Q. You mentioned about the transfer forms. That's the only

other bit of information you have when she first comes over and you see that at 061-015-040. We can pick up the second page to it alongside, 041. This appears to be a standard Western Health and Social Services Board patient transfer form. Sorry, the second page is 061-016-041. Would you have seen this?
A. Yes. I don't remember specifically having any thoughts about it when she came, but I would have seen it when she came to the Children's Hospital.
Q. And the only clue to the fluids would have been at the top right-hand corner, which says, "500 ml of normal saline, 30 ml an hour".
A. Yes.
Q. You say it's very brief, it is their standard form. Leaving aside that you would have liked to have a copy of her notes, what else would you have expected to see on a transfer form?
A. I think this transfer form is literally just her condition during the transfer, that those are her observations during her transfer and it doesn't really reflect observations when she was actually an inpatient in Enniskillen. It's very much just during the transfer.
Q. How typical was this at the time?
A. This was probably just a very standard transfer letter

and it could have been used for any type of patient, not particularly paediatrics, and it probably is more geared towards adult patients than paediatric patients. But it was probably the standard form they had at that time.

Q. We can pull up one for Raychel, who was being transferred from the Altnagelvin Hospital, just quickly, to see the comparison, to see if you can help us with which you thought was more or less representative of the kind of information you would get at that time. 020-024-052 and, alongside it, 053. That's the first page.

So there you have an opportunity to put more detail, obviously, to the consultants then of the current drug therapy. More information as to the items to be sent with the patient, case notes, X-rays, so on and so forth, and that can all be filled in. I think the other one really talks about valuables and clothing.

A. It's more like an old person going to a nursing home.

Q. Then of course you have the second one, which is the transfer record sheet, which is telling you what happens en route, if I can put it that way. So in terms of what, if you can remember, was more representative of the standard at the time, can you help us with a view?

A. Obviously, this is much more comprehensive, it gives details about her ventilation, the fact that she had

a catheter in, a lot more detail about the fluids. Sorry, I'm not sure exactly ...

Q. What I wanted to know is: you have the one which is rather brief that I showed you in relation to Lucy, you have this, which you have acknowledged is in more detail; which more closely resembles the sort of thing you were receiving in 2000, if you can do that?

A. I ...

THE CHAIRMAN: One form might be better than another, but they're both what she was receiving in 2000 because they're both standard forms.

MS ANYADIKE-DANES: You said in your PSNI witness statement that you accepted -- sorry, I will just pull up the reference for it. 115-022-001. You say that you were on call on 13 April when Lucy was admitted to the Children's Hospital:

"I accepted by telephone her transfer from the Erne Hospital around 6 am."

What does that mean exactly?

A. My memory was that the Erne Hospital phoned paediatric intensive care to tell us about the child that they wanted to transfer. Those calls would normally come through to the Children's Hospital and, as the registrar, I was probably the most senior doctor in the hospital unless some of the consultants happened to be

there for some other reason.

So the call would have come through to me as the registrar and I would take the details and then inform the paediatric intensive care consultant who was on call that night about this case and then they would usually make a telephone call or tell us what to tell the hospital about receiving them. And it would be very much, you know, "Do you have space?", "Can you take this child?", "This is what we're concerned about", "This is why we want to transfer them".

So we would be taking the initial call to the hospital and then contacting the anaesthetist, who would then give their approval if there was a bed available, et cetera, and give their consent to, yes, the patient can come, and then we would get back to the referring hospital.

Q. And when you receive a call like that and you get details which you're then going to pass on to the consultant on call, which in the early hours of that morning would have been Dr McKaigue, do you make a note of what you're being told?

A. We would scribble down the information on whatever was available to us at the time, but that type of thing could have been written on anything and I could have been anywhere in the hospital. We had to cover Accident

& Emergency and all the wards. So we could have been anywhere getting that call. And that initial bit of information would probably have been scrapped once the child arrived.

Q. What information are you trying to get at that stage?

A. You're trying to get, basically, their name and their age and where they're coming from and why they want them to be transferred.

Q. Can you recall that call?

A. No, I don't.

Q. Who would you be speaking to? Would you typically be speaking to the child's consultant?

A. It's usually the consultant makes the call or, if the consultant is busy with the child, their registrar may have made the call. I'm aware that in Enniskillen they didn't have a registrar, it would have been the SHO, but I think it was the consultant who made the call.

Q. In any event, somebody who was familiar with the child's condition and what had happened?

A. Yes.

Q. So if it's a consultant, it could have been Dr O'Donohoe who was the consultant paediatric, or Dr Auterson who was the consultant anaesthetist?

A. Yes, correct.

Q. Somebody at that level, you would expect?

A. Yes.
Q. And then you say that she arrived -- I'm carrying on reading down from your statement:
"She arrived in PICU at approximately 7.45. Along with the SHO in PICU and the consultant anaesthetist, I spoke to ..."
Pausing there, that SHO in PICU, is that Dr McLoughlin?
A. Yes.
Q. And the consultant anaesthetist at that stage would have been Dr McKaigue; is that right?
A. That's right.
Q. "Along with [those two], I spoke to Dr O'Donohoe from the Erne Hospital who transferred Lucy. I took a medical history, examined the patient, and the anaesthetist and the SHO both made admission notes."
What was the information you were trying to get from Dr O'Donohoe?
A. I think it would have been just the clinical history that was recorded by the SHO that morning about her condition and what treatment she had been given, had she been covered with antibiotics, had they done blood cultures, had they sent off other bloods. Just trying to follow up on other samples that they might have sent from Enniskillen, bearing in mind that cultures would

take 24 hours minimum to be reported.
Q. The SHO has taken a note, it's Dr McLoughlin. She has taken a note which she times at 8.30 in the morning, and in that note, it's 061-018-058, she says -- you can see that halfway down:
"A&E last night. 3 hours to get IV access. IV commenced at 12.30."
So you know she's on IV fluids. If Dr O'Donohoe is there available to you, are you not trying to find out what her IV fluid regime was?
A. I presume we asked and therefore asked for the fluid balance chart to be faxed from the ward because it didn't accompany the child.
Q. Yes, but in any event, ahead of that, would you not be trying to find out from him, as he's the person who was treating her, what her fluid regime was?
A. Yes. I can't remember what exactly we asked him about, but that would be certainly appropriate.
Q. That would have been appropriate?
A. Yes.
Q. In fact, you knew from the transfer letter that the initial serum sodium level had been 137.
A. Yes.
Q. Given the condition she was, because you know then she collapsed at 3 o'clock, her pupils were fixed and

dilated, would you not be wanting to know as he's there, "Did you do any other U&Es?", "What is it at the moment?", or, "What was it before she was transferred?"
A. Yes. I can't remember when we heard the next set of results.
Q. No, but whilst he's there, would that not have been an appropriate question to ask him?
A. It would be an appropriate question. I can't remember whether it was asked.
THE CHAIRMAN: We're sort of looking at this now with the knowledge of what happened to Lucy. When Lucy arrived on that morning of the 13th, how far up your list of ideas of what had happened to her was that she had received too much of the wrong fluid?
A. I don't think that would have been top of my list at all because presented with a child of her age, with a fever followed by a seizure that left her unresponsive, I would have been wondering is there some other neurological problem, has she something serious like an encephalitis or a brain tumour or a bleed into her head, something other than intravenous fluids, that has caused this acute collapse.
THE CHAIRMAN: But that might raise its head as a cause or potentially the cause of Lucy's problems if you're told what her fluid regime was, that she was on

Solution No. 18, apparently as a replacement fluid, and the volume which she received it at, over what period of time?
A. Yes, I probably would and, certainly in hindsight, that is the way I would think about it.
THE CHAIRMAN: Right.
MS ANYADIKE-DANES: I wasn't asking you about the fluids because I was suggesting your immediate response when she came in would be, "I think there might be something wrong with her fluid regime", but why I was asking you that is at this stage you don't have her notes, you have a very brief transfer letter, and an even briefer transfer form, but you do have the consultant there, and as you are trying to gather the information ahead of when her notes do come, why I was asking you that is once you see that the child has been on IV fluids and she clearly still is on IV fluids, is not part of your information gathering exercise to see what has her fluid regime been in the same way as you might ask about any of other her symptoms or records of measurements?
A. Yes. I can't remember what detail I or any of the other doctors asked the consultant that transferred her. And I am aware it was 8.30 in the morning when we would have been changing over shift. So I probably was only there for the next half an hour. I can't remember what

exchange of conversation I had with the consultant from the Erne Hospital that morning.

Q. Dr O'Donohoe thinks that he did say what her fluid regime had been on, and he did say orally that her serum sodium levels had fallen to 127 and that that had been taken, or that was a result after they had been administering her with normal saline. Do you remember anything of that sort?

A. No, I don't remember that conversation.

Q. If he had said that, would you have expected that to have been included in Dr McLoughlin's note?

A. Yes, I think I would.

Q. What you do have on that transfer sheet though is, as I showed you, right at the top, that reference to "500 ml normal saline at 30 ml an hour"; did you consider whether you thought that was appropriate or why she was on that?

A. I can't remember whether or not I was trying to work out a fluid regime that would have been appropriate for her because we would base it on the weight of the child and the percentage that she was dehydrated, and if she was approximately 10 kilograms, if she was dehydrated then we would take that into consideration and normal saline would be an appropriate fluid for giving her maintenance plus rehydration fluid. I can't remember whether

I mentally tried to work out the calculation that morning or whether that was brought to my attention the next day.

Q. Would you have noted her weight?

A. Yes. That would be very much standard practice of any transfer.

Q. Her weight's different. Her weight when she's in the Erne is -- let me take you to the place in her notes where we have it. The reference is 061-017-045. It's on her admission sheet. It has "9.14" as her weight there. And when she comes to PICU, her weight has increased -- I'm trying to see if I can conveniently tell you what it goes up to. It's 9.8, I think it goes up to. So that's an increase in weight. Did you note that her weight had increased?

A. I wasn't aware of that fact.

Q. Would that be relevant to look at if her weight does go up?

A. I suppose what I would want to know is what her preceding weight was before her illness if her parents had a measurement, for example with the health visitor. That would help in determining the extent of how dehydrated she was when she presented to the Erne Hospital. That might help.

Q. But if you'd looked at her notes, you would have seen

that she couldn't have been that dehydrated because her tongue was moist. So if she's not that dehydrated when she comes in, and she comes in at that particular weight and her serum sodium was in normal parameters, but her weight has significantly increased a few hours later, if I can put it that way, by the time she gets to PICU, is that not something that should have triggered a query in somebody's mind as to why her weight has gone up in those circumstances?

A. Yes, I suppose you also have to take into consideration the fact that she would have been weighed with perhaps her endotracheal tube and her urinary catheter and maybe there were other things that factored into the -- it's difficult.

Q. Yes, at the moment I'm only asking you: a change in weight, is that something that should provoke a bit of a query?

A. If it's a significant change in weight -- and we do allow a small margin of error for weighing between different scales, they may have a slightly different calibration, that you might get a slightly different weight on two different sets of scales.

Q. Okay. You then go on to say that:

"The staff in PICU contacted the Erne Hospital that morning to request a copy of Lucy's medical notes as

they hadn't come with her."

Pausing there: had you expected that they would come with her?

A. It's always much more helpful if they do come with the child, but sometimes the circumstances are such that they can't get a photocopy of the notes in time and they don't want to delay the transport, an emergency ambulance is waiting, and maybe they will say they'll send them later. So there may have been occasions that we didn't get the full set of notes, but it is always ideal to get all the notes and X-rays, et cetera, with the child.

Q. Yes. So what you have said is that the Children's Hospital contacted the Erne to ask for the notes and to clarify what treatment she had received prior to arrival at the Children's Hospital. Do you know who was doing that?

A. I'm not aware of who exactly did that, whether it was a member of nursing staff or a member of medical staff. I don't remember.

Q. Well, who would you have thought would be appropriate the person to seek clarification as to her treatment?

A. Um ... I suppose once the notes came to the Children's Hospital, then the consultants that were in charge of her case and were responsible -- to go through

things with a fine comb and try to determine what she had been given.

Q. Now, you saw her notes when they did come finally. Given what was in her notes, did you think there were matters that it would be appropriate to seek to clarify with the clinicians at the Erne?

A. Yes.

Q. What would you have wanted to have more clarity on, if I can put it that way?

A. Yes, I remember the fluid balance sheet in my mind, it didn't really -- the sums didn't appear to add up and I wasn't sure if the totals were calculated.

Q. Let me pull up that up for the 061-017-056. That's the one you mean?

A. Yes, that's correct.

Q. What did you feel didn't quite add up for you when you looked at that?

A. When I looked at 11 pm, it's 100/100, and then from 12 midnight through to 2 am, it was 100/200, and then 100/200, and 100/200, and I didn't really understand what that meant.

Q. Yes. The nursing note says that she was on 100 ml of Solution No. 18 per hour. You saw that?

A. Yes.

Q. So you've got that, you've got the nursing note that

tells you that, and also you've got an entry by the SHO, Dr Malik, at 3.20, and he says that 500 ml of normal saline have been administered to her over 60 minutes. When you're putting together some of this information, were you still left with not being entirely clear what her fluid regime had been at the Erne?

A. Yes. I didn't really understand what that really meant because very often they would hang up a bag of 500 ml of fluid, but it would take some time for that 500 ml to go through and, if this was an emergency, maybe they were just writing down "500" meaning a 500 ml bag was erected. But it would be -- it's difficult just to understand what that actually meant. Was 500 ml flowing through in an hour or was it that the 500 ml bag was put at that stage?

Q. We can pull this up alongside it, 061-017-048, which is another part of her notes that was faxed. This is her clinical notes. You can see in relation to the 3.20 entry Dr O'Donohoe's come because she has developed respiratory arrest:

"Passed large foul-smelling stool."

Then you see immediately under that:

"Normal saline, 500 ml, given over 60 minutes."

And then other things follow from that and she's transferred to ICU. So if you've got that sort of

information -- and just, in fairness, the nursing note tells you -- sorry. If we substitute one of those, 061-017-049. This is the nursing note that was also faxed across. You can see:

"IV fluids commenced at 22.30 at 100 ml an hour to encourage urinary output."

Then you see that she has her large vomit at 00.15, IV fluids remaining at 100 ml an hour. Then she has some diarrhoea. Then you see at 3 o'clock she has her collapse.

So those are the entries in relation to fluids. There's also, if we go over the page to 061-017-050, which is the continuation of the nursing record after her collapse, you can see Dr Malik's bleeped by the nurses. He arrives:

"IV fluids changed to normal saline and run freely into IV line. Decreased respiratory effort."

Then Dr O'Donohoe comes in attendance and the repeat U&Es are ordered then.

So if you're looking at her notes and piecing together the information that you've got as to her fluid regime, at any stage when you're doing that do you become concerned as to the fluid regime she's been on at the Erne?

A. It seems like a very large amount of fluid just to be

running straight in. I don't know whether they were using like a drip counter or how they were actually monitoring the 100 ml an hour or 500 ml an hour, but it certainly seems quite excessive.

Q. So even though you may not be in a position to say what the consequences of that might be and you might want to be hearing what the consultants would say about that, but to you as a registrar you're saying that seemed excessive, it's something you didn't entirely understand, if I can put it that way?

A. Yes.

Q. Not a regime that would be familiar to you?

A. No, no.

Q. And perhaps, if I may also say, not one that you yourself, if you had the prescribing of it, would have prescribed?

A. No, no, definitely not.

Q. Is it though something that when you do have access to your consultant, you just might like to raise and see if you have got the wrong end of the stick and see if there's something perfectly explicable as to how these fluids have been prescribed to the child?

A. Yes, and I don't specifically remember, but I remember generally conversations about her fluid management at that time in paediatric intensive care.

THE CHAIRMAN: I understand entirely why, so many years later, you don't remember the exact conversations, but in terms of the general conversations to what effect were those conversations?
A. I think none of us would be bang into this regime as being appropriate. We felt it was excessive.
THE CHAIRMAN: And apart from you, who was involved in those conversations at the different times? Would Dr Crean have been one of the people?
A. I'm aware that Dr Crean would have done the ward round the day she was admitted, but I am not sure if I was physically there at that time. I was more with Dr Hanrahan because I was his registrar in my sort of day job.
MS ANYADIKE-DANES: I do appreciate it's a long time going back and much has been read, probably, since then, but so far as you can recall, was there any kind of level of concern about what had happened in terms of Lucy's treatment at the Erne?
A. I think there was significant level of concern, but whether the fluids were the whole story or not, whether there was something else going on ... Because I think if the fluids alone had caused her rapid collapse, we would have had expected the subsequent sodium levels to actually be a lot lower than what we were told they

were.
Q. Well, would you have expected that if her serum sodium levels had been taken from bloods after she had received a significant amount of normal saline? Could that have affected them?
A. Yes, that certainly could have affected them and so would the site of where the bloods might have been taken from. If they were taken from the same arm she was getting her intravenous fluids, things like that. So we didn't know a lot of that detail, and I wasn't aware of the fact that the second set of blood tests were taken after she had received normal saline. I had assumed that they were taken at the time she collapsed at 3 or 3.20.
Q. Yes. Although if you look at the order in which it is written up in the nurse's note, that does seem to indicate that the normal saline went in, so IV fluids changed to 0.9 per cent saline, run freely into IV, then she has her decreased respiratory effort, which is noted at 3.20, the airway is inserted, bagging starts. Dr O'Donohoe is now in attendance. Then the repeat U&Es are ordered. So looking at that sequence it would seem that the bloods that produced that 127 serum sodium result were taken after she had had the normal saline.
A. Well, in retrospect, obviously that is what happened,

but when I read through that I kind of feel this all happened at that same time when her fluids were changed, you know, they were worried about her airway, started bagging her, and repeated the bloods. That all happened within that short period of time, not an hour later.
THE CHAIRMAN: Can I just take this in stages with you to see exactly, insofar as you can pin this down, which bits caused great concern? First of all, the initial prescription of Solution No. 18 at 100 ml an hour; does that volume of Solution No. 18 seem to you to be problematic?
A. I think what they were trying to calculate is what she would need in terms of maintenance plus replacement fluid and whilst that was probably a bit more than what we would have calculated, given a child with severe dehydration, it maybe wasn't that excessive but we would have used a different fluid for replacement.
THE CHAIRMAN: So there was arguably more fluid than she needed, but not drastically so?
A. Yes.
THE CHAIRMAN: But the type of fluid she was receiving, Solution No. 18, was not appropriate?
A. No, not appropriate for replacement fluid.
THE CHAIRMAN: So then you come to Dr O'Donohoe being called in and he then gives, according to this, 500 ml of

normal saline in an hour?
MS ANYADIKE-DANES: No, Mr Chairman, I don't think that is the evidence. It's not Dr O'Donohoe that gives 500 ml; the evidence seems to indicate that Dr Malik started it in response to the diarrhoea at 2.30. And by the time Dr O'Donohoe gets in at 3.30-ish, that 500 ml bag is virtually complete.
THE CHAIRMAN: Right. Does this now become the reverse, that the type of fluid she's receiving is appropriate?
A. Normal saline would be appropriate, but it's probably excessive volume.
THE CHAIRMAN: Is there any "probably" about the excessive volume? To receive 500 ml in an hour ...
A. Yes, it's certainly excessive because she's already had treatment for -- I think what they would have termed the bolus resuscitation fluid, I think they had anticipated that would be 100 ml followed by 30 ml an hour, but that seems to have been continued as 100 ml an hour.
MS ANYADIKE-DANES: Can I please start in this way: I think when you were giving evidence earlier, an important point in the fluids, I think you were saying, is really whether the child starts with a deficit which has to be addressed because that makes a difference.
A. Yes.
Q. If you are just maintaining the child, that's one thing,

but if the child is already dehydrated, that's another thing. That needs to be addressed, meantime you do need to be providing maintenance fluids.

A. Mm-hm.

Q. So that's your first question: do we have a dehydrated child or not? Then, "If we do, how dehydrated is the child?" Would that be appropriate?

A. Yes.

Q. You, I think when you were answering the chairman, had been of the view that she might have been quite significantly dehydrated. Is that the view that you had at the time or is that the view that some of the consultants had which you're now reciting for us as a common view that was held as her state of hydration?

A. I think it was perceived that she was dehydrated, but if her mouth was moist, that probably didn't come under the severe category; she would have been moderately dehydrated.

Q. In fact Dr Sumner, who was the expert for the coroner, produced a report dealing with that. We can pull up the relevant bit where he discusses that. 013-036-139. You can see that in the middle bit of the page:

"It is difficult to judge exactly how dehydrated Lucy was on admission. A capillary refill time in excess of 2 seconds is one sign of approximately

5 per cent dehydration. However, this sign is likely to be hard to interpret in a febrile child [which you noted]. At this level of dehydration mucous membranes are dry, but it was noted that Lucy's tongue was moist. I think, on balance that she was mildly dehydrated, perhaps somewhat less than 5 per cent, involving a fluid deficit of approximately 350 ml."

That is his position. Would you accept that rationale, if I can put it that way?

A. Yes, that would be entirely appropriate.

Q. So if we've got that, so she is a bit dehydrated, but not maybe significantly so. Then in terms of helping the chairman with trying to see your response to the levels of fluid and types of fluid that you are picking out, if I can put it that way, from the notes that are faxed, I wonder if I could provide this? Firstly, it's a comparative schedule of those who have commented on her fluids so you can see what others have said. 325-007-001. (Pause). We can do it another way. Let's look at 325-010-001.

THE CHAIRMAN: Could you check that again? Because I think some of this documentation was called up yesterday in the opening. 007 wasn't called up yesterday.

MS ANYADIKE-DANES: Let's do 325-010-001 because that was definitely called up. (Pause). I'll come back to that

point.

I'm going to try and help you with the information. If it turns out it's too confusing and you can't hold it in your mind, then we'll have to do it another way. The schedule that we had put together was to deal with both the maintenance rate and a replacement rate, depending on what anybody thought her dehydration level was. So the maintenance rate, using the Holliday-Segar formula, which you'll be familiar with, based on her weight -- here it comes, thank you very much indeed.

So you can see the maintenance rate there, based on her weight of 9.14, as we're dealing with the situation at the Erne, she would have required 914 ml a day, which equates to 38 ml an hour if you're just going to maintain.

A. Yes.

Q. Would that seem within reasonable bounds for you?

A. Yes.

Q. Then if we look at the dehydration, depending on what you assume her deficit to be, we've got three contenders, and if one -- 5 per cent, which is where Dr Sumner thought she might have been, 10 per cent might be the upper end of it, and if you just take the middle, 7.5 per cent, then based on her weight, the formula seems to be that you achieve 686 ml a day, which equates

to 29 ml an hour, which isn't so far off that 30 ml figure that you saw.

Then you add the two together because she needs to be maintained while she's being replaced, if I can put it that way --

A. Yes.

Q. -- and that produces 67 ml an hour.

A. Yes.

Q. What she actually got was 100 ml an hour of Solution No. 18. So if you are trying to -- and it does take a bit of working out -- work out what was an appropriate regime, even without getting to this level of detail, doesn't it strike you that what she was on at the Erne just didn't make sense?

A. No, it didn't make sense.

Q. Thank you. Dr Crean's evidence at the inquest -- which I don't think you attended.

A. No.

Q. Dr Crean attended the inquest, and one of the comments that he made was -- and the reference is 013-021-074. A concern for him was the actual drop in serum sodium level. You can see it there towards the bottom, firstly he was concerned that her notes hadn't come with her, which he would have wanted and he felt he needed. Then he says:

"The drop from 137 to 127 would ring alarm bells."

That's irrespective of knowing where the 127 comes in terms of the administration of normal saline. Was that a drop that to you was a concern?

A. I remember thinking that it was certainly a drop, but I had seen lower levels than that, and I would have been very much guided by the consultant, my consultant colleagues, Dr Hanrahan and the anaesthetists, who felt that it wasn't a significant enough drop to cause such consequences that they would have expected an even wider gap in the two sodium levels. So I can't remember what I would have thought at that time. I would have very much been guided by what their interpretation of that result was.

Q. He goes on to say that the rate of fall is the crucial factor, so it's not just that you end up at 127; it's how quickly you get to 127.

A. Yes.

Q. He thought was important. And he regarded that fall as being within a short period of time. Did you think that she'd had a fall of 10 millimoles an hour within a short period of time?

A. I suppose I thought that was at least four or five hours between the two blood samples and it was significant, but whether significant enough to cause the collapse,

I don't know.

Q. So what you're saying is that you would have been guided by what your consultant said?

A. Yes.

Q. You note it, but in terms of its implications you'd have been guided by what Dr Hanrahan thought?

A. Yes.

Q. He does go on to say the very thing that you've been talking about, which is to criticise the use of Solution No. 18 for replacement and maintenance purposes. He then says that using only one fluid, No. 18, had the potential to lead to hyponatraemia. Would you have known that at the time?

A. I probably would because in children like this we quite often had two intravenous lines, one for maintenance fluid and the other for replacement fluid, and we might have used concurrently two different fluids in the same child. So I think I would have been aware of fluid shifts and biochemical abnormalities.

Q. What you have just said there is exactly what Dr Crean says over the page at 013-021-075. He said you should have had one fluid for deficit and one for maintenance and monitoring and that's what you would have understood?

A. Yes, two IV lines going --

Q. So is the upshot of all of this that everybody would have had a concern about her fluid regime and the big question though is what were the implications of it in terms of her condition as she presented at the Children's Hospital?

A. Yes.

THE CHAIRMAN: Just to emphasise a point, or just to confirm a point you made a few minutes ago, that you recall the general conversation around PICU was that the fluids given in the Erne were not appropriate. You related that to you talking to Dr Hanrahan I think; isn't that right?

A. Yes, I worked mostly with Dr Hanrahan.

THE CHAIRMAN: Am I right in picking up the impression from you that it wasn't just you and Dr Hanrahan talking along these lines?

A. No.

THE CHAIRMAN: And I've already heard this morning from another doctor who was thinking along these lines. Would I be wrong in picking up the impression that it was recognised reasonably quickly in PICU that the way that Lucy had been treated in the Erne in terms of her fluid management was inappropriate?

A. Yes, I think that's correct.

MS ANYADIKE-DANES: Thank you very much.

If we move forward a little bit, I want to ask you about the contact with the coroner's office. You would have seen Dr Hanrahan, who is your consultant, has inserted in Lucy's notes that if she does succumb then a post-mortem -- but in any event, the matter would have to be reported to the coroner. Did he discuss that with you, that that's what he thought was going to have to happen when she succumbed?

A. As far as I can remember, she came on Thursday morning --

Q. Yes.

A. -- and he saw her on Thursday afternoon and I think maybe his notes were written in the late afternoon.

Q. No, he actually saw her at 10.30, the first time he saw her. He had been asked to see her by Dr Crean actually, and he saw her then, and he made quite a full note at that stage. We don't have to look at it, but for reference purpose it starts at 061-018-060. On his examination he noted that the reflexes were present but diminished, and I think his evidence had been that he really thought that there was no coming back from where she was.

He didn't at that time identify a clinical cause for why she was in that state, but he wanted a number of tests carried out. Then Dr McKaigue enters his note,

but from his examination in the morning. Dr Chisakuta comes in and inserts a central line. Dr Hanrahan comes again in the afternoon --

MR McALINDEN: Mr Chairman, just in relation to the sequence of events, it has been described here in relation to the clinical management of this patient: the line that was inserted by Dr Chisakuta was inserted at a much earlier stage. That was when Dr McKaigue had asked Dr Chisakuta to assist, and that was around the time of the change of staff at around 8.30. I think that's when the central line was put in. I don't think that Dr Chisakuta was involved with this patient on the 13th after Dr Hanrahan had seen the patient.

MS ANYADIKE-DANES: I think that's right. Thank you very much.

THE CHAIRMAN: It's about 1.50 pm that the central line is inserted --

MS ANYADIKE-DANES: That's when he writes his note, Mr Chairman. I think my learned friend is right.

MR McALINDEN: That is when he wrote his note, but the actual insertion of the line was much earlier.

THE CHAIRMAN: Thank you.

MS ANYADIKE-DANES: Yes, in fact he says it in the note at 061-018-064. He says:

"Line inserted between 8.35 to 8.50 hours."

So McKaigue is there, hands over to Dr Chisakuta, Dr Chisakuta inserts the line, and thereafter Dr Hanrahan comes to see the child and notes seeing the child at 10.30.

You of course have already seen Lucy.

THE CHAIRMAN: [Inaudible: no microphone]

MS ANYADIKE-DANES: Yes. But then Dr Hanrahan comes again in the afternoon, and that might be the one that you were thinking of.

A. Yes.

Q. Why he's coming then is that he's seen the CT scans.

A. Yes.

Q. And after that he makes his note and it's in that note he says:

"If she succumbs, a PM would be desirable and coroner will have to be informed."

So he has looked at the CT scan, he sees what the position is and that is his conclusion. What I wanted to ask you is: he enters that note at 17.45; was there any discussion between the two of you, even if it's just from a learning point of view, as to why that's his view?

A. I think the reason he wrote that was because I was not there in the afternoon, I had been on call the night before and I wasn't in the hospital that afternoon,

he was probably not on call that evening, and if something had happened to Lucy during the night he had spoken to her parents that she was not to be resuscitated and that if -- it's really having a plan of action in place for the people responsible who were on call on Thursday night into Friday morning: if she had an acute deterioration and she was clinically dead, that this is the plan to follow. So I think he was just making provision if something had happened to her.

Q. So as a result of the way you have put that chronology, he wouldn't have had an opportunity to discuss his reasoning with you, he was just letting you know that was the plan?

A. Yes, I wasn't aware because I wasn't there that afternoon; I was back at work the following morning.

Q. Would your duties have taken you up to, say, lunchtime?

A. Yes. From the previous morning, so that's like a 27-hour shift.

Q. So you would have been there when he had his 10.30 visit, if I can put it that way?

A. I think I was with him at that time.

Q. So far as you were concerned, had he formed a view then that Lucy really was irretrievable?

A. Yes.

Q. Was there any discussion about what should happen apart

from, obviously, one has to have tests done and one has to establish certain matters and so forth? But in terms of where this is all going if people are concerned about her fluid regime, was there any discussion with you as to what he thought he would do when she --

A. I was aware that she had a list of differential diagnoses and it was very important to try and rule out other causes of her acute collapse and that there would be a procedure in place when a child is in intensive care and is ventilated and perhaps on anaesthetic drugs, et cetera, that there would have to be a time of weaning off all the different agents to actually establish a state of brain death. So it was basically following that, giving that window of time until they would do the brainstem tests.

Q. So that's where you thought matters were going and there wasn't really a discussion about what we would do when we get what we think are the inevitable brainstem tests, just that your next step was --

A. I think the thought was if she died, the coroner would have to be informed and a post-mortem would be very much desirable to try and work out what had happened.

Q. Do you know why he thought the coroner would have to be informed?

A. I think just that she had previously been well and it

was such an acute event.

THE CHAIRMAN: Sorry, the other obvious part of that answer, which you said earlier, is because there appeared to be a general agreement in the Children's Hospital that things had not been done appropriately in the Erne.

A. Yes.

THE CHAIRMAN: If a child dies not having been treated appropriately medically, that has to be referred to the coroner, doesn't it?

A. Yes.

THE CHAIRMAN: So it's both an unexpected death of a previously healthy 17-month old child and it's a death which, to a number of doctors, appears to relate to the treatment she received in another hospital.

A. Yes.

THE CHAIRMAN: So for either of those reasons, it goes to the coroner?

A. Yes, that would have been my expectation.

MS ANYADIKE-DANES: Your next note is when you come back on duty the next day and you record an entry at 11.30, which is 061-018-067. You're recording what the next step is, and at this stage it's that:

"Coroner (Dr Curtis on behalf of the coroner) contacted [by Dr Hanrahan]. Case discussed. Coroner's PM is not required [which you underline], but hospital

PM would be useful to establish the cause of death and rule out other diagnoses. Parents consent for PM."

How do you get that information? Is that a conversation you have, do overhear something? How do you get it?

A. I would definitely have been relaying the information from my senior consultant. That would not be my own writing and my personal thoughts as a registrar. So I would have been just transcribing on behalf of Dr Hanrahan.

Q. Does that mean Dr Hanrahan discussed with what you had happened?

A. Yes. He would have told me that he had discussed it with Dr Curtis or the coroner's office and he would have relayed that information to me and then I would have just made notes.

Q. Did he express any surprise to you that the case was not moving towards an inquest?

A. I can't remember other than what I have written, what exactly he said, but I think he had anticipated that it would be a coroner's post-mortem and I can't recollect, other than what I've written, what he said to me.

Q. If he had told you why the case wasn't to proceed as a coroner's case, is that something you think you would

have recorded?

A. I think he told me that they just felt that cerebral oedema was a medical condition and to go ahead and organise a consented post-mortem or a hospital post-mortem.

Q. Thank you. So then it's for you to draw up the autopsy request form. Is he the one who contacts Dr O'Hara to tell him that we need a hospital post-mortem?

A. Yes, that would be a consultant-to-consultant type of conversation.

Q. And before that can happen, of course, the parents have to consent to it.

A. Yes.

Q. Are you involved at that or is that also a consultant responsibility?

A. I probably was involved to some extent because I've written in my notes that parents have given their consent, but I think the initial conversation would have come from the consultant to describe what a post-mortem is and to then ask the parents if they were happy to go ahead and organise the post-mortem.

Q. At this stage, your consultant is Dr Hanrahan and he's the intensivist, but Dr Chisakuta is also on duty in PICU and he's a paediatric anaesthetist.

A. Yes.

Q. So far as you're aware is there any discussion between those two consultants who are both managing Lucy, if I can put it that way?

A. Dr Hanrahan was the neurologist.

Q. I beg your pardon, the neurologist.

A. As far as I'm concerned, I was working with him as his registrar and I wasn't an intensivist registrar, so I was really working with Dr Hanrahan, but I was aware that the anaesthetists in PICU were looking after Lucy and I wasn't ... I think they were happy about the way things were managed in terms of, yes, go ahead and contact the coroner's office.

Q. That's what I meant. Were you aware of any discussion between the two of them about what should be being done, if I can put it that way?

A. I don't remember specific conversations, but that was the general thought that, yes, we're going to go ahead and contact the coroner.

Q. And then when it comes to the hospital post-mortem, so having contacted the coroner and that having not produced an inquest, are you aware of discussions between your consultant and Dr Chisakuta about a hospital autopsy?

A. I don't remember anything specifically between Dr Hanrahan and Dr Chisakuta. I remember Dr Hanrahan

contacting Dr O'Hara, who was the pathologist, and that would have been one consultant to another consultant, to organise the hospital post-mortem.

Q. And are you aware of why your consultant wanted a hospital post-mortem?

A. I think when there wasn't going to be a coroner's post-mortem, he felt that we need to explore further to look for causes of why she died. So that would be very desirable -- I think is the term he used -- to have a hospital post-mortem.

Q. Does that mean at that stage your consultant, so far as you're aware, didn't have a clear cause of death?

A. Yes, he knew she had died because she had coned and had cerebral oedema, but what had triggered that process --

Q. He didn't know that?

A. No.

Q. And, if you're going to fill in a medical cause of death certificate, you need to know that?

A. Yes.

Q. Thank you. Then if we go to your autopsy request form, if we pull up two pages together, 061-022-073 and next to it 061-022-075. The bit I have missed out is the note where you talk about organ donation.

A. Yes.

Q. So here's the first page where you summarise the

clinical presentation and history of the present illness and investigations and so on, and then the second page where you list the clinical problems that you're drawing to the attention of the pathologist who's going to carry out the post-mortem.

Before this form goes, do you have any discussion with Dr O'Hara at all about Lucy clinically?

A. As far as I can remember, my only discussion with Dr O'Hara, the pathologist, was to tell him that her family had requested her heart to be retrieved for organ donation, but I did not speak to him about what Dr Hanrahan had already discussed with him, which is why she was having a post-mortem.

Q. I see. Then the information that you set out in this form, where does all that information come from?

A. I would have taken that straight from her clinical case notes.

Q. So you've inserted that she got her IV fluids, Solution No. 18 and normal saline. Did you think it might help the pathologist to know anything about the sort of thing that had been of concern generally to the treating clinicians, namely something about the fluid regime?

A. Other than what I've written here, I can't remember what my thoughts were at the time. In retrospect, now I can

see that maybe further information would have been useful and very helpful, but at the time I tried to fill it out to the best of my ability. It's not a very comprehensive form and I was aware that her notes would go with her to the autopsy.

Q. Before we come to that point, the pathologist, obviously, is looking at the state of the body and what is there as evidence after the death. You would know that the issues to do with fluid balance and so forth are not something that can easily be detected from the body at death.

A. Yes.

Q. So if the pathologist is going to be alerted to that to try and see whether that is part of or fits in with the evidence that he's got, then he really needs to be told that because he won't see the evidence, say for example, of her serum sodium levels being 127 at 3.30 on the morning of the 13th. He won't see the evidence of that.

A. No.

Q. So if her fluid management regime is going to be relevant, then the clinicians need to tell the pathologist that sort of thing; do you recognise that?

A. Yes.

Q. You said that you were aware that her notes would go with the autopsy request form; did you send the notes?

A. I personally don't remember having anything to do with her remains going for autopsy. I just remember filling in the form.

Q. My understanding is that the notes did not go with the autopsy request form. I think you might specifically have been asked that. We'll check it and see. Did I understand you to say though that you would have intended her notes to go?

A. Yes, I think that would have been normal practice for notes to have gone.

Q. We'll check that, but I think we specifically asked that question and I think the answer was that nothing else went. In addition to Lucy's notes, there's her X-rays as well. Would you have expected the X-rays to go?

A. I would have expected them to go.

Q. Lucy had X-rays from the Erne. Did anybody ever ask for those X-rays?

A. I don't know.

Q. Would you have thought that they would be relevant for the pathologist to have? She had chest X-rays done at the Erne, which were normal. She also had chest X-rays taken while she was at PICU. Would you have thought it relevant to the pathologist to effectively see perhaps the before and after, if I can put it that way?

A. I would have expected all the information to go with her body to the autopsy.
Q. But for the Erne X-rays to go, they'd have had to be asked for?
A. If the Erne X-rays had come to PICU, then that information, together with her notes, would all have been -- I would have expected them to have gone with her for post-mortem.
Q. Do you think PICU should have asked for her Erne X-rays?
A. Yes. That would be quite normal practice.
Q. There doesn't seem to have been a request for her Erne X-rays.
A. Okay.
Q. Did you see the post-mortem report when it came back?
A. Very retrospectively. Just when I was asked to answer questions for the inquiry.
Q. Yes, because you'll see in that post-mortem report that Dr O'Hara said he saw evidence -- and he lists the X-rays and other examinations -- of bronchopneumonia, really, so he has seen evidence of fluid in her lungs.
A. Mm-hm.
Q. It might, in those circumstances, have been relevant for him to see what the state of her lungs was when she was X-rayed earlier because the inquiry's experts have said that a child being on a ventilator can in fact produce

some of those effects that might otherwise be considered to have resulted from some sort of bronchial infection.
A. Yes.
Q. So him not having those X-rays might have been relevant for the view he took as to how long she'd been presenting like that.
A. Yes.
Q. You can see that?
A. Yes.
Q. So if you didn't send Lucy's notes with the autopsy request form, would you consider that to be an omission?
A. I'm not sure what the procedure was at the time in the Children's Hospital, whose job it would be to see that those procedures were in place.
THE CHAIRMAN: In Antrim, if you want a post-mortem done, whose responsibility is it to send all the relevant information to the pathologist?
A. First of all, it's a very uncommon thing to request a post-mortem. For those that I have been involved with as a consultant, I would certainly take responsibility for whatever notes, et cetera, are going with the child or see to it that some of the juniors or indeed the nursing staff would make sure all that information was together for the pathologist.
THE CHAIRMAN: To make the pathologist's job easier?

A. Yes. And some of these children are going straight from Accident & Emergency and then they become an acute death for whatever reason, they're going to a coroner's inquest, so we make sure all the information is there.
THE CHAIRMAN: Like a car accident or something?
A. Or a cot death.
THE CHAIRMAN: But in a case like Lucy's where it is recognised in the Royal that there are real concerns about what happened in the Erne, it's all the more important for the late Dr O'Hara to have received all the assistance he could possibly have got?
A. Yes. I would just assume that the information that we had would have gone with her for the autopsy.
THE CHAIRMAN: And it might also have helped in this context if anybody had been able to go to be present while he conducted the post-mortem.
A. That is a practice that I was not aware of, either being invited or expected to be there.
THE CHAIRMAN: I think, to be fair, it would have been more the consultant who was expected to be there. For instance I know that, in Adam's case, Professor Savage made a point of being at the post-mortem because he was in charge of the service and he had looked after Adam for a number of years, so he made it a point to be at the post-mortem to see what had gone wrong.

The reason for a consultant being present for Dr O'Hara in this case is rather different. The reason for a consultant being present in this case is because it's recognised among the PICU staff in the Royal that a finger is pointing towards the Erne; isn't that right?
A. Yes.
THE CHAIRMAN: So whatever criticisms may be made and have been made in some of these experts' reports about Dr O'Hara, if he didn't have the records and he didn't have any of the consultants with him, he didn't have the advantages that he should have had in conducting the post-mortem; isn't that right?
A. Yes.
THE CHAIRMAN: Thank you.
MS ANYADIKE-DANES: The form which was sent for an earlier child, Claire Roberts' hospital autopsy, that was in 1996. Just as in your form, it has investigations -- do you see where you have "investigations include [and so on]? Under that form it indicates that the notes follow. It says, "See charts", and they were attached. So that was, in 1996, what was happening.
During the course of that case we asked the pathologists, Dr Herron and Dr Mirakhur, who were carrying out the autopsy, we asked them and they said they expected the clinical notes, if they didn't

literally go with the autopsy request form, to be provided to the pathologist. In fact, it turns out that it's an important part of the pathologist's duties to ensure that they've got the correct clinical details, if I can put it that way. So they were quite clear, as were the inquiry's experts, Dr Squier and Professor Lucas, that the notes should go. Were you aware of any guidance at all to help you as to how you filled in that form?

A. Not specifically. I think it was just one of my jobs as a registrar and in filling out the form I would have anticipated that all her medical notes would also have gone with her and that this form was really to summarise her clinical course and to highlight the abnormal investigations, which I did, of the fall in her sodium, her CT scan, her EEG, which --

Q. Yes, but if you're not going to do it as you draw up the autopsy request form, what's the mechanism of Lucy's clinical notes getting to the pathologist?

A. I'm not sure what the mechanism was at the time. I don't know what procedure -- whether it was a job for the consultant in charge or whether it was the -- whoever was in charge from the nursing point of view or whether it was somebody from the mortuary coming to get the body to make sure they had all the relevant

documentation.

Q. But if you're doing the form, would you not have thought it appropriate to at least, even if you didn't physically go and attach the notes, but at least make the arrangement to make sure that the two things end up with the pathologist since you've been given the responsibility by your consultant to fill in the autopsy request form?

A. As far as I understood, it was my job to fill in the form and make sure there was a copy of that form in her notes and that form went with her to the autopsy. But it wouldn't have been -- I wouldn't have expected to physically organise sending it and sending the notes and transferring the body. That would be organised by somebody else and I am not sure what the procedure was.

Q. So somebody else would arrange for the notes to go?

A. With the body.

Q. Yes. But just so that we're clear, you are of the view that the notes should go?

A. Yes.

Q. Did you know that there were guidelines on autopsy and audit, which help in terms of completing the autopsy request form? They're issued by a joint working party of the Royal College of Pathologists, the Royal College of Physicians and the Royal College of Surgeons. There

were some in August 1991. They might have been the ones that were current at the time. Did you know that?

A. I don't think I was aware of that.

Q. I have just found the bit that I wanted to take you to. It's in your first witness statement, 282/1, page 10. It's in answer to question 18:

"Did you provide Dr O'Hara with any other documents or copies of documents apart from the autopsy request form. If so, identify what additional documents or copies of documents you provided him."

You answer:

"No other documents were provided to the best of my knowledge. I cannot remember any additional forms."

So --

A. What I have meant there is that I did not fill out any other form for the autopsy apart from the ones that were there, and I know there was a form or there was some guidance about the organ donation.

Q. But it might have been helpful at that stage to say, "I didn't do it, but I fully expected they would have got there".

A. I anticipated that the notes had been sent.

Q. Thank you.

THE CHAIRMAN: I think the witness was working on an assumption, which may have turned out not to be

fulfilled.

MS ANYADIKE-DANES: Yes.

If we then go back to what your clinical problems were that you had identified. That's at 061-022-075. Can you help us with how you would have arrived at that?

A. Sorry, the clinical problem list?

Q. Yes.

A. I think what I was highlighting at the time was a chronological sequence of events rather than maybe correctly filling in in order of importance. Because I would have known that brainstem death is far more important than diarrhoea and vomiting. So I would have been thinking in a chronological order of events rather than -- to list her clinical problems rather than in order of importance.

Q. But actually, what the form wants you to do, for the assistance of the pathologist, is to list the clinical problems in order of importance. That's why I was asking you whether you had any guidance at all as to how to fill in this form.

A. I don't remember reading anything on guidance to fill in the form.

Q. How many times had you filled in a form like this?

A. I don't remember filling in one before that.

Q. So this could have been your first one?

A. Yes.
Q. And in terms of not reading anything to provide you with any guidance, did Dr Hanrahan assist you with how to fill in a form like this?
A. I don't remember if he proofread it after I had written it or not. I can't remember.
Q. You were here for part of Dr Chisakuta's evidence. He said, "I wouldn't fill in a form like that, I'm a consultant. My registrar would do it or I would delegate it to a more junior member of the team, but I would certainly give some guidance as to how to do it", because ultimately a consultant bears responsibility for things done by their trainees. So that is why I'm trying to find out whether Dr Hanrahan looked at this list of problems with you.
A. I can't remember whether he did or not and now, as a consultant, I would certainly want to either write it myself or read what my junior had written before a form like that went.
Q. When you looked at that and you saw, "vomiting and diarrhoea, dehydration, hyponatraemia", and then getting to "seizure", as you wrote it down did you have in your mind how you thought she might have got from dehydration to hyponatraemia to seizure?
A. I was probably thinking about the chronology of the

events and describing the clinical features. I can't remember, apart from what I've written, you know, where the ... I felt that they certainly were linked, but the term hyponatraemia, in my mind, was basically that she had low sodium level as opposed to a diagnosis.
Q. Yes, she had got a low sodium level, but when you wrote that down and you have expressed how there was a general concern about Lucy's fluids, had you tried to figure out even for yourself as a registrar what the connection might be between dehydration and hyponatraemia?
A. Apart from the fluid management and -- I would have been very guided as a junior, as a registrar, by what the consultants were feeling, and I think when they felt that it wasn't a significantly low sodium to cause that degree of collapse and cerebral oedema, I wouldn't have questioned what their feeling was about it. But I did know that there was certainly a fall of 10 millimoles in her sodium level and that is why I included it in the form. But I wouldn't have questioned, as a junior, what the consultants were feeling at the time, which was possibly that they would have expected her sodium level to be much lower given the state of the consequences of her cerebral oedema. They felt it wasn't the whole picture.
Q. Does that make it all the more concerning then because

if that's the case then it becomes really quite unclear as to why she's collapsed in the way that she has?
A. That is what I think I tried to get across in what information I had on the form, writing down her abnormal results.
Q. Except to say that point about the low sodium doesn't reflect Dr Crean's view because Dr Crean also had some management of Lucy and his view is that that drop was significant. Were you aware at all of there being any divided thoughts about how significant the sodium drop was?
A. No, and again I was really a paediatric neurology registrar so I would have been mostly working with Dr Hanrahan, but I was not aware of any divided thoughts in her management from the team looking after her in the Royal.
Q. I'm going to ask you in a minute about the death certificate, but when you -- throughout the answers that you have given me, you seem to be fairly clear that although there are a number of disciplines in PICU, if I can put it that way, and more than one looks after Lucy while she's there, nonetheless you say, "I'm very much looking towards my consultant and what my consultant is saying", and what I'm going to ask you is, maybe because there wasn't much, you don't seem to be aware of much

multidisciplinary discussion, if I can put it that way, about Lucy and why she's in the condition she is. Is that because there wasn't any?
A. I think there must have been some, and to what extent it all happened, that was not my base, so I wouldn't have been there all the time that Lucy was there. I think there was a lot of discussion that maybe didn't get recorded clinically in her notes, but I wasn't aware of any difference of opinion.
Q. Was there not, from your point of view, professional interest or inquisitiveness as to how this child, who seemed to be reasonably healthy before she went to the Erne, not very many hours afterwards, comes to the Children's Hospital in a moribund state and everybody's of the view that there is nothing that can be done for her? Are you not interested -- "interested" sounds pejorative and I don't mean it in that way. Are you not interested to find out, from the point of view of your own learning, what happened?
A. Yes, and I think that's why we tried to pursue the line of investigations of seeking advice from the coroner, was a coroner's post-mortem going to happen, and then trying to get a hospital post-mortem.
THE CHAIRMAN: Sorry, what do you mean by seeking advice from the coroner?

A. Sorry, maybe informing the coroner.
THE CHAIRMAN: That's exactly the point we might end up developing over the next few weeks, about whether Lucy's death was actually reported to the coroner or whether there was somehow some variation on that, such as seeking advice from the coroner. It is your introduction this afternoon of the term "seeking advice from the coroner" that intrigues me.
A. Yes, and maybe that's not correct because I personally didn't contact the coroner. But I was aware that we felt that she would have a coroner's post-mortem and when the coroner's office was contacted, I was not aware of the fact that if they said, no, we are not going to organise an inquest, you could go back to them later on and discuss it again.
MS ANYADIKE-DANES: Well, if you did have a professional interest, if I can put it that way, quite apart from the human one, it's a child that you're helping to care for, why did you not attend the autopsy? There's a place on the form where it specifically says, "Will you or a colleague --
THE CHAIRMAN: Ms Anyadike-Danes, that's a consultant's responsibility. I think that's primarily a consultant's responsibility to attend the autopsy. Professor Savage and others have said that before. I don't think if

Dr Hanrahan doesn't ask this witness to attend the autopsy and he, as a consultant, doesn't attend and Dr Chisakuta doesn't attend, I don't think it's really primarily for this witness to put herself forward.
MS ANYADIKE-DANES: Thank you, Mr Chairman. Let me put that in a different way.
You fill in this form because you're asked to by your consultant, there's a place in this form where it says:
"Will you or a colleague be attending the review session/attending the autopsy itself?"
How did you know to put "no"? Is that because Dr Hanrahan had told you that he didn't want to go?
A. I don't know. Maybe we did have some discussion, I don't remember. I certainly was not anticipating being there myself.
Q. I understand that.
A. I can't remember whether I discussed that with him or not.
Q. Are you likely to have indicated "no" without having discussed it with him? It doesn't have to be you, it could be a colleague. Are you likely to have done that without discussing it with him?
A. I am sure I discussed it with him.
Q. Thank you. I think you said that when the post-mortem

was conducted that you don't recall seeing the post-mortem report until quite significantly afterwards.
A. No, I don't.
Q. In fact, in relation to this inquiry, I think.
A. Yes, yes.
Q. Did you want to know, though, what was in it?
A. Well, I was working with the neurologists in the neurology ward and neurology outpatients and so on. I would only been in intensive care when I was on call and if we had other patients in intensive care, so I don't think -- and as a registrar, the report would not be coming to me.
Q. No, I understand that, but it would have gone to Dr Hanrahan, your consultant --
A. Yes.
Q. -- so that's why I ask you: would you have wanted to know what was in it?
A. I'm sure I asked him at some point what was the outcome and what were the after events of meeting with Lucy's parents and so on. But I don't remember physically seeing the post-mortem report.
Q. Did you know if your consultant, Dr Hanrahan, attended any meetings afterwards to try and refine what the cause of death might be? We've heard them referred to as clinicopathological correlation attempts, when the

pathologists meet with the clinicians and pool their information, if I can put it that way, and see if they can come up with a cause of death in a hospital post-mortem. Were you aware if they did that?
A. I'm aware of the meeting, I think it was August, in the Children's Hospital, when they discussed --
Q. The audit meeting?
A. Yes, but I had moved to another job because I wasn't working in the Children's at that stage.
Q. How did you become aware of that meeting?
A. Just through the inquiry.
Q. You weren't aware at the time?
A. No.
Q. So far as you can recall, you weren't aware of Dr Hanrahan attending anything in the immediate aftermath of the post-mortem?
A. No. I am aware that he met with her parents and I remember him specifically saying to them you have to go back to the Erne to ask them.
Q. Why do you remember that? Is that --
THE CHAIRMAN: To ask them what?
A. To ask them what they felt happened to Lucy, that it was some -- an acute problem in the Erne.
THE CHAIRMAN: And this is what Dr Hanrahan told you he told the Crawfords?

A. Yes.
MS ANYADIKE-DANES: I was going to ask you why you remember that. I take it you weren't there.
A. No.
Q. But he told you that that is what he had done?
A. Well, he said to them when they were in intensive care, when Lucy was there, but he also met them after her death at some point, weeks after her death, and he --
Q. He did. I'm just trying to establish the source of your information. Were you there in PICU when he met the parents?
A. Yes.
Q. When he met the parents in PICU, did he say anything about his concerns about her treatment, if I use it loosely like that, at the Erne?
A. He said you have to go back and ask the Erne about their treatment.
Q. Do you remember that?
A. Yes, I remember him saying that.
Q. Did he give them any indication as to why he was suggesting they did that?
A. I just remember him saying that you have to ask Dr O'Donohoe in the Erne Hospital. That's all I remember.
Q. You actually remember him saying you'll have to ask

Dr O'Donohoe?
A. Yes.
THE CHAIRMAN: I've got mixed up. Were you there with him when he said that to the Crawfords or is this what he told you?
A. No, I remember him saying that when she was in intensive care.
MS ANYADIKE-DANES: This is before she's died?
A. Yes.
Q. So there's a meeting then when he's expressing his concerns about her general condition and the fact that she's not going to survive --
A. Yes.
Q. -- and you're present and he says you'll have to go back to the Erne and talk to Dr O'Donohoe as to what happened to her?
A. Yes.
Q. Did he give any indication at all as to what they might be asking Dr O'Donohoe?
A. I can't ... I just remember him trying to tell them to go back to the Erne with their questions, but I can't remember what the family were particularly asking.
Q. Leaving aside what they were particularly asking, as I understood you in your answers to some of my questions, and to the chairman, there was a general view

that something amiss had happened with Lucy's treatment --
A. Yes.
Q. -- in the Erne and that centred around her fluid management regime.
A. Yes.
Q. What I am trying to see is if your consultant is suggesting to the parents that really, if they need to go back to the referring hospital to ask questions of Dr O'Donohoe, is he giving them any kind of clue so far as you can recollect as to what they might be asking Dr O'Donohoe?
A. I don't remember specifically. I suppose that would include all the treatment she received, including the drugs, for example the intravenous antibiotics and the mannitol and her IV fluids.
Q. Did anybody think there was anything wrong with the antibiotics and the mannitol?
A. Only that if she had developed an acute drug reaction or some -- to cause her acute collapse.
Q. Did anybody think she might have developed an acute drug reaction?
A. I think that was raised by the Erne Hospital in some of the information I read.
Q. No, I mean from the Children's Hospital --

A. From the Children's Hospital?
Q. Did anybody at the Children's Hospital think that she might have developed an acute reaction?
A. No, I don't remember.
Q. So then why would he be telling them that?
A. I don't remember what -- all he was saying. He specifically said, "You need to ask the Erne, you need to go back there where they've been ...
THE CHAIRMAN: Sorry, there's a very simple thing to say to the Crawfords. That is: there's a concern in the Royal that Claire [sic] got too much of the wrong fluid and that that may have contributed to her death. Given your recollection of Dr Hanrahan speaking to Mr and Mrs Crawford, was that said to them?
A. I don't remember that specific --
THE CHAIRMAN: No, but that was the specific concern in the Royal, wasn't it?
A. Yes.
THE CHAIRMAN: And if you're going to send parents back to another hospital on any meaningful basis for them to make enquiries, instead of just saying in a very general, vague way, "You need to go back and ask how Lucy was treated". What is wrong, what could possibly be wrong with steering the Crawfords to raise the specific point with the Erne which concerned the Royal?

A. Yes. Again, he may have outlined that more clearly and succinctly and I wasn't always present with the conversations, nor was I present when he met them afterwards.
THE CHAIRMAN: I have to say, doctor, I suspect that if he had outlined that clearly and succinctly, that is something that would stick in your mind.
A. Yes, possibly.
THE CHAIRMAN: Thank you.
MS ANYADIKE-DANES: Then if we come to the death certificate. Dr O'Donohoe says in his note, 061-018-068, he's tasked by Dr Hanrahan to write up the medical cause of death certificate. In the course of that, he says:
"Spoke to Dr Stewart. Had been waiting for PM result."
According to his evidence, the family were anxious about receiving the medical cause of death certificate. And it so happened that he took that call or he got that information and he spoke to you. That's the note he records. You say in your evidence that you don't remember him speaking to you. But if he's recorded it, do you accept that that's likely it happened?
A. Yes, I accept that the "Dr Stewart" probably applies to me.

Q. The "Dr Stewart" probably applies to you?
A. Yes.
Q. Because you did at one stage say that there were a number of Dr Stewarts, but on reflection you think it probably is you?
A. Yes. There were at least two other Dr Stewarts that I was aware of in the Children's Hospital, but I presume that this one --
Q. It would make sense if it was you since your name is on her notes and, if he wanted to find out anything about her, it's much more likely he would talk to somebody who had been involved in her care.
A. Yes.
Q. So if you accept that it's you, then he says he spoke to Dr Hanrahan. The upshot of it is that he records a cause of death and that goes on her medical certificate of cause of death, which, if we pull up 013-008-022 -- did you see this?
A. I only remember seeing that as a result of the inquiry investigation. I don't remember seeing it at the time.
Q. Could you have seen it?
A. I think it's unlikely because Dara would have written it and would have given it to whatever family member or funeral undertaker, so he was working in PICU and I wasn't.

Q. If you had seen it, what would you have thought of the box "cause of death"?
A. I probably would have agreed that she died of cerebral oedema, but the contributing to her death was her rotavirus, gastroenteritis, which would have come under the point 2.
Q. Yes, and, "Cerebral oedema due to or as a consequence of dehydration"; what would you have thought of that?
A. Well, now in retrospect I would have said it was actually her rehydration that caused the cerebral oedema.
Q. Do you need retrospect to conclude that being dehydrated without more isn't going to lead to cerebral oedema?
A. It's hard for me to look at that now and to think what I would have thought at the time. I don't remember any conversation at all about what to write on this form.
Q. Now, but --
THE CHAIRMAN: Doctor, at this time, how far away were you from being a consultant? When did you become a consultant?
A. Two years later. February 2002.
THE CHAIRMAN: By this time you were in your fourth year as a specialist registrar?
A. Yes.
THE CHAIRMAN: Surely at that time you would have realised

that you don't get cerebral oedema as a result of dehydration.
A. No.
THE CHAIRMAN: It's not just you can say now looking back that that's wrong. At that time could any self-respecting doctor have completed that death certificate as it stands?
A. I ...
THE CHAIRMAN: It's medical nonsense, isn't it?
A. It doesn't make sense to me and I know that as a junior we follow out our seniors, what they're asking us to do, so that again would come from a consultant telling a junior member of staff what to write.
MS ANYADIKE-DANES: Well, if a consultant had told you to write what the chairman has distilled as "medical nonsense", do you not ask him, "How does that work?"
A. I think I would have. I was not --
Q. You may have been a junior, but as you have just said, you were two years away from being a consultant and you're a senior person, really. You may be a trainee, but that's because everybody who isn't a consultant is a trainee.
A. Yes.
Q. So if in some way Dr Hanrahan or somebody else for that matter had asked you, "This is how I think that form

ought to be filled out", bearing in mind that the person filling it out is somebody who has to take responsibility for it, even if a consultant is authorising them to do it, but do you not want to say, "How on earth can that work?"

A. Yes. I think I would have put in more information and, the gastroenteritis, I would have put it under other significant conditions and I would have put in something about rehydration, "Cerebral oedema as a consequence of rehydration".

Q. Yes. Well, that could work, couldn't it? If the response to --

THE CHAIRMAN: It's because it's the opposite of what the form says.

A. Yes.

THE CHAIRMAN: Rehydration is the opposite of dehydration.

A. Yes.

THE CHAIRMAN: So if you completed it in the opposite way, it would make sense. As completed, it makes no sense.

A. Yes.

THE CHAIRMAN: Thank you.

MS ANYADIKE-DANES: Sorry, if I can just pick that up.

If you had put on a form that the rehydration, which was the response to the dehydration, had caused cerebral oedema, are you not putting on a form that a clinician's

intervention had led to the death if you put rehydration?

A. Yes, that would infer that --

Q. That's what that would mean?

A. Yes.

Q. As it stands there, all those are natural things: gastroenteritis, that's a natural illness; dehydration, that can be a natural result of gastroenteritis; leaving aside the gap, cerebral oedema, that can be a natural consequence of a medical condition. But if you insert between dehydration and cerebral oedema "rehydration", what you're saying is that there was clinical intervention that gave rise to death. And if you were writing that, you'd have to report that to the coroner, wouldn't you?

A. Yes. If that had come to my attention. I was not aware of a process of --

Q. In fact, you shouldn't be writing that at all. If you'd formed a view that what properly happened in terms of the chain of causality was an inappropriate response to dehydration, you shouldn't be writing a medical certificate at all, you should be contacting the coroner.

A. I'm not sure I would have been aware at that stage of my training that the coroner's office had been informed and

you had that opportunity to go back to the coroner's office.

Q. Well, do you not at least ask that? Because what you're just about to put on a medical certificate, without the benefit of any inquest, is that human intervention caused a child's death if you put rehydration. So do you not at least, if you're the person filling this in, have to go back to the person and say, "Hang on, can we do this without notifying the coroner?"

A. Yes. As a paediatrician we rarely write death certificates and I had no knowledge that this was happening. I was really not involved in Lucy's case at this stage.

Q. I'm not --

A. If I had been, I think I would have wanted to ask more questions.

Q. Yes, I'm not actually talking about it in those terms. You know, do you not, or at that time as a registrar, the circumstances in which you have to report a death to the coroner?

A. Yes.

Q. Yes. And that is a statutory obligation that you have as a medical practitioner. So you would have known that. So all I'm inviting you to consider is: if you look at this and make it intelligible by inserting

"rehydration", which means human hand, that brings it within the criteria for a notification to the coroner, and the only way through would be to discuss with your consultant if you're unsure and say," Should we not be reporting that to the coroner?"; is that not the case?

A. Yes, I understand that.

Q. Thank you.

THE CHAIRMAN: Can I just finish with this? You know that Mr and Mrs Crawford effectively withdrew from the inquiry --

A. Yes, I understand that.

THE CHAIRMAN: -- which is why we're looking at the aftermath of Lucy's death rather than scrutinising exactly what went on in the Erne.

A. Okay.

THE CHAIRMAN: The reason that we're looking at it is because Mr and Mrs Ferguson believe that had Lucy's death been correctly analysed and identified at the time, it might have prevented Raychel dying 14 months later in Altnagelvin. Did you learn anything from Lucy's death in 2000?

A. Yes, I think I learnt a lot from being involved with Lucy's case at various levels because I'd never come across a case like this before.

THE CHAIRMAN: When you say "a case like this", how do

I interpret "a case like this"?
A. Previously being well and having what we would normally consider a mild illness and ending up with catastrophic events and, as a registrar, I think it was my first time to be asked about organ donation, and that was my main role in actually speaking to her family.
THE CHAIRMAN: Do you also mean a catastrophic event of a girl who's suffering from some level of dehydration being rehydrated in a way which leads her to have cerebral oedema?
A. Yes, that's what I mean. A catastrophic event where she had a collapse.
THE CHAIRMAN: But from what you've said and from what Dr Chisakuta said this morning, it's already apparent to me, subject to whatever other witnesses say in the days ahead, that this problem was identified within the Royal even before Lucy was dead.
A. Yes, I think that's correct.
THE CHAIRMAN: And despite that, this death certificate was issued. There was no inquest and the awareness of hyponatraemia was not raised in April 2000. Arguably -- or we'll see later -- with the result that when Raychel went into Altnagelvin in June the following year, the level of awareness may have been the same as it would have been had Lucy not died at all.

A. Yes.
THE CHAIRMAN: And we can't all be certain about what would have happened, but if braver or more appropriate steps had been taken within the Royal, this would have been highlighted in 2000 and Raychel's death might not have occurred in 2001. Does that appear to be logical to you?
A. Yes. You can certainly see the sequence. As far as I was aware, as a junior at that time, the coroner didn't want to pursue further and I felt that if a coroner had said, "No, we're not taking it as a case", I wasn't aware that you could go back to the coroner.
THE CHAIRMAN: Are there any questions from the floor?

Questions from MR QUINN

MR QUINN: I've got some questions. I can put them through my friend.

Mr Chairman, there are two references at page 102 and page 147 of the [draft] transcript where this witness has said that she was unresponsive afterwards and her pupils were fixed and dilated. The Ferguson family would like to know, as this has been a feature of other cases, what is this doctor's opinion of seeing that evidence? What they want to know is: was she being transferred as someone who was already deceased?
THE CHAIRMAN: If one has a child, Lucy in this case, or

Raychel a year later, whose pupils are fixed and dilated, to all intents and purposes is that child dead?
A. I suppose there could be anaesthetic drugs and things like that on board. Once intensive care management takes place, then they would want to try to transfer the child to an intensive care facility, then to properly establish brainstem death.
THE CHAIRMAN: Okay. Let me ask you it in another way, which might be the way that Mr and Mrs Ferguson are thinking about it. How often in your career have you seen a child with fixed and dilated pupils making a recovery?
MR QUINN: Could we also add that there were no anaesthetic drugs? I understand totally what the doctor may be saying here that some children may be under the influence of anaesthesia, therefore they have to be transferred to paediatric intensive care. That's another issue. When these children don't have, so far as we know, any great level of anaesthetic drugs, what would her opinion be?
A. I can't say how many children, but I have certainly seen a number of children, either babies who have suffered from cot death and have been brought to the hospital and have died and children with very bad road traffic accidents, things like that. We would be asked to come

to Accident & Emergency to assist, and I have seen children with fixed and dilated pupils coming in and attempts at resuscitation failing and their pupils being fixed and dilated and then we stop resuscitation.
MS ANYADIKE-DANES: I think what the point is that when Lucy's pupils are first noted as being fixed and dilated, which may not have been the first time that they were, but when they're first recorded is 3.30 on the Thursday morning, 13 April. By the time she gets to PICU, it's about 8 o'clock. So they have been fixed and dilated for that period of time without apparent change, and I think what the Ferguson family are wishing to know is: in your experience, the prospect of that amount of downtime, if I can put it that way -- a child being revived?
A. I don't know of any. I don't think I have treated any children or had any children under my care that have reversed from that situation of being fixed and dilated and revived.
Q. If a child is being transferred in that condition, in Lucy's case when she left the Erne, that was at 6 o'clock, so she had been with fixed and dilated pupils for at least about two-and-a-half hours, depending on whether they were fixed and dilated when first noted, so about that period of time. And I think the issue

is: what is she being transferred to the Children's Hospital for? Is it to treat her in the hope that there might be some improvement or is it to certify that she is in fact brainstem dead and then with the benefit of the CT scans and much better equipment that you have in PICU, try and find out why it happened?

A. I think it's the latter.

Q. To certify she's dead and find out why?

A. Yes.

MS ANYADIKE-DANES: Thank you.

THE CHAIRMAN: Unfortunately, that didn't work in Lucy's case; isn't that right? If the reason for transferring Lucy was to establish why she died, it failed. Sorry, it officially failed; isn't that right?

A. Yes.

MS ANYADIKE-DANES: I beg your pardon, just one final question because you mentioned that you are from an outlying hospital now, as a consultant, which does transfer children, if you're in that situation where an event like that -- and I don't mean literally like that, but you have a child who to all intents and purposes you think is irretrievable, but you want to get that child to PICU so that they can carry out the brainstem tests and they can carry out those investigations and try and help the family with some answers as to why that

happened.

In your experience is that something that you counsel the family with before the child sets out so they know the purpose of the journey, if I can put it that way? Or do you wait until the child gets to the other end and have the consultants at the other end tell the parents the bad news?

A. I think we would want to be as honest and truthful with the family with what information is available to us at the time. We would want to tell them. If we felt that the news was very bad that we would tell them: we are very sorry the news is very bad, intensive care have a bed and this is the reason that you're going.

MS ANYADIKE-DANES: Thank you. Thank you very much indeed.

THE CHAIRMAN: Any more questions? Mr McAlinden?

Doctor, thank you very much. That brings to end to your evidence unless there's anything you want to add before you leave.

A. No, thank you.

(The witness withdrew)

THE CHAIRMAN: Ladies and gentlemen, as we had hoped to do, we've heard from Dr Chisakuta and Dr Stewart, and tomorrow -- is it Dr McKaigue first?

MS ANYADIKE-DANES: Yes.

THE CHAIRMAN: And Dr Gannon. Thank you very much. 10.00

tomorrow morning.

(4.47 pm)

(The hearing adjourned until 10.00 am the following day)

I N D E X