Monday, 10 December 2012

(10.00 am)

(Delay in proceedings)

(10.08 am)

MISS ELIZABETH DUFFIN (called)

Questions from MR STEWART

MR STEWART: Good morning. Thank you for coming back. Since last you were here, you provided us with a further witness statement WS265/1. Are you content that the inquiry should adopt that as your formal evidence today?

A. Yes.

Q. Thank you. Just to remind us, can we return to your CV, which is at page 311-026-001? I think you told us last time that you retired in March 1997. In the middle of your career, from 1984 to 1993, you were director of nursing at the Royal Group of Hospitals and extending on after the formation of the Trust in 1993 through to 1997 as director of nursing and patient services. So your span at the top of nursing was long.

Further down the page in the general information section, the penultimate entry:

"King's Fund Organisational Audit. Surveyor, UK hospitals."

Were you, in 1996, a King's Fund surveyor?

A. Yes.

Q. And you remained so for many years thereafter?

A. Yes.

Q. So you knew, as it were, what to look for in a hospital in governance terms in nursing terms?

A. Yes.

Q. We also have your job description, setting out your duties and principal responsibilities and tasks. That is at 305-158-001. At the top of your job description, it says you report to and are accountable to the chief executive.

A. That's correct.

Q. So you had the ear of the chief executive?

A. Yes.

Q. And going on down through your principal responsibilities at number 3, you were charged with:

"Advising the chief executive and the clinical directorates on patient-oriented quality assurance initiatives."

At 5 you were charged with:

"Coordinating the development of patient-orientated quality assurance strategies in both clinical and non-clinical directorates."

Did that take up a large part of your time?

A. Yes. I couldn't give you an exact division of it because there was a lot going on. We were planning the

new hospital, I was in that working group, and there was just ... It was just very busy so it's hard to say. I did have the groups and did have assistance with doing it and tried to involve all the directorates.

Q. You were also tasked, if we go over the page to 002, at number 4, with:

"Providing professional leadership to the nursing staff employed in the Trust."

And at number 7:

"To ensure the maintenance of professional standards and requirements as laid down in the UKCC codes for nurses."

A. Yes.

Q. Did that take up much of your time?

A. Yes, it did.

Q. You described to us last time how you kept in contact with the nurses at ward level.

A. Yes.

Q. And you met monthly with the nurse managers?

A. Yes.

Q. Remind us what sort of things you discussed about the ward-level nursing practices at those meetings.

A. It would really have been if there were concerns or if there was something that had arisen in one directorate in relation to nursing practice, we would have shared

that with the other nurse managers. We would have decided did we need a policy, did we need a procedure or did procedures need to be updated. It was issues like that. Also ensuring that the UKCC codes were made aware to all staff -- that all staff were aware and any action that was required from these would have been discussed and dealt with.

Q. Did you meet with ward sisters?

A. Not that frequently. I would have met with them, I did try to get around each directorate on a regular basis and usually I would have met with the ward sisters then or would have spoken to them at ward level, yes.

Q. Did you have a sense at that time that you knew what was going on with the nurses, the nursing practices in the Children's Hospital?

A. Yes, because I had very good -- I would have to say the nurse managers in each directorate were very good, very experienced and communicated well.

Q. Did you have to appraise the performance of the nurse managers in their duties?

A. I did until the clinical directorate system was brought in in 1993. They would have been appraised then by the clinical director that they reported to.

Q. And thereafter, after the Trust was formed, who appraised, did you say, the nurse managers?

A. The clinical director.
Q. If I could draw your attention now to paragraph (g) at the foot of this page where you were charged with:
"Reviewing individually and, at least annually, the performance of the immediate subordinate staff."
Did that not include nurse managers?
A. No, not from 1990. It would have been the nurse manager in outpatients and there were some other staff -- there were two staff who worked with me in the office -- I would have appraised them. But when the directorate system was formed in 1990, the management responsibility of the nursing staff then went to the clinical director. Up until 1990, I would have appraised all the nurse managers who reported to me.
Q. Was there any difficulty experienced by you in providing leadership to the nurses and maintaining their professional standards if you weren't part of the appraisal?
A. No, because certainly if there was any problems, the clinical director would have discussed it with me, but it didn't happen with my regular meetings with them and they knew they could -- I had an open-door policy that they could come to me and quite often they came to discuss issues and seek advice.
Q. You felt comfortable that it was being properly --

A. Yes.
THE CHAIRMAN: Miss Duffin, roughly, proportionately how many nurses were there in the Children's Hospital compared to the rest of the Royal? Would it have been 10 per cent, 15, 20?
A. Probably about 10 per cent.
THE CHAIRMAN: Thank you.
MR STEWART: You told us in your last visit to the inquiry that after Adam's death there was no audit of the nursing records and there was no audit of the nursing practices. It seems that after the death of Claire Roberts, there was no audit of the nursing records and no audit of the nursing practices; is that correct?
A. No, we ... You must be misunderstanding. We were doing nursing audit from, probably, the late 1980s and certainly one of the areas that we did audit and did have a policy for was audit of the records.
Q. Yes, I meant specifically in relation to these two deaths.
A. Oh no, that was correct.
Q. So in neither case was there audit of practice or record?
A. Not to my knowledge in those two cases.
Q. In hindsight, was that a satisfactory state of affairs?

A. We did have -- and the nurses and sisters knew that if there was a query about the management of a case or any incident, then an investigation should be carried out and that would include the records and nursing practice.
Q. How was a nurse to know if there was a query about the management of a case unless there was perhaps a review or an audit of the case?
A. If something adverse happens, then it should be investigated and looked at what happened, why it happened, was there something that should have been done differently, did it have implications for other directorates in the Trust. For instance, if there was a drug incident, that was thoroughly investigated, really, to see was there something wrong with our policy that had gone wrong or was it human error.
Q. At that time, would you have considered death as an adverse outcome to have been a sufficient trigger to look at the case and whether or not anyone was indicating a care-management problem?
A. I think as I said before, my clinical practice was in obstetrics, midwifery, and certainly any death or stillbirth, we did investigate them all. But that was part of audit. That was ongoing. So certainly -- and I think in the early 1990s, we were trying to implement medical audit and subsequently clinical audit so that

everything -- these matters would be picked up.
Q. Does it surprise you that the nurse managers did not audit the records in Claire's case after her death to see if a nursing lesson might not emerge?
A. No, because there was a policy in nursing audit where they submitted a quarterly report to me from each directorate on the results of their audit. Some nurse managers did it on a monthly basis, some sisters preferred to pull so many charts on a weekly basis, some audited charts when the patient was discharged. But certainly, every record wasn't audited, it was a selection of them, and that's what was required by the King's Fund audit.
Q. I understand. So it doesn't surprise you that this wasn't done --
A. No, not --
Q. -- in this case?
A. No. Um ... If the nurses had felt that the death was unexpected, then yes, I would have expected it to be.
Q. Sister Pollock, in her witness statement to the inquiry, indicated that she felt Claire's death was unexpected.
A. Sorry, can you repeat that, please?
Q. Sister Angela Pollock, the ward sister for Allen Ward, which was the ward that Claire was admitted into, has indicated to the inquiry at WS225/2, page 4, at question

7 towards the top of the page:

"Please state whether you regarded the death of Claire Roberts as expected or unexpected."

And Angela Pollock has responded "unexpected". Does it surprise you that an audit of the nursing records was not undertaken after her death?

A. When it was unexpected, the policy probably was that they would -- whenever they audited the notes that certain notes ... Her notes maybe were not one that was picked. I cannot remember what their policy in Children's was, whether they just did them every three months or whether they did them on a monthly basis.

Q. But you were responsible because the nursing audit committee meetings were sent to you, were they not?

A. Yes.

Q. So you can in fact see exactly what was happening, what sorts of cases were being audited, both in terms of records and nursing practices?

A. I did not get the detailed report, I got the report on the audit, the compliance. There were criteria laid down that they were auditing against, and it was against that that I would have got the results. And frankly I cannot recall what all the criteria were. I know there were things like clarity, signatures, timing of entries.

Q. As a general proposition, would you think that there isn't a mortality case that doesn't provide lessons?

A. I really can't answer that.

THE CHAIRMAN: It doesn't matter, Miss Duffin, sure it doesn't, whether there's a particular concern about nursing care. If the death is unexpected then, unless you look at it, you don't know if -- it might turn out in fact there's nothing wrong with any of the medical or nursing care. Unfortunately, children die in hospital.

Am I right in believing or understanding that you don't need to be prompted by a particular concern about nursing care in order to audit what has happened from the nursing perspective?

A. No, no, it was ... Nursing audit was a regular thing, yes, and we should always be looking -- you know, nurses should be looking at the care they've delivered of every patient in the ideal world.

THE CHAIRMAN: In 1996, what would have prompted an audit from the nursing side of the treatment a child received?

A. Probably if the child did not respond or there was some reason as to something that differed from it.

I can't -- I'm finding it difficult to explain. I know that certainly in 1994/1995, we started looking at clinical care -- at care pathways --

THE CHAIRMAN: Yes.

A. -- so that we would have standards to measure against, criteria, that if something deviated from what we normally expected that condition to follow, then that would have been investigated. And we were starting work on that. Work was developing on audit, nursing audit, medical audit very much during the early 1990s and subsequently leading on to clinical audit and governance.

THE CHAIRMAN: You see, one of the concerns that has been expressed on behalf of the Roberts family is that nothing seems to have been learnt or appreciated from Claire's death and their particular concern then is: how do we know this couldn't happen again? I know that governance and audit was at a different stage of development in the mid-1990s, but Adam's death, as a result of what happened during his transplant operation, was unexpected and there was no nursing side audit at that time. In fact, you didn't know about Adam's death.

A. No, I didn't know about this one either.

THE CHAIRMAN: Then the following year, Claire dies, she arrives in hospital on a Monday evening, she doesn't respond to treatment and she dies, in effect, on Wednesday morning, although the actual time of death is later. She doesn't respond to treatment, her condition

deteriorates, and her death is quite unexpected in the sense that Dr Webb, the paediatric neurologist who was assisting in her care, went home on Tuesday evening, expecting that she would recover and was then called back in when she'd gone into arrest. Even allowing for audit and governance to be in a fairly primitive stage, perhaps, that suggests that something has gone wrong or a number of things might have gone wrong.

A. Yes.

THE CHAIRMAN: But neither on the medical side nor on the nursing side does anybody really seem to have done anything in 1996 about it. From the nursing perspective, are you disappointed by that?

A. Yes.

THE CHAIRMAN: How should an investigation or a review or a look back over the notes -- or whatever title you put on it -- how should that have started in November 1996?

A. They should have started with discussion at the ward level between the senior staff, the nursing and medical staff.

THE CHAIRMAN: Right.

A. But it's very easy with hindsight to ...

THE CHAIRMAN: I know, but the whole thing about governance or audit, whatever term you put on it, is that it's trying to avoid hindsight. It's looking now at: did we

do something wrong yesterday or might we have done something more yesterday; isn't that right?

A. Yes.

THE CHAIRMAN: And when you strip away the titles and all the papers, that's what you want to do anyway in a hospital, isn't it?

A. Yes, mm-hm.

THE CHAIRMAN: So there should have been, if I understand you rightly, some sort of discussion at ward level.

A. Yes.

THE CHAIRMAN: And at the very least, there should have been the discussion and what that led on to, it might be a bit difficult to guess at now, but it should have led on to some sort of concern being expressed.

A. That would be normally the practice that the doctors and sister would very much, you know, discuss cases and ward rounds and things afterwards, you know.

THE CHAIRMAN: Let me understand you rightly: this doesn't depend on a child dying, sure it doesn't, you don't only react if a child dies. If something else goes wrong in a child's treatment, you react to that as well, don't you?

A. That's right, yes.

THE CHAIRMAN: Thank you.

MR STEWART: Just a couple of questions arising out of that.

In the discussion at ward level, who decides at ward level if an audit of nursing or review of nursing records should be undertaken?

A. At ward level, it would be the ward sister.

Q. Ward Sister Pollock gave us a copy of her job description from that time. It's at WS225/2, page 12. She was charged with many obligations and duties, but not a responsibility for audit. Can I suggest, a system that imposes a duty to decide for an audit to be undertaken should be set forth in a job description, surely?

A. Job descriptions wouldn't have gone right down to that detail then. But I think you could put it under 1.4:

"Co-operates with medical and paramedical staff to ensure that a high standard of patient care is given."

Q. I think if you allow some time, we'll be able to find a job description for Nurse Jackson, who was a nurse manager who, if my recollection is correct, did specifically include an obligation to conduct audit.

A. Yes.

Q. Can I bring you to one of your own quotes, it's from WS245/1, page 10? At number 22, the third paragraph down:

"As part of the nursing audit programme, all nurse managers were expected to ensure that nursing records

were audited on an ongoing basis."

So there you suggested that the obligation was on the nursing manager, but then you suggest the obligation is perhaps on the ward sister. And then you're not yourself responsible for appraising the performance of the nurse manager. So it seems that there's a potential for the matter to fall between a number of stools.

A. No, the nursing audit programme was driven centrally and all the nurse managers were on that group. Then they devolved it to the ward sisters, but the sisters did it, it was their responsibility on the ward for doing it, feeding the information back to the nurse managers and then the nurse managers would have compiled the returns from their directorate, which was forwarded to my office.

Q. And did you ever have cause to complain about the standard of the audits that you were receiving and the committee meeting minutes that you were receiving?

A. No. I think there were some on occasion, but then they were expected to have an action plan to deal with the area of non-compliance, to address it, and then you expected that that would have been an improved result the next time.

Q. I see. We've heard that, in 1996, there was no single nurse manager for the Children's Hospital, but the

responsibility was split between three individual sisters; do you remember that?

A. I do now. I couldn't have remembered the dates, but the DLS have been able to clarify the dates for me as to when people were doing --

Q. Why was that? Were there three people acting up into the role of nurse manager?

A. I can't honestly recollect the details, but it was the directorate manager -- I think it was an interim measure because things were ... I think the clinical director changed and that, and there was, you know, ongoing that they wanted to, I suppose, wait until they decided who was being the clinical director and what they wanted.

Q. Can you remember which of the nurse managers had responsibility for Allen Ward?

A. No, I can't.

Q. When the ward sister in Allen Ward was unable to undertake her duty on the ward, it is said that she would have arranged cover for herself and she would normally have obtained cover from an F-grade sister. But in 1996, there weren't, until the end of the year, many F-grade sisters about, so the responsibility devolved to a sister on an E-grade; do you remember that?

A. That would have been the normal practice throughout the

Trust, that there would have been a sister, the G grade, and then they were supported by an F grade and then E grades, and then the D grades, staff nurses.

Q. Was that ever a cause for concern or did it give rise to problems?

A. No.

Q. Was there a difficulty in finding numbers of adequately-graded sisters to fill those roles? Was there a staffing shortage?

A. No. Staffing ... If there were any problems with staffing shortage, it would have been brought to my attention and I have no memory of any.

Q. Were you in fact responsible for the staffing levels of nurses in the Children's Hospital?

A. No, that was all devolved. I wasn't responsible for it from 1990; it was devolved to the clinical directorate, the budget.

Q. The nursing budget was then --

A. The nursing budget. But I did have sight of the staffing requirements in the annual business plans.

Q. And of course, if problems had arisen, they would have been brought to you --

A. Yes.

Q. -- whether you had responsibility for the budget or not.

A. Yes.

Q. And were problems brought to you?

A. Not from Children's, no.

Q. The Children's Hospital produced a document in 1996 called "Getting it together: a strategy for Children's Services". I don't know whether you remember this, WS266/1, page 28. It's a rather grainy copy of the cover of this document. Does that ring bells? This is in relation to the Children's Hospital. Page 50 of that document, about ten lines down:

"Though the Royal Belfast Hospital for Sick Children has the advantage of having paediatric trained staff in all disciplines, workload pressures are evident, particularly among nursing staff, and in certain medical areas."

Does that ring any bells with you?

A. No.

Q. The next page, page 51, and the first major paragraph of that:

"It was acknowledged that nursing and medical staff are under considerable pressure of work, but there were cases where mothers felt that standards of care were inadequate or insensitive. The first phase of redevelopment of the Royal Belfast Hospital for Sick Children will alleviate some of these problems, but the Trust is concerned that the pressure on staff has

continued to intensify."

Does that not provoke some recollection of a problem?

A. No, no.

Q. When you had your responsibility for organising the application to the King's Fund for accreditation in the mid-1990s, would you have considered staffing levels as one of the issues you'd have looked at?

A. I can't remember all the standards from it, but certainly there would have been -- I know there were standards around the employment of staff, the recruitment and employment that staff were of appropriate grades and experience. But it certainly didn't go into staffing details. The organisational audit was really looking at the overview, at the systems and procedures that were in place throughout the Trust; it didn't go down into the depths in each ward or department.

Q. But doesn't a system or a procedure depend completely upon there being an adequate level of staff to actually make it function?

A. Yes, and we had our policies for calculating nursing staff for the different departments. That's what the nursing budget was based on.

Q. Do you remember the details of your application and the

process you went through to obtain accreditation?

A. Yes.

Q. The responsibility was placed squarely on your shoulders to achieve this accreditation for the hospital.

A. Yes.

Q. It must be a major part of your career at that stage.

A. Yes.

Q. Do you remember the first time the survey took place in 1995, at which provisional accreditation was granted?

A. Yes.

Q. You do?

A. Vaguely, yes.

Q. It took place in November 1995.

A. Right, yes.

Q. Can you remember whether arrangements were put in place at that time? Do you remember when in November?

A. I don't. I couldn't have told you which year the first accreditation process took place in. I couldn't. I have been told it's 1995, so I do know that we had a 18-month run-in, time to prepare for it.

Q. Yes. Well, do you remember the time when the hospital was gearing up for its second survey with the King's Fund in 1996?

A. Yes.

Q. Because we've received an interesting piece of

information attached to a diary that there was a mock survey arranged for 22 October 1996.

A. Right.

Q. What would the mock survey have entailed?

A. The purpose of the mock survey was for the Trust itself to assess how we were complying with the standards before we forwarded the forms back to the King's Fund prior to the official survey taking place. I think we did the mock survey about six months before the actual survey was due to happen and we had a lot of documentation to complete, the directorates had to do and departments, and that all had to be forwarded to the King's Fund, as I say, prior.

We did it six months before, which was recommended by the King's Fund, because it then gave us a benchmark of where we were and what further action needed to be taken to -- if we wanted to achieve accreditation when the surveyors inspected.

Q. Was the mock run like a sort of dress rehearsal, a dry run?

A. Yes.

Q. Were various individuals, the personnel in the hospital, brought together to do what they would have to do on the day of the real survey?

A. Yes.

Q. What would that involve for the clinicians, the sisters, the nurses and the doctors? What would have their role been in the mock survey?

A. It would have involved the senior people. It wouldn't have involved every nurse, it would have involved the nurse managers and whoever they had designated to spearhead it in their directorate.

Q. A ward sister?

A. It could have involved some of the consultants who were involved in it as well at the directorate, and other disciplines. It went through all the disciplines in the hospital.

Q. So on the day of the mock survey, those individuals would have been engaged with the mock survey and not engaged with their normal day-to-day tasks with patient care?

A. Yes.

Q. What sort of cover did you arrange for people that were doing the dress rehearsal to cover for their patients?

A. I didn't arrange any cover; that was arranged within the directorates. It was up to the individual directorates to arrange cover. We sent them the programme of when we would be visiting that directorate and they decided who would participate in the interview. Then it's up to the individual to arrange cover.

Q. So it was left up to the individual ward sisters, individual doctors or left up to who?

A. It would have been the clinical director and the nurse managers in each directorate.

Q. Can you remember, was a specific instruction given by you on behalf of the accreditation team that they should arrange cover and should make sure --

A. No.

Q. It was simply left to their common sense, was it?

A. It was common sense, yes.

Q. I see. Was there any focus as part of the King's Fund accreditation application on adverse clinical incidents?

A. Sorry, can you repeat?

Q. In relation to the King's Fund application process that you were running, did you have to satisfy any particular criteria in relation to the adverse clinical incident procedures you had in place?

A. I can't honestly remember, but it doesn't ring a bell and I think, in the mid-1990s -- I think it was more ... There was health and safety and the other thing ... We didn't have critical incident reporting forms or anything, it was a statement book, is what my memory is.

Q. I'll come to that in a second, if I may. Can I draw your attention to page WS061/2, page 232? This is the health and safety policy, November 1993. This was the

policy, so far as we can ascertain that, was extant in 1996. I'll take you to page 061/2, page 241. This is within the overall health and safety structure. There was a medical risk management group set up and it had responsibilities for, amongst other things -- it had specific responsibilities, further on down the page at (iii):

"The medical risk group has specific responsibilities for untoward incident report (clinical)."

If we go down to the composition of this important committee, we see, third in line:

"Director of nursing services (represented)."

Do you recall this committee, this group?

A. Yes, I do now, yes.

THE CHAIRMAN: You were on it itself? When it says "represented" there, does that mean that either you were on it or you nominated somebody to be on it for you?

A. It meant that there was someone nominated.

THE CHAIRMAN: And who was that, do you know?

A. I can't remember. I cannot honestly remember.

THE CHAIRMAN: Okay.

MR STEWART: That person would have been reporting back to you?

A. They would have reported back, yes, to the nurse

managers group.
Q. Reported to you?
A. What?
Q. Would that individual you had nominated or placed on the group to represent you have reported back to you?
A. They would have reported back to me, but also to the -- at my meeting on a monthly basis.
Q. So you'd have been kept informed then --
A. Yes.
Q. -- of the procedures for "untoward incident reporting (clinical)"?
A. Yes.
Q. What were they in 1996? What was the procedure for reporting an untoward clinical incident?
A. It would have been, as I say, on the statement book, and it would have been probably to Dr Murnaghan, to his office, and, if it was a nursing incident, it would have been reported directly to me.
Q. Can I ask you about the statement book, first of all? Mr McKee, in some of his submissions to the inquiry, has made reference to the statement book procedure. Can you remember how it worked?
A. I remember the books and they had to be filled in. I can't remember whether it was duplicate or triplicate, but all the details would have been filled in on that

and then forwarded to -- I think it was probably the medical risk management group now.
Q. And how would an untoward clinical incident have been defined in 1996?
A. I can't remember. I can't recall the exact details. It would have been -- um, anything that wasn't expected.
Q. Yes. Would you have relied upon nurses to make reports of untoward clinical incidents?
A. Yes.
Q. And you'd have hoped that sisters and nursing managers and doctors and everyone would have played their part?
A. Yes.
Q. Were people given guidelines as to what they should report and what they need not report, the dos and don'ts?
A. I can't recall, but certainly the sisters would have been very good at filling in any incidents and making sure that they were filled in properly.
Q. Okay. Ward Sister Pollock was asked about this very issue on 30 October 2012. Can we look, please, at page 206 of her evidence, taken on 30 October 2012 at line 11? She's asked about what she should do in terms of follow-up or investigation or searching around after an incident. And she answers at line 11:
"I can't recall that we had any particular process

in place at that time for doing exactly that. The likelihood is I would have been -- there would have been a discussion."
So she doesn't seem clear about any process there for initiating a reaction to an adverse clinical incident and she was a ward sister.
A. Yes.
Q. Do you remember before the Trust came into being that there was a process whereby untoward incidents might be reported to the Health Board?
A. I can't honestly remember. I know certainly I would ... I think I was responsible to the chief of -- CANO in the Eastern Board until -- I think it was 1998. I would have reported things to her if there was anything. But that was 1984 to whatever, when we had districts and then when the districts changed. There have been that many changes.
THE CHAIRMAN: Is that before the Trust was founded?
A. Yes.
THE CHAIRMAN: And the Trust was founded, I think, in 1993. That's the start date, isn't it?
A. Yes.
MR STEWART: Perhaps I can just pursue this a little bit more with you at page WS061/2, page 321, to see if this document provokes any recollection with you. This

is January 1991, it's called "Circular ET5/90 (amended)."
It is for the reporting of untoward incidents. If you go down to section 1, this is for reporting to the board of an untoward incident. Section 1:
"Summary of current notification procedures. The board currently has notification procedures in place in regard to: (i) notifying the coroner about any death which may be the subject of an inquest."
As a matter of interest, do you remember that? Do you remember any notification procedures about notification a coroner at that time?
A. No, but certainly we would have implemented that circular.
Q. Over the page at page 322, section 2, which is strangely headed:
"Proposal regarding notification of untoward incidents."
But it seems that this was nonetheless an active protocol:
"The board wishes to ensure that it receives prompt notification of any untoward incident. Unit general managers ..."
That's, I suppose, the equivalent of a chief executive; would than right?

A. Yes. Sorry, if I could clarify: when I was appointed in 1984, we were a district, and then at some -- I think it was 1988, unit general managers were ... Maybe it was slightly before that. And at that point, yes, then I would have reported to the general manager, but I would have had to report to the chief admin nursing officer, and I think it was probably around 1990 that that changed.

THE CHAIRMAN: The chief administrative nursing officer, that's CANO, C-A-N-O?

A. CANO, that was in the Eastern Board. And I can't remember the exact date it changed when I no longer reported to her, but I then reported to the unit general manager.

THE CHAIRMAN: The bit I'm missing is: what exactly is it that you're reporting? What is the untoward incident that you're reporting?

A. That could be anything abnormal, you know. It could be ...

MR STEWART: Usefully, there are criteria set out further down the page. At sub-paragraph 1 what was required was:

"An effective reporting system be maintained to ensure that all untoward incidents are notified to the UGM and its staff are familiar with the procedure."

Then under "criteria":

"For assessing those cases which should be reported, include any incident which might suggest there has been a failure in professional standards of care and treatment."

Just the top paragraph (a).

A. Yes.

Q. So it looks like, in the early 1990s, the hospital was expected to have in place a system whereby an untoward clinical incident be reported.

A. Yes.

Q. Do you remember that system?

A. Yes. But I can't remember the details and I think it was something that became more formalised with clinical audit, with audit which came subsequent.

Q. If there was a system here with which all basic and supervisory grades were supposed to be familiar with, presumably information was circulated telling people the type of incidents they should report?

A. Yes.

Q. And the criteria would appear to be an incident which might suggest there has been a failure in professional standards of care and treatment.

A. Yes.

Q. Might that suggest, and it's tentative, but if there's

a possibility of perhaps negligence, it should be reported?

A. Yes.

Q. How was that actually put into practice?

A. It would have been through, I suppose, initially through the statement books and also informing the medical director's office.

THE CHAIRMAN: Can you give us an example? I don't want names of patients, right? But can you give us one or two examples of untoward incidents which were reported that you were involved in reporting or being notified about, which had any aspect of nursing care to them?

A. Um ... No, I think one was ... One that I would have been involved with was where an allegation -- a nurse had mistreated a patient.

THE CHAIRMAN: Right.

A. I can remember there was an incident in a directorate where a wrong drug was given to a patient and that was reported.

THE CHAIRMAN: Is that separate from the mistreating?

A. Oh separate, yes.

THE CHAIRMAN: So the mistreating is perhaps being verbally or physically abusive?

A. Physically abusive.

THE CHAIRMAN: And the second element is a wrong drug being

given to a patient.

A. Mm. That was by a doctor.

MR STEWART: So broadly speaking, was it left up to the doctors and nurses whether they should report their own errors or report the errors of their colleagues?

A. It would have been -- it would have originated at ward level, at the ward sister level, and that ... With the doctors on the ward.

Q. It was left to them to report themselves if necessary?

A. To fill out a report and to inform up the line, whoever their manager was.

Q. What happened to that circular after the Trust came into being in 1993? Did it continue?

A. It would have, and then I think too, with organisational audit, we would have been looking at developing other -- revising. We had to revise some of our documents. I remember that some areas that we didn't have a policy or a procedure for, that we had to make them, disseminate them. One of the things of the King's Fund, it was all very well having the paperwork and the policies and procedures, but there was a big emphasis on the dissemination of that information to the staff. And as a surveyor, when you were visiting the wards, one of the things was, you spoke to staff, you could pick the staff nurse or a sister or even a domestic, and question

them to see if they had the knowledge of what was deemed to be important procedures or policies.

THE CHAIRMAN: In other words, there's no point in having a policy unless the staff know about it.

A. Unless it's implemented and the staff know about it.

THE CHAIRMAN: So you would do a random check to see, for instance, if a nurse knew about this policy?

A. Yes.

THE CHAIRMAN: Okay.

MR STEWART: So would it be fair to say that the procedures developed under this circular would have been continuing on into the 1990s and through?

A. Yes.

THE CHAIRMAN: But with greater emphasis on the nurses being aware of the policies?

A. Sorry?

THE CHAIRMAN: With a greater emphasis on the nurses being aware of the policies.

A. That's right.

THE CHAIRMAN: And on presumably, also, doctors being aware of the policies.

A. Yes.

THE CHAIRMAN: And the reason for that is that's a better way of ensuring that the policy is followed?

A. Yes.

THE CHAIRMAN: So you would expect to see incidents being reported because there's a greater awareness of the procedure for reporting them?

A. That's correct.

THE CHAIRMAN: So if more incidents are reported, it's not because things are getting worse in the hospital --

A. No.

THE CHAIRMAN: -- it's because there's --

A. More awareness.

THE CHAIRMAN: -- and they're expected to follow it?

A. Yes.

THE CHAIRMAN: And that's all part of being approved by the King's Fund?

A. Yes. Because one of the difficulties is with the reduced work hours -- it is very difficult if someone is on holiday and a policy comes out, how do you ensure that they have seen it and are aware of it?

THE CHAIRMAN: Yes.

MR STEWART: So to go back to the work of the medical risk management group as part of the overall health and safety strategy, did that group, at which you had representation, take any steps to produce a policy or guidelines to assist people in the criteria for assessing those cases which should be reported?

A. I don't remember. I would like to think they did, but

I cannot remember the detail.

Q. The inquiry has seen no trace of any such guideline or policy.

A. Right.

MR STEWART: I have no further questions.

THE CHAIRMAN: Are there any more questions for Miss Duffin? Thank you very much for your time. You are free to leave again. Thank you very much indeed.

(The witness withdrew)

THE CHAIRMAN: Ladies and gentlemen, we'll take a break now for about 10 or 15 minutes. After that, Professor Young will come to give evidence. In large measure, he'll do so in relation to his involvement from late 2004 with the review or a case note review of aspects of the care and treatment of Claire. In that exercise, he participated along with Nichola Rooney and others.

I want to say on the record that I have known Dr Rooney for more than 35 years. We grew up in the same part of Belfast, her husband is a colleague at the bar, as is her brother. In recent years, my wife and I have been guests in their home and they've been guests in ours. It's part of my responsibility that I consider Dr Rooney's evidence in the same way as everyone else's, but I particularly wanted Professor Young, if he wasn't aware of that, to be aware of it before he starts to

give evidence.

(11.03 am)

(A short break)

(11.24 am)

PROFESSOR IAN YOUNG (called)

Questions from MR STEWART

MR STEWART: Good morning.

Professor, you provided us with a number of witness statements. In fact, five in all, WS178/1 through to 5. Are you content that the inquiry should adopt those as your formal evidence?

A. I am.

Q. Thank you.

THE CHAIRMAN: If you pause there, I think, professor, it's right to say that you were asked by the inquiry for one witness statement, which is the first one, and you gave that on 14 September.

A. Yes.

THE CHAIRMAN: Subsequently, you volunteered statements on 30 October, 2 November and 26 November. We have called those statements 2, 3 and 5. Your statement 4 is in fact not a statement, but something that you refer to as some additional literature and we are now referring to it as 4 for the purposes of paginating the documentation.

To some extent, you clearly are challenging some of the evidence that was, in particular, given by Dr MacFaul.

A. Yes. I think my position is that I am very closely aligned with the views expressed by Dr Scott-Jupp in general and that I believe that Dr MacFaul is incorrect in a number of respects. In addition, since --

THE CHAIRMAN: I think incorrect in some respects and maybe a bit unduly harsh or critical in other respects.

A. Yes, I think that's absolutely what I feel. My responses have been mainly to Dr MacFaul's comments and also, as some issues have cropped up in the inquiry -- I have had information or knowledge, for instance about the Glasgow Coma Scale, which I felt was important to draw to the attention of the inquiry, in order to ensure that full and proper consideration can be given to everything.

THE CHAIRMAN: Okay. This is a statutory inquiry sitting in public and I'm quite happy to receive information, which will improve the evidence before the inquiry, and to inform me as I come to write the report. It also has obviously informed the questioning of witnesses like Dr Scott-Jupp and Dr MacFaul, as you'll have seen from the transcripts, and you've also corrected me on at least one issue so far and maybe more today. That's

pretty much an open book.

Mr McAlinden, on Saturday night, I think you e-mailed to the inquiry senior counsel 65 lines of questioning you were suggesting might be followed with the professor.

MR McALINDEN: There are a significant number of clinical issues and it would be my submission to the inquiry that Professor Young can give valuable evidence to this investigation in relation to.

Just to highlight one: there is an issue over whether there was a fluid overload or an administration of more fluid than should have been administered to Claire after 11.30 pm and some of the experts have attested to that.

You'll see from the exchange with Ms Anyadike-Danes that Professor Young has very firm views in relation to the calculations that took place. If his evidence is correct, then it would appear that there was indeed a reduction of fluid to very nearly the level that it was intended to reduce the fluid to, which would be, in my submission, a very important piece of evidence for this inquiry to hear. So that would be one issue in relation to the clinical --

THE CHAIRMAN: If we just pause there. I think you've asked the inquiry to ask Dr Scott-Jupp for his view on this;

isn't that right?

MR McALINDEN: Yes.

THE CHAIRMAN: And we're hoping he'll come back to us over the next day or so. This is what happened at about 11.30 when Dr Stewart saw Claire, then had a discussion by phone with Dr Bartholome.

MR McALINDEN: Yes.

THE CHAIRMAN: And there was a reduction, but there was also the administration of further drugs and the question is: what effect did that administration of drugs intravenously have on the overall fluid administration?

MR McALINDEN: Yes.

THE CHAIRMAN: Okay. That's one issue. Was there any other issue in particular? What I'm going to ask Mr Stewart to do is -- he had planned and lines have been circulated which are along the governance issues. These will, inevitably, move into some of the clinical areas that you have identified for the professor to highlight because they can't explain publicly what his input was to what I think he calls the case note review without going into some of this clinical evidence; isn't that right?

MR McALINDEN: Yes. Another major issue that should be addressed, Mr Chairman, is whether the management would have been different in 1996 from when the review took

place in 2004. It's clear that Dr MacFaul is of the opinion, if anyone presented with symptoms or signs of encephalopathy or encephalitis, that the standard practice at that time was to restrict and to consider the administration of more sodium-rich fluids. Professor Young has very definite views about that subject.

THE CHAIRMAN: This might make it a bit easier. I obviously know what Dr MacFaul has said about that. First of all, he has said that while many doctors would have followed his line, it would not have been universally followed. Secondly, I don't think it attracts majority support, even from the inquiry experts.

Professor, Dr MacFaul, in my eyes, is saying -- and this is subject to any other submissions -- that this is what many people would have done, it wasn't a universal approach, and Dr Scott-Jupp, at the very least, for one, disagrees with him.

A. I think that the majority of the expert witnesses who have looked at this case disagree with Dr MacFaul.

THE CHAIRMAN: I think that's probably right.

A. As I do. Furthermore, I have tried to demonstrate from contemporary literature and evidence that there were good reasons for that and for the change in wording in Forfar & Arneil between the two editions.

THE CHAIRMAN: I understand that. I think, since you have been following the inquiry, you'll have seen a number of interventions from me, which have indicated that my provisional view is that whatever was done overnight on Monday -- and that's really a combination of Dr O'Hare and Dr Volprecht -- if there's any criticism of that at all, it's going to be quite mild on the evidence that's received so far.

And can I say again -- this has to be subject to any submissions which come in -- that the notion that it was inappropriate to give Claire that solution on her admission seems to be a minority one, the minority being Dr MacFaul, and I'm not inclined, at this stage, to go along with that.

If that assists, Mr McAlinden.

MR McALINDEN: I think the other issue, which is a major issue -- I think it relates both to governance and to the clinical aspect of the case -- is the references to the stability of Claire's condition on the Tuesday. I think that really ties in with the inter-observer variation issue in the GCS scores.

THE CHAIRMAN: Yes. Well, you can take it that -- I've no difficulty. What I don't think is appropriate is for ... I'm not going to turn away evidence from somebody who's clearly qualified to give an expert view.

My concern about the statements which are coming in was that, in a way, they could be read as a running commentary, but Professor Young, on the inquiry evidence, which I really don't think is appropriate to have a running commentary because that has come through in some of the statements which have been made and I think some of the language is a bit regrettable. But what I'll do is I'll ask Mr Stewart to take the professor through the professor's CV, ask him to take the professor through his involvement from when it started in 2004, and we'll see then, after that exercise is complete, how many issues there are, which you suggest might need to be taken any further, remembering that I do have all this information before me.

MR McALINDEN: I'm obliged.

THE CHAIRMAN: Mr Stewart?

MR STEWART: Thank you, sir.

Professor, your CV at 311-008-001. I hope that's the new one that arrived this morning.

A. Yes.

Q. Yes, it is. Just one thing I draw attention to. You have, I'm glad to see, corrected an omission from the previous CV so that under "previous appointments" you have noted your position between October 1993 to January 1999:

"Senior lecturer in clinical biochemistry, Queen's University Belfast and consultant in clinical biochemistry, Royal Group of Hospitals."

So in fact, at the time of Claire's admission, and her death in hospital, you were in fact a consultant in clinical biochemistry at the Royal.

A. I am and was what's called a "joint appointment clinical academic". My primary employer is Queen's University, Belfast. My office is within the university building on the Royal Victoria Hospital site. My salary is received each month from the university and I use an university e-mail address and all my HR issues are dealt with by the university. The nature of my employment is that it's a joint appointment, so I also have a role with, initially, the royal Victoria Hospital and, currently, the Belfast Health and Social Care Trust.

Q. Thank you. Why was that appointment omitted from the previous CV submitted to the inquiry?

A. I was asked for a brief CV, it was omitted for no reason. I had a five-page CV to hand, which I submitted to the Trust and was told was appropriate, and came to yourselves. It has become clear to me during the course of the inquiry that considerable time has been spent looking at the CVs of various witnesses and I was keen that a fuller CV should be available to you.

Looking at it this morning, because I don't actually have a very up-to-date one, and I had to prepare this one as well. One appointment is missing from this one, which was declared on any original witness statement, as I'm sure you are aware, and that was my post as director of research and development within the Royal Victoria Hospital, which was from 2002 to 2005, and which was really an additional responsibility.

Q. Yes. I can see that you are anxious to lay this particular canard to rest, but in 2004, it is correct to say that one of your employers was the Royal Group of Hospitals.

A. I'm anxious that the inquiry have as full information as possible of all of my aspects of involvement in this case.

Q. And that you were employed on the Royal Group of Hospitals site?

A. Absolutely, I was based on the Royal Group of Hospitals site, that's correct.

Q. And you were asked to advise Dr McBride of the Trust?

A. Yes.

Q. And that you were authorised to speak on behalf of the Trust when you met with Mr and Mrs Roberts?

A. Yes. Dr McBride had indicated to me that when I met with the Roberts family, that I could convey to them

information on behalf of the Trust.
Q. Thank you. Your CV is most distinguished and I can see that amongst your other accomplishments is an interest in clinical ethics and you presently chair the clinical ethics committee of the Belfast Health and Social Care Trust.
A. That is correct. I have chaired the clinical ethics committee of the Trust, I think, for about three years, approximately.
Q. And you also clearly have an interest and expertise in hyponatraemia.
A. Yes. So I have very extensive experience with hyponatraemia throughout my professional career. I have seen many hundreds of patients with hyponatraemia and certainly, during the 1990s and the early years of the 2000s, I would have been the main expert on hyponatraemia within the Royal Group of Hospitals and would have received and carried out frequent consultations in relation to hyponatraemia.
THE CHAIRMAN: Can I ask you: in your experience, had you ever come across Professor Gross, who gave evidence in Adam's case?
A. No. I haven't come across him, no.
THE CHAIRMAN: Because he's also, in effect, presented by the inquiry as an expert in hyponatraemia and he said,

not only in the mid-1990s, but even today, it's significantly misunderstood and often not recognised.
A. Absolutely. It's a complex and difficult condition to manage and any impression that comes across to the contrary, I think, is misleading.
THE CHAIRMAN: I don't have that impression. Sorry, let me correct that. I think in some cases my impression is it's easier to identify than it is in other cases.
A. It's easily identified, but the response to it is complex and difficult and it's difficult to get the cause of the diagnosis correct. I teach extensively on fluid and electrolyte balance and, of all the electrolyte disturbances, hyponatraemia is the most complex and difficult one. That's what we taught in the early 1990s and still teach to the undergraduate medical students.
THE CHAIRMAN: And you'll have seen the inquiry opening, which was presented, the clinical opening, and a separate document prepared, in which even the Royal's doctors, the witnesses at the inquest and the inquiry experts, still have shades of disagreement about what the actual cause of death in Claire was.
A. Yes.
THE CHAIRMAN: Is that a reflection on the complexity of hyponatraemia?

A. I'm sure we'll come on to this. It's a reflection of the complexity of Claire's medical condition and also the difficulty with understanding the contribution of hyponatraemia, which certainly, in 2004, I felt strongly had made a contribution, but was not able to quantify the extent of that contribution.
My interest in disturbances in sodium extends beyond that in that I have acted as an expert witness in family court and criminal cases related to sodium metabolism. So this is an area on which I have a very large amount of clinical experience on which I've taught and lectured and where I have also served as an expert witness.
THE CHAIRMAN: Okay.
MR STEWART: Could I simply ask you, for the record, to explain to us what a clinical biochemist is and does?
A. Yes. Thank you, because I think this is quite important. One of the difficulties is that a clinical biochemist is also sometimes known as a chemical pathologist, and I'm aware, having looked at the records of the inquiry, that both of those terms have come up at different times, and it's perhaps not always been clear that they were referring to the same type of individual.
In addition, Dr MacFaul, in his initial statement, refers to me on a number of occasions as an adult physician and criticises my selection by Dr McBride on

that basis. And in fact, I'm very keen to get across that I'm not an adult physician; I'm a clinical biochemist. Our training covers both laboratory and the provision of results, and in addition the clinical management of biochemical and metabolic disorders. The training extends right across the entire life course from prenatal screening to neonatal, to children, and then through to adults and old age.
Most of us have sub-specialties. My own particular interests have been in lipid metabolism and nutrition, so I run an outpatient clinic where I see patients with disorders of lipids, adults and children, often together as families.
It's a relatively uncommon specialty within the UK. There aren't very many of us. I'm trying to understand Dr MacFaul's failure to appreciate my role. By looking at his hospital, which is Pinderfields -- which I think he describes as a medium-sized district general hospital -- they don't have a chemical pathologist or a consultant in clinical biochemistry, to my knowledge, on their staff. So I think he would probably have limited experience of working with a chemical pathologist or a clinical biochemist.
Q. So just to further establish your credentials, in 2004 what sort of clinical experience did you have of

hyponatraemia?
A. In 2004, I had seen many hundreds of cases of clinical hyponatraemia. I had been appointed as a consultant in -- I think it was 1993 or 1992, which is almost the same time as Dr Scott-Jupp, in fact, was appointed as a consultant. Dr MacFaul had been appointed at, I think, a much earlier stage, and in part I have a feeling that the disagreements between us arise from the fact that he had experience of -- much experience in the 1980s, when I think, from the evidence he's provided, the management of fluids in encephalopathy was significantly different. That was really while I was a student and I think I wouldn't have had particular knowledge of that experience.
So I would have -- whenever the laboratory identified a very low sodium level, then it would be referred to me very often, and I would contact the clinicians on the wards and go and speak to them and advise on the management of the patient. Out of hours, so evenings and weekends, then with two or three colleagues, we provided a 24-hour cover for all of the Belfast hospitals in relation to biochemical abnormalities and disturbances, which is still the case. So if somebody has a very low sodium and clinicians are concerned about them, then they would generally phone

the lab, who would refer them on to us to advise on management and treatment.
My own involvement was -- the vast majority was in the adult hospital, so in 2004 there were two chemical pathologists or clinical biochemist, medically qualified, based in the Royal: myself and Professor Elisabeth Trimble. Professor Trimble, who's now retired, ran a metabolic clinic in the Children's Hospital, so she would have been a familiar figure there. The vast majority of my practice was in the adult hospitals and I wouldn't have been in the Children's Hospital more than probably a couple of times per year.
THE CHAIRMAN: At the risk of opening a book, in very summary terms, is the treatment of low sodium levels potentially more or less complicated between children than adults or does it just depend on each child and each adult?
A. It depends very much on the individual clinical presentation. However, hyponatraemia in children is much more dangerous and the reasons for that will have been heard. So in adult practice, I have seen sodium levels go down to less than 100 and I have seen a lady walk into the hospital with a sodium level of 99 and just feel slightly dizzy and not have any other

complaints.
In children, the difficulty, of course, is because -- mainly, most people think the relative size of the brain and the skull, the limited space for the brain to expand. The symptoms of hyponatraemia can come on much more acutely and may tend to be more severe, but the principles of treatment and causation are the same.
THE CHAIRMAN: The gist of the evidence given to me a number of times is that while children can bounce back very quickly from illness, they can also go down very quickly.
A. Absolutely.
THE CHAIRMAN: So there's a real time issue that, once things start to go wrong with a child, there's a greater time pressure to identify it and put it right?
A. Absolutely, I completely agree with that. In adults, while the principles, management, investigation and treatment are exactly the same, often there's not the same degree of acuteness in terms of the danger to the patient, although hyponatraemia can be fatal in adults as well.
THE CHAIRMAN: I understand.
MR STEWART: And did you have a teaching role in respect of hyponatraemia as well?
A. I did. After my appointment as a senior lecturer and

consultant in October 1993, I was responsible for the chemical pathology or clinical biochemistry course, which formed part of the third year of the undergraduate medical curriculum, from memory. So I developed that course and delivered most of it. It's a long time ago now, but I think there were about probably 20, maybe 25, lectures in total, and there was an examination of the students at the end of the third year. Certainly, hyponatraemia would have formed one component of that course.
There was a major review of the undergraduate medical curriculum in the late 1990s, and as a result of that, the specific course I taught in chemical pathology, clinical biochemistry, was removed from the curriculum. Since then -- and others will give evidence on this -- the distribution of teaching has been across the five years of the curriculum, but I have particular responsibility for a final-year study day in fluid and electrolyte balance, which all final-year students attend, which includes a more detailed discussion of four clinical cases, three of which involve, from memory, hyponatraemia.
Q. So would it be fair to say in the mid-1990s you were involved in the teaching of hyponatraemia-related issues and you were also providing an advisory service, really,

in the Royal for low sodium cases?
A. Yes, but particularly in the adult hospital. I was very, very rarely ever called to the Children's Hospital.
Q. Was the case of Adam Strain ever brought to your attention in 1995 or the mid-1990s and your advice sought?
A. I had no awareness at all of Adam's case until the television programme aired.
Q. So when Claire was admitted to the Royal, you were there as a consultant providing this service. If you'd been asked to look at Claire's notes in October 1996, would you have formed the same view as you formed in 2004?
A. Do you mean after her death?
Q. Yes.
A. Yes, I would have done, without a doubt.
Q. And would you have thought it appropriate to refer her case to the coroner at that time?
A. I would.
Q. Why?
A. Because I would have felt that there was at least a possibility that the sodium management, fluid management, had contributed to the events that led to her death, and I would have felt it was important for those issues to be aired and for independent external

opinion to be received.
Q. When you finally were contacted in 2004, after the broadcast of the UTV programme, who first contacted you and what request was made of you?
A. From memory, I was contacted by Dr Michael McBride by telephone. It was explained to me that Claire's parents had contacted the hospital and expressed concern that fluid management and hyponatraemia may have contributed to her death in 1996. I was asked to review the notes and to advise Dr McBride whether hyponatraemia may have contributed to her death and whether, in my opinion, he should refer the case on to the coroner.
Q. Were you asked to give a view about fluid management or was that so bound up with the issue of hyponatraemia it was the same question?
A. It was the same question. The question was whether there was enough evidence in the notes to suggest that the case should be referred onwards to the coroner as a result of the role that fluid balance and hyponatraemia -- which are completely and utterly tied up -- may have played.
Q. Were you given a time within which to come back with your views?
A. I have no recollection of being given a time, but I recall that it was something which it was hoped

I would do relative quickly. I can't recall any mention of a time.
THE CHAIRMAN: I presume the question is meant not whether there was a time limit, like "We have to have this tomorrow at noon", but whether there was clearly some time pressure to get a response.
A. I have no recollection of a specific time limit, but I felt it was something that needed to be done fairly rapidly. That was the impression that I had.
MR STEWART: Were you asked to put your opinion in writing?
A. It wasn't suggested to me how I should put my opinion. Dr McBride had phoned me and asked me to do it on the phone, so my recollection is that I gave my opinion verbally to him, as he had asked me to carry out the review verbally.
Q. I think you said in your witness statement that you did that by telephone.
A. Yes, that's my recollection, although I am happy to say -- I know that Dr McBride recalls that there was a meeting and it's quite possible that there was a meeting, which I can't remember.
Q. Yes. Did you watch the programme, the UTV programme, when it was broadcast?
A. No. I'm assuming -- I travel a lot, you know, nationally and internationally. I've referred earlier

in my CV to my international role with the Federation for Clinical Chemistry and Laboratory Medicine. I don't remember whether that was on then, but I've always travelled extensively and it was quite possible that I was out of the country whenever the programme was on television.
Q. When Dr McBride contacted you, did he indicate to you that this was brewing up into a storm, there was political interest, public concern, questions being asked?
A. I have no recollection of that. I was certainly aware at that time that it was a matter of public interest and clearly, and more importantly, it was a matter of interest to the Roberts family.
Q. Yes.
A. And that's always been at the core of this and my involvement in it. However, there was no sense at all, as far as I was concerned, of any political and other pressures and I don't know what you mean by that comment.
Q. The minister announced this inquiry in, I think, November 2004. That's a fairly high level public concern.
A. Okay. In fact, it was certainly the possibility that Claire's case might be referred onwards to this inquiry.

Q. That subsequently emerged as a possibility, yes.
A. I can't remember when that emerged. I can't remember whether it was -- whether it emerged at the beginning. I think it was because I believe that in the notes of the meeting there's reference -- the first meeting with the Roberts family, there's reference to the responsibility of referring the case onwards to the inquiry.
Q. That's a little bit later than the time I'm focusing in on, which is when you received the request from Dr McBride.
A. Probably within a couple of weeks. It's very close to it and that's why I'm having difficulty recalling.
Q. The question is quite simply this: with an opinion you are asked to provide on a matter which is of potentially great public concern, political concern, concern to the Roberts family, did you think it unusual that you should be just asked to give an opinion, a verbal opinion perhaps, nothing more formal?
A. I didn't think it was unusual in that I felt, at the time, that Dr McBride believed that hyponatraemia probably had played a role and that he was seeking confirmation from me that that was the case. If I had disagreed with that and had recommended anything other than onward referral of Claire's case to the coroner and

possibly to the inquiry, then I think it would have been important for me to put that in writing and the reasons for it. However, since my opinion, which I reached fairly rapidly, was a very clear and straightforward one and was going to involve referral onwards, which we believed is what the Roberts family felt was appropriate, then I didn't feel under any particular pressure or indeed thought it was unusual not to submit my opinion in writing.
Q. And Dr McBride likewise did not ask for anything in writing from you?
A. No, Dr McBride definitely didn't ask me for anything in writing because, if he had, I'd have provided it to him.
THE CHAIRMAN: I don't know if you can answer this, but when you got the impression that Dr McBride had already formed a view, maybe even a preliminary view, that hyponatraemia had played a role and he was looking for you for confirmation of that or otherwise, did you get the impression that he had formed that view from his own quick analysis or from what he had been told by others?
A. I'm sorry, I really can't answer that. I don't think I formed any view. And to be honest it does become difficult. I know 2004 is more recent than 1996, but I've read so many papers and e-mails and correspondence in recent months that it does become difficult to

actually reconstruct it all sometimes.
THE CHAIRMAN: Thank you.
MR STEWART: You said one moment ago that indeed it didn't take you long, when you got the medical chart, to form your opinion that hyponatraemia was implicated.
A. I think that's correct. So just to be clear on the process: I was sent the clinical notes, I can't remember exactly who brought the notes to me or sent them to me. I also can't remember exactly what the content was, except I had the clinical notes. I think I probably spent an hour at most, maybe less, reviewing the notes before I came to my opinion.
Q. Is that something that could be achieved quite quickly? In a medical chart, does the most recent addition to the file appear at the top of the file, as it were?
A. I wish that were always the case because it would make my job much easier. Unfortunately not, no. There is meant to be a sequence of records or notes, but it depends on the size of the chart. But my recollection -- and I believe it's been referred to in the minutes -- is that Claire's notes were not particularly large or comprehensive. So it wouldn't have -- it definitely didn't take me long. I was focused on a particular issue, which is the role that fluid balance and hyponatraemia may have had in terms of

her death. I was focused on that, I reviewed it and I reached a fairly rapid conclusion.
Q. I assume you just looked at the discharge summary from PICU, saw hyponatraemia and said, "That's the question answered".
A. Not at all. I looked through the notes from -- I remember looking at the GP referral letter, the A&E note. I remember looking at the written notes and obviously I looked at the fluid balance chart because that was something which was important. I think it's fair to say I paid much less attention to events after 3 am on the morning of the Wednesday, whenever Claire suffered the respiratory arrest, because really the contribution of the hyponatraemia had done its damage by then. So in terms of answering the question which had been posed to me, the parts of the records after that were not really relevant.
THE CHAIRMAN: And presumably the 11.30 record or sodium reading of 121 taken from the test at about 9 o'clock, I presume that's a significant director of your attention?
A. Absolutely. So yes, that was important, certainly, and I commented upon that at the inquest.
MR STEWART: Because your review of the papers or the chart was focused on the one issue, would it be fair to say

that when one engages in a process like that, perhaps other things which aren't immediately relevant to the issue you're focused on, aren't absorbed?

A. I think that's absolutely true. One of the points on which I have been criticised is my failure to identify the overdose of midazolam. I have to put my hand up and say I absolutely did not identify that at any stage and I regret that. However, I would say in my defence that it was certainly not at all a focus of my review of Claire's notes. While I'm an expert, I think, on fluid and electrolyte balance, biochemical disturbances, the only drugs I ever prescribe to children are lipid-lowering drugs, cholesterol-lowering drugs. I have absolutely no experience at all with the other drugs that were being used in this case, although obviously I'm aware of their general indication.

As has been pointed out, I was confident that these notes were going to be reviewed by external experts and at least four external experts, paediatricians, went through the notes, both at the inquest and for the police investigation, and failed to identify the overdoses. So certainly I regret that I missed that. If I had identified it, then I would certainly have drawn attention to it at the time.

THE CHAIRMAN: Dr Herron has said that if he had picked up

that point, that in itself is a reason for a referral to the coroner --

A. Certainly. There's a question --

THE CHAIRMAN: -- because the extent of the overdose is significant.

A. Certainly this question of the 120 milligrams or 12 milligrams, whatever it was, certainly, absolutely, that would definitely have been an indication for onward referral, and if I had picked that up or identified it at the time, I would certainly have flagged that up with Dr McBride and subsequently.

THE CHAIRMAN: Yes.

MR STEWART: Your case note review was the sole case note review conducted on behalf of the hospital at that time.

A. I am not aware of any other case note review which was carried out or any intention to carry out another case note review. Obviously, the notes were looked at by, I believe, Dr Steen and Dr Sands, who eventually attended the meeting with me. They would have been looked at by Dr Nichola Rooney as well, but Dr Rooney would not have had relevant expertise at all in terms of identifying or commenting on any of the medical issues --

THE CHAIRMAN: Because, although she is a doctor, she is not

a medical doctor.

A. She's not a medical doctor, absolutely. So although she, I'm sure, went through the notes, she definitely could not have been expected to picks up any of these issues.

MR STEWART: As you've fairly said, your review was focused on one issue and was comparatively quick. It wasn't comprehensive and wasn't perhaps as rigorous as a complete review ought to be.

A. I conducted a rigorous review in the context of being asked to look at the role that hyponatraemia and fluid balance may have played in Claire's death. I wasn't asked to conduct a comprehensive review of her care.

Indeed, if I had been asked to do that I would have declined because I'm very, very aware of the importance of anybody carrying out a review or acting as an expert to limit themselves to the areas of their expertise. My expertise, as I think I have shown and is apparent from my CV in relation to laboratory medicine and sodium fluid balance, I think is very high. But I simply don't have expertise on some of the other aspects of Claire's care and I would not have agreed to carry out any review of her notes in that context.

THE CHAIRMAN: One of the issues about what happened when Mr and Mrs Roberts contacted is hospital is what the

extent of the review was. You've just distinguished between the review which you were asked to do and the one which you could do, on the one hand, between that and a comprehensive review on the other hand. Dr McBride has said that with hindsight it might have been better for him to have instigated what was then known and had come in a few years earlier as a root-cause analysis. Have you been involved in root-cause analysis in any cases?

A. No, I'm aware of root-cause analysis and that they are carried out. I have never been involved in a root-cause analysis within the Trust.

THE CHAIRMAN: On a general approach, do they typically involve more than one person, because it does call on various expertise?

A. Very much. It's a multidisciplinary review of a case. I believe that on occasions it can involve an external person to the trust as well, but it is multidisciplinary. It would include not only medical staff and practitioners, but usually nurses, sometimes pharmacists, and perhaps other disciplines where they are relevant.

THE CHAIRMAN: So whether we call this a comprehensive review or a root-cause analysis, then you could have contributed to that, but not done it?

A. Yes, I think I could have made a very useful contribution to it in relation to the sodium and fluid balance.

THE CHAIRMAN: Thank you.

MR STEWART: Can you now recall the steps that took you to actually meet with Mr and Mrs Roberts? You telephoned your view to Dr McBride that indeed hyponatraemia was involved in this case. When were you told that it would be appropriate for you to meet Mr and Mrs Roberts?

A. I can't remember that, but certainly when I reported to Dr McBride or shortly afterwards, there was a suggestion that a meeting should take place with Mr and Mrs Roberts, where I would explain the findings of my investigation. I was very happy to participate in that, but I can't remember exactly when that was agreed.

Q. When you went to Dr McBride to give him your opinion, this is something you mentioned in your statement to the coroner, which we find at page 090-052-159 and 160. It's really the final paragraph of 160 I'd like to draw your attention to:

"I informed Dr Michael McBride, the medical director of the Trust, that in my opinion hyponatraemia may have made a contribution to the development of cerebral oedema in Claire's case. I advised that it would be appropriate to consider discussing the case with

the coroner for an independent external opinion with access to statements from all of the staff involved in Claire's care."

So you had a bit of a discussion with him. Did you think this was an appropriate case to get an external, independent expert view?

A. What I believed would happen -- and I have to say that this is the only coroner's case I've ever been involved with in my career -- but I believed that, yes, it would be appropriate to have an external opinion on Claire's care and that that would occur in the context of the coroner's inquiry. That is what I believed at the time.

Q. Did it occur to you that you could get an external independent opinion notwithstanding that the coroner was involved in the case?

A. Since I believed it was going to go to the coroner's court and that he would get external opinions, I didn't think that there was any need for another independent external opinion in parallel to that.

Q. What about the suggestion that all the staff involved in Claire's case all be asked to give statements? Did you think that's something that should have been doing irrespective of the coroner's referral?

A. I understood that that would take place as part of

the coroner's inquiry, that all of the relevant staff would give statements and that that would be done under the aegis of the coroner with, at that stage, the possibility that Claire's case might also be referred on to this inquiry, although I wasn't clear at that time the processes which this inquiry would follow.

Q. When it came to preparing yourself to meet with Mr and Mrs Roberts, obviously from their point of view they wanted answers to questions, they wanted straightforward, honest answers to questions. Did you think that you were adequately prepared to go and meet them and answer their questions without an independent review and without yourself having studied all the notes rigorously from all angles?

A. Well, at the meeting it was decided that -- and eventually Dr Steen and Dr Sands and myself attended the meeting. I was there and certainly had the expertise to comment on the fluid management and electrolyte issues, and I believe that Dr Steen and Dr Sands, who were both paediatric consultants at that time, had the expertise to comment on the other aspects of Claire's care. It didn't occur to me at the time that there would be any need for another independent external view and indeed I did feel adequately prepared to address the issues I was going to address in the context of the meeting,

given my very considerable experience and expertise in relation to sodium.

Q. I wonder if we can just take an approach to the meeting itself by going through the e-mails and the various notes that chart the progress. Can I bring up page WS177/1, page 18? This is a note that Dr Rooney took. It's dated towards the bottom:

"6 December 2004, P meeting. Professor young, Dr McBride and myself."

It's timed at 8.30 am:

"Discussed findings and potential role of fluid management in death."

Do you recall that meeting at 8.30 in the morning of 6 December 2004?

A. No, I think I've already indicated that I have no recollection of that meeting. Having seen written confirmation that it took place, I'm certain that it did, but I have absolutely no recollection of it at all.

Q. Do you have any recollection as to why Dr Steen wasn't at that meeting?

A. I have no recollection of the meeting or who attended or who didn't.

Q. Move down to the next line, 2 pm, there's a further meeting, the same day:

"Dr Steen, Professor Young and myself met to plan

for meeting."

And it goes on into page 19:

"Agreed that Dr Steen will set context with patient journey. Professor Young will answer specific questions relating to fluid management and sodium levels and explain plan of Trust re coroner. Parents to be offered follow-up meeting to discuss further questions."

Do you have any recollection of that meeting on the afternoon of 6 December?

A. Yes, I do. I do have some recollection of that meeting, yes.

Q. What do you remember?

A. My recollections of it are that, firstly, I had carried out and completed my investigation, my assessment of the role that hyponatraemia may have played in Claire's death. Looking now at the records and the fact that there was a meeting earlier that morning with Dr McBride, I accept that his recollection is correct and I assume that, at that meeting, I would have informed him of the outcome of my investigation.

THE CHAIRMAN: That's what Dr Rooney summarises as findings, "Discussed findings"?

A. Yes, that's what I would assume that means and I definitely remember telling Dr McBride my findings and I thought it was by phone. I now accept that my

recollection was incorrect.

MR STEWART: It could be both, of course: you could phone him and then discuss at a later date.

A. Perhaps, I don't know. But clearly, a meeting took place. My recollection of the meeting in the afternoon is that I was there to tell Dr Steen my findings and to discuss how to deal with the meeting with the Roberts family. I believe that my preference at the time -- and this is I think somewhat borne out by the wording of a subsequent e-mail -- would have been to meet with the Roberts family just with Nichola Rooney.

I had worked with Nichola previously in the context of another very difficult set of circumstances. I had great confidence in her professionalism and we worked very well together. So I was keen to meet with the Roberts family just with Nichola.

Q. Was there anything about Dr Steen's presence that would have discomfited you?

A. I anticipated that the meeting with the Roberts family was going to be a difficult one. Let me clarify what I mean by that. One of my other teaching responsibilities back in the 1990s was teaching communication skills to the undergraduate medical students and we approached consultations in different ways, and we defined certain characters, certain types

of more difficult consultation. So particularly a consultation where you were breaking bad news -- and there was an element of the meeting that was going to take place, which involved us breaking bad news. Secondly, a consultation where you were aiming to get across a large amount of complex information, and we were definitely going to be doing that in relation to the meeting. And third, a consultation or meeting where there was more than one person present, and I was expecting to meet both Mr and Mrs Roberts.

So I felt it was going to be a difficult consultation in that context and my experience of those consultations is that they work most effectively if there's one person there who is handling and dealing with all of the communication. So my preference would have been to do the meeting myself with Nichola Rooney there primarily to support the family and to take notes and minutes.

THE CHAIRMAN: That meeting would deal with the issue which you could deal with and, if there then needed to be a separate meeting with Dr Steen, that could go ahead again with Dr Rooney leading that?

A. Yes, it could have done, absolutely. And this is not at all a criticism of Dr Steen, but I was aware that Dr Steen and myself maybe have different communication

styles and also felt that I would have preferred to use my own style and approach on its own in the meeting.

Whenever we had the meeting in the afternoon, there was clearly some discussion about the best way to handle it. Dr Steen, I think, put the view quite strongly that it was important to be prepared and able to talk about the clinical journey -- I think that is the phrase which is used -- which were the events that happened during Claire's care and the other conditions which she had, which were outside my immediate expertise.

THE CHAIRMAN: That would be a broader discussion?

A. Yes. So around the encephalitis, for instance, and the status epilepticus where I would have had virtually no experience of those conditions in children, although some experience of them in adults. We clearly had some discussion about it and decided at the end that the best way to proceed was as described and as subsequently happened, with us all present, and indeed Dr Sands was present as well.

MR STEWART: Yes. So immediately after your meeting with Dr Rooney and Dr Steen, almost immediately afterwards, you sent an e-mail to Dr Michael McBride. That's at 139-153-001. It's the lower part of the page, it's at 17.36:

"Michael. We met with Heather Steen this afternoon

and reached a measure of agreement about the role of the hyponatraemia. She wants to be present at the meeting tomorrow and will deal with any questions about the clinical journey while I deal with the fluid issues. Hopefully this will work. Heather has definite views about the significance of the fluid management that are not quite the same as mine."

In relation to this measure of agreement on hyponatraemia and a differing of views about fluid management, can you now remember what those divergent views were?

A. I can, yes. In Claire's case, my feeling, reviewing the notes, had been that there were three significant conditions or processes which were taking place. And this is subsequently being teased out and discussed at some length, with conflicting views, from a range of experts. There was status epilepticus, there was a viral encephalitis and then there was hyponatraemia.

All three of those conditions can cause cerebral oedema. There was absolutely no doubt or dispute that cerebral oedema had been the ultimate cause of Claire's death. My view was that the hyponatraemia may well have made a significant contribution to the development of the cerebral oedema, although I could not quantify that, and indeed I think there's still great difficulty

agreeing what its contribution might have been.

My recollection is that Heather, while acknowledging that the hyponatraemia may have played a role, felt it was less likely than me and felt that the status epilepticus or the encephalitis, particularly the encephalitis, would have been almost a sufficient cause on its own. So Heather probably felt that I was putting a little bit too much emphasis on the possible role of hyponatraemia, although she accepted that it had played some role with the hindsight that was available from 2004.

I should say at this stage that my view was in no way at any stage modified by Heather's opinion, nor was anything that I subsequently said, either at the meeting with the Roberts family or at the inquest, modified by Heather's opinion or that of any of the matters. The opinion I reached was exclusively and completely my own based on my review of the records and clinical opinion.

MR STEWART: Thank you. You go on in this e-mail to say that:

"Heather has definite views about the significance of the fluid management, which are not quite the same as mine."

What was the difference of views in relation to fluid management as opposed to hyponatraemia?

A. As I've indicated previously, I believe that fluid management and hyponatraemia are so intricately entwined in this context that I wouldn't really have distinguished between them when writing this e-mail.

Q. So you informed Dr McBride that there was not complete unanimity of approach, there was a differing of opinion. Did that trouble you in terms of going to meet the Roberts, that you'd be giving an explanation, which might not be the same explanation?

A. Not at all. It was agreed that the explanation that would be given would be mine in relation to the fluid and electrolyte balance, not Heather's opinion. That's what discussed in the minute: Heather would cover the clinical journey and I would deal with the fluid and electrolyte balance. So it was going to be my opinion which would be given on that issue.

Q. I can understand the importance of that, but would it not have been more honest with the Roberts to let them know that "we're not agreed here"?

A. The purpose of the meeting, as far as I was concerned, was to present the result of my view. If Heather did disagree with it -- and she will speak to that herself -- I think it would have been up to her.

THE CHAIRMAN: But she did disagree with it.

A. Yes, but the extent to which she disagreed with it --

I'm giving you my recollection of it and you know, these are events that were some time ago.

THE CHAIRMAN: Yes, I understand.

A. And she will have to give her own view on that because clearly the two of us have not discussed it and I don't know what she will say on this issue. But the purpose of the meeting, so far as I was concerned, was to give my view, which was on the fluid -- the fluid and electrolyte balance and the hyponatraemia, which was the view given to Dr McBride, based on which he had made the decision to refer Claire's case to the coroner.

MR STEWART: When you informed Dr McBride in relation to Dr Steen, "She wants to be present at the meeting tomorrow", did that reflect the feeling that you'd be happier doing it by yourself?

A. Yes.

Q. Then you introduced how you were going to deal with it and you expressed the view that, "hopefully this will work".

A. Yes.

Q. What did that mean? What would work?

A. The way that we were proposing to deal with the meeting in terms of me handling the communication about the fluid and electrolyte balance and Heather handling the clinical journey. I have already discussed and

described the reasons why I would have preferred to do the meeting on my own and I was concerned about the practicalities of how the meeting would work for the reasons I've described.

Q. Does it really mean: hopefully then, Dr McBride, Mr and Mrs Roberts won't realise that there's a disagreement here, that I don't agree with Dr Steen?

A. Not at all, it absolutely does not mean that. It means that hopefully between the two of us we'll be able to give the correct and accurate information to Mr and Mrs Roberts that they need in an effective way and in a way that they can understand clearly.

Q. It goes on:

"Nichola will offer the parents the opportunity to speak with me separately if they wish to."

Just to go forward, were Mr and Mrs Roberts offered the opportunity to meet with you separately at the meeting?

A. I believe the answer to that is yes. We'd have to go on to the note of the actual meeting itself and, from memory, I believe at the very end that the possibility of a future meeting was offered. Certainly, I was very keen that the Roberts family have the chance to meet with me subsequently if they wanted to, and if they had any questions that they wanted asked, I would have been

happy to do that.

Q. I don't think that's recorded in the minute, but did you say that to them?

A. I haven't -- can we call the minute up and the end of it? I can't actually remember.

Q. We will and we'll examine it with all the other questions that arise from that.

THE CHAIRMAN: Just before we get that, your preference, as you've expressed it over the last few minutes, was that you would have a meeting with Dr Rooney and the Roberts with effectively just the four of you. And partly, as I understand it, one of the reasons for that is because you had a different communication style from Dr Steen or, for that matter, you have a different communication style to anybody else.

A. Yes.

THE CHAIRMAN: It wouldn't matter who the other person was, you have a different communication style, you're giving parents information, which is perhaps not the information they want to hear, so it's going to be a difficult meeting for them.

A. Yes.

THE CHAIRMAN: Therefore if there's one style of communication coming at the parents, that might make it a bit easier for them to absorb.

A. Absolutely. That's what I felt, yes.

THE CHAIRMAN: But the other element then is that you -- was it from the 2 o'clock meeting on 6 December? Was that when you learned that there was a difference of view between you and Dr Steen about the extent to which hyponatraemia may have contributed?

A. Yes, and I wouldn't want this to be overinterpreted. It was a difference of emphasis.

THE CHAIRMAN: Okay.

A. Three contributory factors. I was placing somewhat more weight on the fluid balance and sodium than Dr Steen would have done.

THE CHAIRMAN: Doesn't that actually become an additional reason, at least with the benefit of hindsight, for there to be a separate meeting? Because not only do you have an extra person there, not only do you have a different style of communication there, but you have a different interpretation, to some extent at least, and explanation of what happened to Claire?

A. I think I can see that argument and I would accept that. At the time, what we were doing -- what I was trying to do, I think was to weigh up the advantages and disadvantages.

THE CHAIRMAN: Because it means a second meeting?

A. Yes, it means a second meeting, and the risk therefore

is greater of things being said not quite in the same way that appear to conflict. We were trying to weigh up the advantages and disadvantages, plus it was quite possible that if I met with Mr and Mrs Roberts on my own, they would have significant questions about the clinical journey or the encephalitis or the epilepsy, which I would not really have been qualified to address.

THE CHAIRMAN: And then you run the risk of looking evasive or unhelpful, which is exactly the opposite of what you want to be?

A. Exactly, yes.

THE CHAIRMAN: Okay. Thank you.

MR STEWART: Dr MacFaul has suggested that the fact that there was a disagreement between yourself and Dr Steen on some issues was itself a reason why you should have put your view in writing. How would you respond to that comment?

A. I would say that the differences between Dr Steen and myself were differences of emphasis. If I'd felt that they were substantive differences, if I'd felt for instance that Dr Steen was, saying, "No, I don't accept hyponatraemia played a role here", then that would have concerned me. But at no stage did Dr Steen suggest that at all. Knowledge about hyponatraemia in the Children's Hospital had moved forwards enormously since 1996. It

was clear that Dr Steen was well-informed and recognised the problem. What we were talking about in practice were quite subtle differences of emphasis and, indeed, as I look through the records of the inquiry to date, the differences between myself and Dr Steen were probably smaller than the differences that have emerged between the various expert witnesses to the inquiry.

Q. At what stage did Dr McBride authorise you to speak on behalf of the Trust at the meeting arranged on 7 December?

A. I cannot remember. I cannot remember that. But clearly, I believe I was authorised to transmit the view of the Trust. And there's a note there, I think, that I would indicate to the family the decision that had been made around the referral onwards to the coroner. So clearly, that was information given to me and certainly I felt I was acting in that capacity when I met with the Roberts family.

Q. Did that cause a problem for you, given that you were speaking on behalf of the Trust and yet Dr Steen wasn't quite of the same view as yourself, you had a difficulty there, a conflict?

A. I didn't view that as a conflict. As I've said, the differences between Dr Steen and myself were ones of emphasis. I didn't view them as substantive at the

time. If there had been significant differences of opinion between us, then I think that would have given me a problem. But because there weren't, no, I was comfortable enough doing the meeting with Dr Steen and Dr Sands, although for the reasons I've indicated earlier, my balance, on preference, would have been to do it just with Dr Rooney.

Q. And coming to 7 December and the meeting --

A. Can I just make a comment?

Q. Yes.

A. Because I was very taken aback and somewhat distressed myself about the opening and some of the statements that were made there, particularly in relation, for instance, to this e-mail, the interpretation that was placed on it. I have built an entire career based on my integrity and honesty and I approach everything I do in that respect.

I'm very, very unhappy that it has been suggested that there is a cover-up and that, effectively, it has been alleged that I participated in that and I want to completely and utterly put it on the record that that is not the case, never has been the case. In everything that I have done here, I have attempted to act in an open, honest and professional way.

THE CHAIRMAN: Professor, I understand why you have just

said that to me. I think you will understand that one of the things which the inquiry is particularly looking at is not just how Claire died, but how that was handled afterwards.

A. I do.

THE CHAIRMAN: I think I have to be frank and say it doesn't look, on the evidence to date, as if things were handled very well in 1996. That's perhaps a generous description of what happened in 1996 and into early 1997. Mr and Mrs Roberts then have concerns about what happened in late 2004 after they saw the television programme and contacted the hospital. And even then, what happened at the inquest. The point you made earlier about revelations which didn't emerge at the inquest, which have only emerged in this inquiry, and Mr and Mrs Roberts, I think, must be wondering how on earth this could all possibly have come about.

I think we can agree it has come about very unhappily and messily and inadequately, and what I'm looking at -- I'm not assuming at this stage that you or anybody else behaved dishonestly or are lacking in integrity. What we're doing is probing whether any of that happened. I haven't made any findings at all along those lines yet.

A. I recognise that, and obviously any upset that I or

indeed others might have felt at the way things have emerged in the inquiry is as nothing compared with the distress which the Roberts family have had and I absolutely recognise that. But I just wanted to put it on record, my complete and utter rejection --

THE CHAIRMAN: Okay, I've got your point. Thank you.

MR STEWART: I'm trying to explore your involvement in the steps that were taken. So going into the meeting on 7 December, what documents did you have? You had the medical chart.

A. I can't remember what documents were available in the meeting. I believe that the medical records were there. I believe that Dr Steen probably had them. I suspect I was working, as I often do, from memory.

Q. Were you given a copy of Dr Steen's patient journey?

A. I have no recollection of having been given a copy of Dr Steen's patient journey, as I think I've said before.

Q. I wonder if WS177/1, page 34, be shown, please. This is a document, it's the first page of a three-page document exhibited by Dr Rooney to her witness statement, which we have assumed -- and until Dr Steen confirms it, it's only an assumption -- that this was the patient journey document that was used at the meeting for Dr Steen's exposition of Claire's case. Does that look familiar to you?

A. No.
Q. Did you have a copy of the autopsy report at that time?
A. I can't say. I have seen this autopsy report. I definitely saw it at the time of the inquest.
Q. Yes.
A. But I can't say whether or not I had sight of it at the time of the meeting with Claire's parents.
Q. It's a very relevant thing to have with you at the meeting in discussing the cause of her death, isn't it?
A. I just can't recall. I may have had it. I am not saying I didn't have it.
THE CHAIRMAN: Would you have had the autopsy report for the purposes of doing your case note review?
A. I may well have had, but I honestly again can't remember. I can't remember what notes I had at the time. I remember the clinical notes and I've indicated the nature of my review at the time, which was focused very much on the events up until probably 3 am.
THE CHAIRMAN: Okay.
A. So I just can't remember.
MR STEWART: If it wasn't there, would you have asked for it?
A. Not necessarily in relation to the question I'd been asked to investigate or determine. I certainly would have been interested in it and because I've seen it

subsequently, I obviously know what it said. But I just can't remember, sorry.
Q. Because, on the one hand, you open up the chart, you see that one of the diagnoses on discharge from PICU is hyponatraemia. You look at the medical certificate of cause of death, the cause of death entered by Dr Steen, and it just has "cerebral oedema, status epilepticus". You'd want to surely correlate the two and find out what the autopsy was before you went to meet the Roberts family, wouldn't you?
A. So as I understood it, the purpose of the meeting was to let the Roberts family know that we would be referring Claire's case on to the coroner for the cause of death to be looked at. I think the purpose of the meeting was not to give the Roberts family a cause of death because, indeed, I was not in a position to do that.
Q. I think they were there to find out what happened to their daughter.
A. Absolutely, and in the course of the meeting I did my very best to give whatever information I had on that to them, based on the review of the notes which I had carried out.
Q. Yes. If we can come, please, to the minutes of the meeting at WS177/1, page 58. Here we have the minutes circulated afterwards. Were these minutes actually sent

to you for your approval after the meeting?
A. I can't remember that. If indeed they were, there would be an e-mail trail, I'm sure, to show it.
Q. We'll come to that:
"Dr Rooney opened the meeting by introducing Mr and Mrs Roberts to Dr Steen, Dr Sands, Professor Young, and reassuring them that any questions they feel still remain unanswered regarding Claire's death will be addressed, adding that the Trust will meet with them any time to help them in any way possible. She went on to outline what she believed were Mr and Mrs Roberts' main areas of concern."
And these are the main questions that it seems that the Roberts wanted answers to:
"What led to her sudden deterioration after they left hospital that day? Was Claire's condition misdiagnosed? What role, if any, did Claire's fluid and sodium management play in her death?"
So really, those are the questions, that's what they want an answer to, and really that's what you're there to answer for them.
A. Yes. And those are the questions that I did my best to answer during the course of the meeting.
Q. If you read through this minute, you don't find the word "deterioration" occur, nor the word "misdiagnosis"

occur, nor the word" hyponatraemia" occur. It seems to be an odd minute if you're discussing those issues.
A. Firstly, if I talk in general terms about communication. I hadn't met the Roberts family before the before. Generally, whenever I communicate with patients, I try to avoid using technical or scientific language. That's usually the appropriate course of action. So certainly I would not have used the word "hyponatraemia", for instance, during the course of a meeting like this. I would have talked about sodium and low sodium. Did you have some other points there?
Q. Can I ask you about that? This is in the light of the television broadcast where hyponatraemia is the word that's used. Do you not think that in those circumstances you might use it?
A. I hadn't seen the television broadcast, as I've already indicated, and I also believe -- and I'm sure you'll correct me if I'm wrong -- that the Roberts family themselves hadn't mentioned hyponatraemia.
Q. Can we go back to your initial introduction --
A. There is hyponatraemia throughout the course of this document --
Q. Yes.
A. -- we're just not using the word "hyponatraemia". I've explained why. I view it as a technical or scientific

word that is not a word I would use in normal communication with patients, at least in that era for sure.

THE CHAIRMAN: Sorry, let's just pause for a moment, professor, about two points.

One is: the hyponatraemia inquiry had been established by the time this meeting takes place, so hyponatraemia is a term which, however imperfectly understood, has now been raised to a level, which it wasn't raised to in the public's eyes before.

Secondly, if we can go back to page 56 of this document, please, when you said a moment ago ... I think you said that the Roberts family themselves hadn't mentioned hyponatraemia.

This note at page 56 is Mr Roberts' note of the meeting. At paragraph 1 he mentioned hyponatraemia in the third line "typical of hyponatraemia". So whether Mr Roberts' understanding is perfect or otherwise, hyponatraemia is a term he's using in his own note of the meeting.

A. My understanding of this is -- I'm just trying to explain my approach to the meeting. I had never met the Roberts family before, I had no idea of their likely educational status or ability to understand complex language, et cetera.

THE CHAIRMAN: Right. You meet parents, some of them are very well educated and some of them aren't.

A. Indeed. In general terms, my approach to communication with patients is to use non-technical language, which I think is good practice to try and get across the concepts. I can't say whether I used the word "hyponatraemia" in the meeting or not. I was responding to the comment that the word "hyponatraemia" doesn't occur in Dr Rooney's note of the meeting, and that's absolutely correct and I'm trying to explain why that might be. I completely accept that Mr Roberts in his letter, I think from the next day following the meeting, has used the word "hyponatraemia", and I suspect that we would have addressed that subsequently and directly.

Certainly, if there's any sense of a desire on our part in the meeting to avoid using the word "hyponatraemia", then I would completely refute that. My whole recommendation was that the case would be referred on to the coroners.

THE CHAIRMAN: Because of hyponatraemia?

A. Because of hyponatraemia and, indeed, subsequently to this inquiry. That's also mentioned.

THE CHAIRMAN: Okay, thank you.

MR STEWART: I wonder if we can go forward to page 59. This is where you introduce yourself. It's halfway down the

page:

"Professor Young joined in at this point, firstly by emphasising that he was involved in the case purely as an independent adviser."

Did you say that?

A. I can't remember the exact words that I would have used in the meeting, but since it's written here then I may well have said it. I would accept that or indeed -- yes, I think probably, and I may have been introduced in that capacity, I can't remember.

Q. Do you understand the difference between being independent and being seen to be independent?

A. I do understand the difference, yes.

Q. Would it, in those circumstances, have been important for you to tell them that whilst you're independent of view, you were nonetheless employed by the same employer as Dr Steen and so forth?

A. My understanding was that the Roberts family were already aware of who I was ahead of the meeting. What I'd like to do, if I can, is to refer back to the governance summary opening. I think it's paragraph 377, from memory. This is where I may need some assistance if I've not got this. I don't know if we can get it up on the screen.

Q. I'm not sure I can assist you in that regard.

THE CHAIRMAN: We'll find out over lunch about getting it put up on the screen. If you want to take me to the point, do you have that opening there?

A. Yes. So paragraph 377 in the opening is Mr Roberts talking about what had happened. It says in the middle of that -- I think relating to a phone call on Monday 22 November:

"Dr Rooney also advised me that another senior consultant would be reviewing Claire's fluid management."

THE CHAIRMAN: Right. So you're saying, since Mr Roberts says that's what Dr Rooney told him and since you were the person who appeared at the meeting having reviewed Claire's fluid management that they would know from that that you were a consultant?

A. I can't remember how I was introduced at the meeting. But I believe and always thought it was clear that, while being a professor of medicine at Queen's University, which is my primary appointment, that I also had a post and a role in the hospital.

THE CHAIRMAN: Okay.

A. And indeed, I think that's consistent with what's in paragraph 377 of the opening.

MR STEWART: 377 goes on to say:

"Dr Rooney advised me that she would like the

medical director, Dr McBride, and a professor from Queen's, Professor Young, to look at the document."

So it looks as though from Mr Roberts' recollection, you were being introduced as a professor from Queen's and if we go to the top of page 58 here, we can see in the minutes, a record of those present at the meeting:

"Ian Young, professor of medicine, Queen's University of Belfast."

A. And that's correct. That is my title and my primary role.

Q. So I take it you don't think you told the Roberts that, in fact, you were employed by the Trust?

A. I can't remember. I believe I was introduced -- I believe it was clear, I felt it was clear and it didn't occur to me otherwise and from paragraph 377, to which I'd referred, I think Mr Roberts had been told that a senior consultant would be reviewing the fluid balance.

Q. Whether that was you or not or was something that was said is a matter for the chairman.

A. I think I was the only other person who did review the fluid balance, to the best of my knowledge. I'm not aware of anybody else having reviewed it.

Q. Did you explain to those present the limitation on your

remit in terms of reviewing the case notes?

A. I think that -- absolutely. I felt that it was clear that I was focused on the fluid balance and the sodium. That's the only thing that I talked about, I believe, within the context of the meeting. If I can go back --

THE CHAIRMAN: If you pause there for a moment, if we go to page 59 in this document again, I presume you would say that the minutes support you on this because, if you look directly above the line, "Professor Young joined in", the line above that is:

"Mr Roberts queried whether administering the fluids had influenced her condition."

And that's the point at which you are specifically noted as having joined in. So you would say that that bears out that the meeting had started without your input pretty much and then, when it got to the specific point about fluid management, it was at that point that Dr Rooney turned to you or you intervened and you joined in.

A. Yes, thank you.

MR STEWART: Did you tell the Roberts family that you were authorised to speak on behalf of the Trust?

A. Again, I can't remember what exactly I said. All I have is the note of the meeting here. So if it's recorded here, then yes, I'm sure I did.

Q. You can see the problem. The minute records you emphasising that you're involved in the case purely as an independent adviser; on the other hand, Dr McBride recalls authorising you to speak on behalf of the Trust. There's an apparent contradiction there.

A. Yes. I think obviously I need to address what my view of that was and why I felt that I was there as an independent person. Firstly, I had absolutely no prior knowledge of Claire's case or management and was completely independent of the clinical team. Secondly, I was based within Queen's on the Royal site and also all my clinical work was in the adult hospital, it was exceptional for me to be in the Children's Hospital. Thirdly, I clearly had the expertise and knowledge to provide an opinion into the contribution of sodium and fluid balance in Claire's case.

There were, at that stage, probably two other chemical pathologists working in the hospital, both of whom had clinical commitments in the Children's Hospital. I was the one who didn't have those commitments. So on all of those accounts I was -- I think I had the right expertise and distance from the case to provide an independent view on it.

Q. In terms of presentation, do you think it might have been better to have given the indication that you were

independent of mind, but not necessarily independent of the Trust?

A. It wasn't a distinction which, I must admit, I made in my mind at the time. I'm relatively used to seeking independent opinions within the Trust in the context of my work as the chair of the clinical ethics committee -- although it's not relevant to this case at all -- but particularly in the area of withdrawal of treatments towards the end of life. The GMC have issued guidance on that and they refer to seeking a second opinion from an independent -- and they use the word "independent" -- senior consultant who will often be someone from a different discipline. That's what's advised in those very difficult circumstances. Certainly, I felt that was analogous to the sort of role that I was performing in this case. Indeed, I did give independent advice, I gave very clear advice that that case should be referred on for an independent external opinion, which I've put in writing and I thought that that was going to take place through the coroner.

Q. Well, I suppose we can all bandy advice around --

A. I'm not quite sure what that means.

Q. Well, can I introduce you to page WS061/2, page 422? This is a Department of Health circular on the reporting and following up of serious adverse incidents. It

derives from June 2004 and can I bring you to page 425 at paragraph 13?

"In those situations where a body considers that an independent review is appropriate ..."

And you were brought in to review and you're claiming to be independent:

"It is important that those who will be conducting it are seen to be completely independent."

"Seen to be completely independent", that seems to be the Department of Health's view of what might be appropriate and best practice. Would you agree that that probably represents good sense?

A. I think this document is in the context of serious adverse incident reporting; am I correct?

Q. Yes.

A. So I accept absolutely, in the context of serious advert incident reporting, that that was the view of the department in 2004, yes.

THE CHAIRMAN: Then that leads us back into the question of the extent of the review which was prompted by Mr and Mrs Roberts contacting the hospital. That's really not an issue for you, with respect, professor; that's really an issue for Dr McBride.

A. At no stage, certainly, did I think I was looking at any sort of serious adverse incident or being asked to

conduct a review of a serious adverse incident. To be honest, I'm not sure if in 2004 I would have been aware of this document.

MR STEWART: No, you may be forgiven because I don't think Dr McBride necessarily was either.

Can we look, please, at the first page of the minute, which is WS177/1, page 58? I'm interested in the quality of the information which was given to Mr and Mrs Roberts. I'm interested also in the accuracy of the minute itself. If we go down to halfway down the page, to the paragraph:

"Claire arrived in A&E on the evening of Tuesday 21 October. The history given to staff was vomiting in school that day ... Claire arrived at A&E at around 8 pm."

There are a number of seeming inaccuracies in this short portion of paragraph. It wasn't Tuesday 21 October, it was Monday 21 October, and the history recorded there is certainly not one that she had been vomiting in school that day. She didn't arrive at Accident & Emergency at 8, she arrived at 7, and so forth. By the time the patient journey was being outlined to Mr and Mrs Roberts by Dr Steen, had you got a copy of the chart before you, were you able to spot that this wasn't perhaps necessarily accurate?

A. I think I've already indicated in response to your earlier question that I don't think I had a copy of the patient chart.

Q. The next question is: were you sufficiently and adequately prepared for that meeting?

A. Certainly. In terms of addressing fluid and electrolyte balance and the role that it may have played in Claire's death, then I was absolutely completely and properly prepared for it. I think what we're talking about now is the accuracy of a minute, we're not necessarily talking about the information that was given to Claire's parents in the meeting. So I can't comment on whether this is an accurate minute of what was said or whether it's a mistake in the minute.

Q. We can go back to the patient journey -- I won't do that -- but it also had inaccuracies contained within it. If those mistakes were given as part of the patient journey in that meeting, would you agree with me it's not a very good bit of work?

A. I have no recollection of whether those inaccuracies were given in the context of the clinical journey or not. It's clear from the minute of the meeting -- and is also my recollection -- that Dr Steen was handling this part of the meeting and giving the details about the clinical journey. If indeed she gave inaccurate

information at the time of the meeting and I failed to pick that up, then clearly I'm sorry and I would apologise for that. I would have thought, however, that if she had actually said, for instance, that Claire was admitted on Tuesday evening, then Mr and Mrs Roberts would, in the meeting, have corrected that.

THE CHAIRMAN: Maybe we're looking at two slightly different things. One is that when you're in a meeting like this, you have a significant message which you want the parents to receive.

A. Mm.

THE CHAIRMAN: So some of what might be regarded as the smaller details might not affect them receiving that important message from you. But isn't one of the important things whether, particularly for doctors -- and for lawyers too for that matter -- that you engender the confidence of the people you're meeting by getting the facts right?

A. I think that's absolutely correct. And if there are inaccuracies in this minute, then I greatly regret that. As I say, there are two slightly separate things here I think. One is the information that was given to the Roberts family at the meeting and the second is the minute of the meeting. I guess all I'm trying to say is that the two are not necessarily the same. It could

be that inaccurate information was given. I certainly wasn't aware of that at the time; I would have corrected it. It could be that the minute of the meeting is inaccurate in terms of some of the details. I know that if I had reviewed this minute -- and I'm not saying I did or didn't because I can't remember. I know if I had reviewed this minute that I would have been focused very much on the second half, the parts where I was talking about the fluid and electrolyte balance.

THE CHAIRMAN: Mr and Mrs Roberts, I have never got the impression that they want us to dwell or focus on insignificant, minor errors -- that cannot possibly be Mr and Mrs Roberts' main concern -- but there is something of a recurring theme through the documentation, which is that once a fact gets into the records inaccurately, it stays there, doesn't it?

A. Yes, absolutely, and other witnesses have commented on that. It's something that I regret, something that we all encounter in all clinical practice. You trace back a piece of information and it turns out somebody made a mistake six or seven clinic visits ago, but it's very easy for it to persist. It gets echoed.

THE CHAIRMAN: And the problem is that in 99 cases out of 100, it doesn't matter, but in Claire's case it's an aggravation for Mr and Mrs Roberts.

A. Absolutely. That's why I'm apologising if I failed to pick up on these things.

THE CHAIRMAN: Okay. Can we break for lunch? Is that a good time? 2 o'clock, professor. Thank you.

(1.02 pm)

(The Short Adjournment)

(2.00 pm)

MR STEWART: Professor, back, if we may, to the minute of 7 December 2004 meeting and a point that you raised before lunch about whether or not indeed it is a true and accurate minute.

There were two things -- in fact, they were highlighted in the inquiry opening, so you may already be alerted to them. Mr and Mrs Roberts, after the meeting, were clearly of the view that you had stated at the meeting that the fluid administered to Claire had a definite input into her death and you'll find the quotation for that at 089-003-007.

THE CHAIRMAN: Paragraph 10?

MR STEWART: Paragraph 10:

"Professor Young stated that the fluid type administered to Claire had a definite input into her death. He indicated that the input level would be difficult to quantify."

Which was a very sort of clear recollection from Mr

and Mrs Roberts. And equally --

THE CHAIRMAN: That's almost a perfect definition of what you did say to them in two lines, isn't it?

A. Not quite. I don't know whether you want me to address that now.

THE CHAIRMAN: Go on.

A. I indicated earlier that one of my concerns in preparing for the meeting was the enormous amount of really quite complex information that we were going to be giving to the Roberts family. And that's based on a long experience of talking to patients and their families in difficult circumstances. There's a substantial evidence base around this, that -- particularly in emotionally-charged settings -- when you're communicating with people, they have more difficulty recalling exactly what information is given to them.

What we would normally do or try do -- and if I'd been running the meeting myself, what I would have done is you give the important messages first because those are the ones that are most often accurately remembered. And then you go through the detail, you recap and summarise at the end, and then you'll send a record, a written form of the information of the meeting.

Whenever I received the letter, the notes from the Roberts families, Mr Roberts the next day, I was amazed

at just how much information they had been able to take on board, and I think that's of enormous credit to them and to their understanding of the situation. I would want to say that. There is, I think, a contemporary e-mail from me, and it's somewhere in the exchanges after this, between myself and Nichola Rooney -- I don't have the reference -- where I say that, unsurprisingly, they haven't quite fully understood exactly what we said.

I can't find the reference there. I don't know if somebody else will have it, but I know it's somewhere in the record. Do we want to pause and find it?

THE CHAIRMAN: If you go on making your point and we'll make a point of finding it before you finish.

A. Clearly, whenever I received Mr Roberts' letter and questions, I felt the family had understood an enormous amount, much more than I would have expected, to be honest, in the circumstances. But there were some things that indicated -- that were just not quite right in their response that indicated that we hadn't successfully got some of the things across.

As a really clear-cut example of that, if we look at point 9 at 089-003-007:

"Professor Young explained that the fluid type would not be given to a patient today and that such patients

would have their sodium levels reviewed every 1 to 2 hours."

That's definitely not something that I said. What's recorded in the minute is that I said 6 hours, and that would have been in the situation where somebody had significant hyponatraemia.

So that's just a small example, an unsurprising one, of something that just wasn't quite picked up correctly in the meeting. I think the first two lines in number 10 are another example of that.

THE CHAIRMAN: Because of the reference to "type"?

A. No, because of the use of the word "definite".

THE CHAIRMAN: Okay.

A. Because what I said was that it may have had an input into her death. I'm sure it had an input into the process by which the hyponatraemia developed, but I was not definite about whether it had contributed to her death or not. And for reasons I have given earlier, I was not really in a position to weigh up the contribution of the hyponatraemia along with the status epilepticus and the encephalitis to Claire's death, which is why I thought this needed to go on to the coroner and have other experts, external ones, look at it and comment on it.

MR STEWART: We'll return to the point I'm pursuing in just

a second, but for completeness, the e-mail to which you have referred, WS177/1, page 47, of 13 December, from you to Doctors Rooney and Steen --

A. And Dr McBride.

Q. -- and copied in to Dr McBride:

"I am happy to be guided by your view as to the family's wishes. Not surprisingly, they do not seem to have absorbed all of the information we gave them."

Is that the e-mail?

A. Yes, that's the e-mail I'm referring to. And that was my contemporary opinion, but I just want to put on the record: it is not in any way a criticism of the Roberts family because I was amazed by how much they had taken on board.

THE CHAIRMAN: In fact, as you explained, it's a compliment to them that they've absorbed a lot, but not absolutely everything?

A. That's certainly the sense in which it was intended. They did better than most people would have in those circumstances.

MR STEWART: This is just to revert to the point I'm pursuing at the moment, which is one about the accuracy of the minute. In relation to that essential point you were making to the Roberts, Mr McBride has got his own view as to what was communicated to them. That's

WS177/1, page 45. At the second paragraph:

"At the meeting, on my recommendation, we clearly indicated that, following our case note review and the expert opinion of Professor Young and others, we were significantly confident that their daughter's fluid management was a contributory factor to her death amongst the many others involved."

So it's not definite, but confident. That's his version of what he thought was said.

A. Yes. I think, obviously, Dr McBride wasn't present at the meeting --

Q. Quite.

A. -- and he has picked that up and I'm not sure he won't perhaps comment on how he formed that view. But I don't think I would depart significantly from it. I wouldn't have used the -- I think I would have said "reasonably confident". I couldn't have quantified the contribution, but I was reasonably confident that it would have contributed to her death. But you know, there's no way I would have used the word "definitely".

Q. In other words, both Mr and Mrs Roberts and really you and Dr McBride are pretty clear that, at the meeting, Mr and Mrs Roberts were told that the fluid management may have had a contribution to the death.

A. I believe what I said in the meeting is "may have made

a contribution" and I was unable to quantify it. I would refer you to the minute of the meeting and the bottom of page 2 and the top of page 3.

Q. Is that:

"Professor Young explained the treatment today is very different"?

A. No.

THE CHAIRMAN: Just one second. So that everyone can follow, page 59 and 60.

MR STEWART: Thank you.

A. Maybe I'm looking at a different ...

Q. Does it appear in the minute?

THE CHAIRMAN: Are you looking for something else, professor?

A. I am, I think. Yes, sorry, it's the third paragraph up on page 59.

MR STEWART: The fourth bullet point; is that right?

A. Yes, that bullet point there. That is the one. If you go down towards the bottom there.

Q. "Professor Young feels"?

A. Yes.

Q. "Professor Young feels this may have contributed to the swelling of Claire's brain and therefore ultimately to her death, but that it was not possible to say to what extent. He added that fitting and a virus infection can

also cause this."

That's quite a long way from --

A. I believe that is an accurate minute of what I said at the meeting.

Q. So the fluid management may have contributed to the swelling, but it's not possible to say to what extent, but fitting could also cause it and a virus infection could cause it. It's not really very close to what the Roberts remember, nor to what Dr McBride reports as what was said.

A. This is the minute of the meeting. Nichola Rooney and Dr Steen and Dr Sands, all of whom were also present, no doubt, can comment on whether they think it's an accurate minute or not. What I'm saying is that I believe this is an accurate minute, a record of what was said to the Roberts family. I'd like to highlight a couple of things since we're talking about it, and it relates to the fact that I didn't use the word "hyponatraemia" earlier, to which the chairman drew attention.

This is very typical of my style of communication and I think it's accurately recorded. I talked about "fitting" rather than "status epilepticus". And I talked about "a virus infection" there rather than "encephalitis". It's typical of the way I would be

trying to communicate this sort of information.

THE CHAIRMAN: Yes.

A. It's in line with what I have explained to you, that I felt there were three pathological processes which had contributed to the cerebral oedema, which was the ultimate cause of Claire's death; they were hyponatraemia, status epilepticus and encephalitis. And that's really what I'm trying to say there in what I would have considered to be lay language.

THE CHAIRMAN: Does that mean that you are saying that you believe that Claire did have status epilepticus?

A. No, and I was asked about this earlier in my witness statement. I do not have the expertise to determine whether or not Claire had status epilepticus. In saying that, I was relying on the opinion of a consultant paediatric neurologist, who had been looking after her, which was clearly recorded in her clinical notes.

THE CHAIRMAN: And similarly with encephalitis?

A. That is correct. So clearly, I had seen references to both of those conditions within her clinical notes, whenever I reviewed them. I was aware that those were the three processes which, in my opinion, could have contributed to cerebral oedema in her case and I was trying to get that across to the family and the fact that I felt further scrutiny, if that was required, to

determine the relative contributions of the three ...

THE CHAIRMAN: Yes, but I just wanted to get this right in case I misunderstood it this morning. When you sent your e-mail to Dr McBride, the three issues were status epilepticus, encephalitis and hyponatraemia. You said:

"All three can cause cerebral oedema, which in turn caused Claire's death. My view was that hyponatraemia made a significant contribution. Dr Steen thought that there was a difference of emphasis between [you]; she thought it was less likely than the other two."

A. Yes. So if we imagine three slices of a pie making up the whole, the question is: what size are the three slices?

THE CHAIRMAN: And that perhaps can never be measured. But your point is, when you're referring to status epilepticus and encephalitis, you're reflecting the views of others on those two issues. The one issue on which you contribute a view -- and you think it's a matter which was of some significance -- is the hyponatraemia.

A. So from my own -- obviously, I'm a clinician. From my own general medical knowledge, I would have been aware that both status epilepticus and encephalitis could be causes of cerebral oedema. So what I was saying there

was reflecting that knowledge, but certainly I would not have had sufficient expertise to tease out the relative contributions in a child who I felt had been very seriously ill and where clearly the clinicians had been struggling to reach a definite diagnosis.

THE CHAIRMAN: Thank you.

MR STEWART: You felt able to give evidence to the coroner about the causes of death to be entered into the death certificate.

A. I was specifically asked by the coroner, having listened to all of the evidence, what I would have written on the death certificate at the time, and I, along with I think all the other witnesses who appeared at the coroner's court, made an attempt at that.

Q. And that was on the basis of what you had read and what you had heard as opposed to your own first-hand expert knowledge?

A. Absolutely. It was based partly on my first-hand knowledge as regards the possible contribution of hyponatraemia, but also based on the two expert opinions, external ones, which I had read, and also the comments of the clinicians who were involved in the case. I think that the formulation which I came up with, which I don't have in front of me here, was in fact very similar to that of the two expert external

paediatricians.
Q. Can I ask you about whether any differences of opinion emerged as between you and Dr Steen at the meeting on 7 December?
A. During the meeting?
Q. Mm.
A. I was very much focused in the meeting at the information exchange and dealing with the questions that came back. So I certainly wasn't thinking about opinion or forming opinions during the course of the meeting.
Q. There are a couple of sentences or paragraphs here at page 59 at the very bottom:
"Professor Young explained that treatment today is very different. At the Royal Hospitals, lessons have been learnt regarding management of sodium levels in children, which is still not the case in many UK hospitals. Dr Steen added that textbooks still recommend previous thinking on fluids. Professor Young continued that the use of fifth-normal saline is in fact now banned in the Royal Belfast Hospital for Sick Children, with a different type of fluid used today to avoid ..."
That sounds as though you were having an exchange of views and you really are sort of correcting her a bit.
A. Not at all. It doesn't read like that to me at all.

THE CHAIRMAN: Let me pick that up from Mr Stewart.
The lessons which you've referred to as having been learnt, "which is still not the case in many UK hospitals", by the time this meeting is taking place, Raychel Ferguson has died, and the department has put together a committee, which has brought out the hyponatraemia guidelines.
A. That's correct, yes.
THE CHAIRMAN: And that's what you are referring to there, is it?
A. Absolutely. Although this inquiry is dealing with tragic cases, tragic circumstances, many avoidable, Northern Ireland, in many ways, led the world in terms of developing the guidelines.
THE CHAIRMAN: Absolutely.
A. And some of the literature, which I refer to in my previous papers clearly highlights that in other countries, probably even other parts of the UK, many children continue to die from hyponatraemia when Northern Ireland had guidelines in place.
THE CHAIRMAN: I think this is the point that Mr Stewart was asking you about a reading of this paragraph -- and what he was really asking you to comment on was this: that sentence, which has you saying that it's still not the case in many UK hospitals, that's because of our unhappy

experiences which led to the guidance, right?
A. It's because of the lessons which had been learned --
THE CHAIRMAN: And Dr Steen then says:
"The textbooks still recommend previous thinking on fluids."
And that's either an indication that we are now ahead or a way of saying -- a different, defensive interpretation.
A. Sorry, I now understand the point, I do. Thank you. No, certainly my recollection of the meeting -- and this is the first time that possible interpretation has ever occurred to me, and I've read this minute quite a few times. My clear recollection of Dr Steen's comment was that textbooks, which other people are using, still recommend this, but because of what has happened in Northern Ireland and the lessons we have learned, we have moved on and are doing something different.
THE CHAIRMAN: Yes, okay.
MR STEWART: There's another example of a possible differing of a line, and that's page 61. The second paragraph, third line down:
"The professor added that with the viral infection, seizures and fluids administered, it is difficult to say what their relative contribution would have been. Dr Steen also added that it is very difficult to

evaluate how much the fluids contributed to the situation."
It sounds as though she's trying to undermine what you're saying or trying to give a slightly different spin on it.
A. Again, I never have considered that before and I see that possible interpretation. I had no sense of that at the time. We had agreed a particular approach, which is that I would address the fluid and electrolyte issues. Certainly, I didn't feel in the context of the meeting at the time that Dr Steen was trying to take away from my interpretation. What I've said there is accurate and it's what I've explained previously: that the difficulty for me was the relative contribution of the three processes that I've described.
Q. After the meeting, the minutes were forwarded to you to be checked and e-mail correspondence ensued. WS177/1, page 72. This is the day after that meeting, it's 8 December, and Nichola Rooney has, I think, circulated some draft minutes and there is Dr Sands, I think, coming back:
"Dear Nichola. I see a problem. We don't actually know what the second U&E sample was taken, only when the result was noted. There may be no way we can be certain. Claire would have had to have extra lines put

in for her infusions. We nearly always take that opportunity to take blood samples at such times and it is possible, perhaps likely, that the U&E sample was taken at that time. If so, the result would have come back in a pile of reports around 5 pm or so. That's why I wanted to have another look at the chart to see if there were any --

A. Sorry, can I just take you back a bit? You said the minutes were sent to me for checking.

Q. Yes.

A. It may have been, I just can't remember.

Q. Here we are, page 70. That's you on 8 December also, the second lower e-mail there:

"Nichola. Best wishes, Ian. Nichola, I have made some changes which are highlighted in red, including changes to deal with the timing of the blood sample issue. The notes are in my office on the top floor of Mulhouse. If any one wants to look at them, they're on the table. I'll be in London for the rest of the week."

A. Thank you.

Q. So obviously the draft is going round and everyone is commenting on whether it's fair or accurate. But the point I wanted to take you to occurs on the next page, 71. This is from Nichola Rooney, 8 December, to Andrew Sands, but copied in also to yourself. We're

going back to the query that Dr Sands raised about the time that the second sample was taken. She writes:

"Okay. I think Heather and Ian searched hard, but couldn't find the time. They thought it most likely to be 9 pm as once every 24 hours would have been typical. Perhaps it's better to say we don't know when and all we really know for sure is the time it was noted in the medical chart, ie 11.30. What do you think? I can change the minutes accordingly and add in 'there is no way of knowing for sure'. Nichola."

Was this the usually way minutes were written up?

A. I think if there's uncertainty about the accuracy of a minute, it's good to circulate it and check with those who were present.

Q. Yes, but this is actually a debate about what should be put in the minute in terms of what was accurate, therefore what should have been said at the meeting, not what was said at the meeting.

A. So I can't actually comment about what was said at the meeting, because the only -- I have no clear recollection of it, just a sense of the meeting. All I have is the minute. And looking at the minute, I think we've done our very best to make sure that there's accurate information within the --

THE CHAIRMAN: I think there's a slight tension here,

professor. One is that a minute should be an accurate record of what was said, but the second point is that if there is a factual uncertainty then how is that carried forward? Is it absorbed into the minute, which means the minute may become an accurate document, but it's not necessarily an accurate minute, or is it dealt with separately?

A. I take the point. Can we just go down to see what Dr Sands actually asked? I haven't got that.

MR STEWART: I'm sorry. If we go back to --

A. Or the point --

Q. -- page 72. It's the top e-mail and he says:

"We don't actually know the timing of the second U&E."

He suggests that it probably was in the evening.

A. That's okay. Do we have the first draft of the minute, I wonder, to see what was being said and what he was drawing attention to?

Q. I don't know, but we do have the minute at page 59, where we can see, the second line:

"Blood levels were checked, probably around 9 pm."

So what has been inserted there in answer to this conundrum is "probably around 9 pm". If we go back to Dr Rooney's e-mail at page 71, she says:

"They thought it most likely to be 9 pm as once

every 24 hours would have been typical. Perhaps it's best to say we don't know when and all we really know for sure is the time it was noted in medical chart, ie 11.30. What do you think? I can change the minutes accordingly and add in that there's no way of knowing for sure. Nichola."

Somehow the minute is then altered to put in something which then should have been said or could have been said, but there must remain doubt as to whether it was said.

A. Can we go back to the minute? Do we have two versions of the minute and do we know that those words were added in?

Q. No.

A. No, we don't?

Q. No.

A. So we don't actually know what was --

THE CHAIRMAN: We know what the end result was; we don't know what the earlier drafts were.

A. I just wanted to be clear on that.

MR STEWART: There was a draft, you made some amendments, corrections to it in red.

A. Absolutely.

Q. I don't have the original version with your amendments or indeed what was probably there beforehand, except

only that we know that Dr Sands picked that up as a problem because he wasn't able to identify the time the second sample was taken.

A. He picked up a problem from the first draft of the minute, is my interpretation of his e-mail; do you disagree with that?

THE CHAIRMAN: I'm not so sure it's picking up a problem from the draft or being able to answer an issue which had been raised. There are two things going on simultaneously: there's a draft minute, but there's also a series of questions which have come in from Mr and Mrs Roberts, and this is perhaps an effort to combine the two.

A. I understand. I'm doing my very best to help the inquiry here.

MR STEWART: I think, with respect, the draft letter from Mr Roberts, although dated 8 December, would not have been received at the time this email correspondence was --

A. Thank you. That's very helpful. So this was our attempt to get it. I can't recall either what was actually said at the meeting on this point or what was in the first draft. What I can say is what went out in the version that's there and we can return to that --

THE CHAIRMAN: Page 59.

A. -- about the timing of the --

THE CHAIRMAN: Page 59, please.

A. -- sample. I know that that was my view and those words "probably around 9 pm" may have been my suggestion to put in. That is quite possible because when I reviewed the notes, what I had concluded is that because the phenytoin sample was taken at I think 9 pm, that my assumption was that the blood for electrolytes had been taken at the same time, although I didn't actually know that because it wasn't documented in the notes. But generally, when you take a sample from a child, as you will have heard from other witnesses, you don't want to take more than one sample.

So certainly, that wording, "probably around 9 am [sic]", reflected what I believe to have been the case and certainly is in an effort to ensure an accurate record. That's for definite. Unfortunately -- and I do take your point -- I can't be certain whether it was said in the meeting or not, and if that's been an error, certainly it was with the best of intentions, I think.

MR STEWART: Maybe the intentions were good, but it must be troubling if a minute is circulated and signed off by everybody as a true, accurate and faithful account, whereas, in fact, it is not.

A. Sorry, I can't accept that at all. I think this was a honest effort to get a record of the meeting and

accurate information. It was circulated to a number of people, clearly I made some points on it and changes, and I can't remember what those would have been. But it would have been in an effort to capture the large amount of complex information that was being given at the meeting to make sure it was accurate and that there was a written record of it for the Roberts family.

Q. Thank you. Then of course these issues had to be, in large part, revisited when Mr and Mrs Roberts' letter arrived and a response was required.

A. I'm not sure it was revisiting the issues. They asked some very sensible and intelligent questions, which expanded on some of the issues which had been raised at the meeting, and I don't think it's fair to say it's going over the same ground again.

Q. All right.

THE CHAIRMAN: In some instances, it's developing points --

A. Yes, absolutely.

MR STEWART: Can we go, please, to WS177/1, page 43? This is a small part of the --

A. Are we moving off the note of the meeting now?

Q. Yes.

A. Can we go back, please, because you had said to me that you would raise at this point the issue of whether I offered to meet with the Roberts family.

Q. Yes.

A. And that's at the bottom of page 4 of the minute.

THE CHAIRMAN: That's page 61 in our record.

A. "Professor Young added that he would be happy to meet with Mr and Mrs Roberts again."

Okay? So I just wanted that to be clear since you seemed to have been doubtful about it previously.

MR McALINDEN: Mr Chairman, before we move off that meeting, would it be possible for Professor Young to deal with the specific criticisms raised by Dr MacFaul in his substantive report, which is at 238-002-074, paragraph 353 up to 368? That really relates to the advice given to the family by Professor Young, really minuted in page 2, the bottom half of page 2 of the minute.

THE CHAIRMAN: Right. This is paragraph 353 to 369, is it?

MR McALINDEN: Yes.

THE CHAIRMAN: Okay.

A. Do you want me to comment on that?

THE CHAIRMAN: I think Mr McAlinden is suggesting that since these are criticisms made by Dr MacFaul, in which he says:

"Incorrect information was given to the parents."

You see that at 354. Let's see how we get through this. The minute says:

"Treatment today differs from that used eight years ago."

And he says that's not correct.

A. I suppose, chairman, this relates to some of the correspondence and additional reports, which I have sent to the inquiry. They were really a response to various quite specific and direct criticisms, which Dr MacFaul made of the information that I gave to the Roberts family at that meeting. These are really quite substantive issues, which go right back to the clinical issues that were discussed previously.

THE CHAIRMAN: Right. It's this document which was in part at least responsible for the supplementary statement you volunteered.

A. Yes. That's correct. Clearly, I very strongly reject any suggestion that I gave incorrect information to Claire's parents on these points. The first one -- and they relate closely to Dr MacFaul's opinions on the clinical management of Claire with which you said, at the outset, I disagree. I find myself closely aligned with Dr Scott-Jupp.

THE CHAIRMAN: Yes.

A. And strongly in disagreement with Dr MacFaul, who criticised me, I have to say, in some very stark terms originally, using the out-of-date textbook and made very

strong and specific criticisms of the information I gave. And really, I felt I had to respond to that because it was completely unreasonable on his part.

MR STEWART: Do you feel that you have responded in full and on paper?

A. I have responded in full and on paper. What is unclear to me is the extent to which my views are accepted. And in Dr MacFaul's subsequent follow-up, particularly in relation to the initial fluid management, where he quotes from the correct edition of the textbook, he again introduces a number of inaccuracies and omissions by incorrectly -- has the incorrect chapter, refers to sections and quotes around maintaining homoeostasis, which are not in the encephalopathy section at all, but in the section dealing with hemiplegia. I have the edition of the textbook here with me.

THE CHAIRMAN: I have picked up the gist of your response and I think I said to you at the start today that I recognise that the criticism which Dr MacFaul has raised about the initial fluid management on the Monday evening into Tuesday morning is not reflected or supported by the views of the other inquiry experts, never mind others who were actually involved in treating Claire or who subsequently became involved, such as yourself. I think that's the issue which he's

particularly referring to at paragraph 355, isn't it:

"Treatment today differs from that used eight years ago"?

A. He's referring to the initial treatment and then the second issue is: would treat have been different in 2004? It is unequivocally true -- I have no idea how Dr MacFaul can say otherwise -- that a child like Claire coming into the Children's Hospital in 2004 would have received different fluids than she would have done in 1996. I have no understanding of why he has made the criticism. The information which I gave was accurate. I would be happy to talk about it at some length, but I do think I have probably covered it in my written submissions.

THE CHAIRMAN: Yes, I understand, thank you.

The next, 357, is:

"The doctor gave her standard fluid intravenously, which is the textbook recommendation."

And that's where you get into the whole textbook issue.

A. It is and, again, I am happy to go through that. I was very unhappy to see that in his subsequent report he's again wrongly attributed information to Forfar & Arneil, and if you want me to go through that, I'm happy to do so.

THE CHAIRMAN: I've got your point that, even when he goes to the right edition, he goes to the wrong sections.

A. He quotes information about Claire's fluid balance without indicating which section is of the textbook it is in and I only found this out last night, or whenever I was preparing and checking for this appearance today. He does correctly quote from -- we can look at what he said and I can highlight the issues. He does correctly quote from the encephalopathy section, but then goes on and includes a lot of further information from a section about -- I can get the exact wording, but it's about children with hemiplegia or paralysis of half of the body and he doesn't make it clear at all that it's from a different section.

THE CHAIRMAN: Okay. Then 359 is:

"With the sodium level of 121, the doctor responded appropriately."

This is where there's an issue, which is I think you do want to deal with, about what happened when Dr Stewart came along at about 11.30 and found that the sodium level had dropped to 121.

A. I want to be fair to Dr MacFaul -- and let me go back and qualify my earlier comments. I have the 1996 edition of Forfar & Arneil, which is the third printing of the 1992 edition. There is just a possibility that

there has been some other change, okay? So I do want to be fair to Dr MacFaul. There's a scientific disagreement between us, but that's all.

This point about the sodium level at 121 and the response, I think, despite all of the clinical -- I know you don't want to hear this, but despite all of the experts who have commented on what fluids Claire received after 11.30 pm, I firmly believe that they have still got it wrong, for reasons that I'm happy to discuss.

THE CHAIRMAN: Let me correct you on one thing: you shouldn't say "I don't want to hear this" because I've listened to weeks of conflicting evidence, so I'm not hostile to receiving your view, if your view is different, despite the fact that it's different, professor. I'm not cutting out alternative views. In fact, this inquiry would be a lot, lot shorter if I did cut out conflicting views.

A. The inquiry opening, the draft version, which I had seen, attributed certain views to Dr Scott-Jupp about what had happened at 11.30 -- and there wasn't a reference. So I asked and indeed the inquiry kindly provided a reference for his views. When I received that and checked them and looked at it, I was unhappy, not with what Dr Scott-Jupp had said, because I think

he's done a very good job and he's been a very thorough, independent expert to the inquiry. I provided some calculations, which I understand had been submitted to the inquiry, and I'm conscious that maybe people haven't had chance to respond to them.

THE CHAIRMAN: I think we're waiting for a response from Dr Scott-Jupp.

A. Okay. If I can go to where he discusses this issue, and it's in his supplementary report, "request to additional questions".

THE CHAIRMAN: The reference for this is 234-003, it starts at 001. Is that the document? These are his response to additional questions received on 28 May.

A. Yes. And I think if we go down to the next page, there's a discussion here, I think, about the amount of fluid which Claire received. It's right down at the bottom of that paragraph. He runs through a calculation, the total quantity of IV fluids given between 23.00 and 02.00, and he comes up with 173.5 ml, which I think is approximately right.

The critical issue -- and I don't think that any of the expert witnesses have been asked this question or have done the calculation -- is what happened once the staff on the ward became aware of the low sodium level. And that's not at 11 pm; that's at 11.30 pm.

THE CHAIRMAN: Yes.

A. So therefore, the critical issue in terms of Claire's -- what actually happened with Claire's fluids, and this is what I would have felt at the time, it underpins some of the comments for which I've been criticised. The critical issue would have been what volume of fluids did Claire receive after 11.30 pm, not after 11 pm.

Now, if we go -- I'm not sure if we can get up the fluid balance chart.

THE CHAIRMAN: Give us one moment. We're in file 090.

MR STEWART: 090-038-135 and maybe 133.

A. That's correct. So this is the information I would have been looking at whenever I made the comments about Claire's fluids having been restricted, along with the intention, which was stated in her notes, which was to restrict the fluids by two-thirds to 41 ml per hour.

In the amount column there, which is the second column from the left, you have the running total of the 0.18 per cent saline. So what you see, for instance, at 2300 hours, it's 1,014. At 24:00, it goes to 1,037. That indicates that there were 23 ml of 0.18 per cent saline given at that point.

You'll see at 24:00 hours, beside the 1,037, it says "H" in the column, just beside the 1,037. I believe that means "halt" or something like that. Because you

can see that, at 1 o'clock, the cumulative total hasn't changed. So there has been no further 0.18 per cent saline given at that time. And then up until 2 o'clock, you get to 1,070. So you can do the calculation --

THE CHAIRMAN: Sorry, does that mean if 1,037 means "halt", that explains why there's no increase between midnight and 1 am?

A. Yes, I think they stopped the 0.18 per cent saline.

THE CHAIRMAN: Then what happens between 1 and 2 am?

A. They restart it again and Claire receives an additional 33 ml, 1,070 minus 1,037.

THE CHAIRMAN: Okay. You go on with that, please. That doesn't make any apparent sense because she wasn't seen by any doctor at 1 am or about 1 am.

A. It would have been a nursing decision, I suspect, in terms of the fluids that were going in at that stage, based on the medical advice, for reasons I think that may become clear in a moment.

THE CHAIRMAN: Okay. Go on ahead.

A. We've then got the middle column, the amount, that's the midazolam infusion. You can add up the amount of it which is going in. Then we have the phenytoin, which is in the last column. One of the problems and one of the confusions has been that the phenytoin here is not recorded very well. It's in an "oral" column, firstly,

and we know it was given intravenously. But I think on the nursing note, and everyone else has agreed -- and we can call up the reference if anyone wants to -- you can see the phenytoin was administered between 11 pm and 12 midnight.

THE CHAIRMAN: Right. Yes.

A. So that was 110 ml of fluid given between 11 pm and midnight, that's the phenytoin. The issue is how can we work out what happened? Dr Scott-Jupp has calculated and we've looked at that, the amount of fluid given between 11 pm and 2 am. But the critical point when the action was recommended to reduce Claire's fluids was 11.30 pm. So the calculation which needs to be done and checked is the amount of fluids Claire would have received between 11.30 pm and 2 am, which is the last time we have, I think, an accurate ...

THE CHAIRMAN: Do you take 11.30 because that's the timing of Dr Stewart's note?

A. I do, and there is also a note, which says that -- I think at 11.40 -- there was a change in the saline rate to 41 ml per hour.

THE CHAIRMAN: Right.

A. Is that in the clinical notes?

THE CHAIRMAN: The clinical notes, if we go away from this page for a moment, are 090-022-056.

MR SEPHTON: I think it may be on the next page. 090-038-136.

THE CHAIRMAN: Thank you.

A. Yes. That's the 11.40. It was when the point of the -- yes, it was when the potassium was added. So some action was taken then and it's got "41 ml per hour" at that point.

In terms of doing a calculation, I've assumed, because of the clinical time of the low sodium note, that the change would have been made at 11.30. What you then have to do is: we know how much fluids were administered between 11 pm and 12 midnight, and I have assumed -- but I think it's fair -- that half of the fluids would have been administered after 11.30. So in other words, the phenytoin, it says in the nursing notes, was given between 11 pm and 12 midnight. That's the one hour period. My assumption would be that half of it, therefore, was given up to 11.30 and half afterwards.

THE CHAIRMAN: There's inevitably some degree of speculation in this because the phenytoin, as I understand it, didn't start until there had been a phenytoin result, which came back -- and that's one of the issues about whether the phenytoin should have been given at all after 11 or 11.30 because of the level of phenytoin in

Claire's body at the time.

A. I don't know if we can call up the first page of the nursing note.

THE CHAIRMAN: I was looking for the phenytoin record, the clinical note, but we can go on to the nursing note. You're not talking about the fluid chart, you're talking about the nursing note?

A. Yes. (Pause).

THE CHAIRMAN: Let's try 090-040-138, perhaps:

"IV phenytoin erected by doctor and run over one hour."

A. Yes. 11 pm. That's the note "and run over one hour". That's what I felt was the clearest indication of when the phenytoin was administered.

THE CHAIRMAN: Right. Okay. So on that basis, you take your calculation of phenytoin from 11 o'clock for one hour.

A. For one hour. It was 110 ml and 55, therefore, runs in up until 11.30. And 55 runs in between 11.30 and 12. So basically, I have submitted the calculation, I think, but in essence over the two and a half hour period, you end up with 44.75 ml of 0.18 per cent saline, just over 6 ml of midazolam, and 55 ml of phenytoin. That gives a total of about 106 ml of fluid in the two-and-a-half hour period, which is entirely compatible with the

calculation of Dr Scott-Jupp that we started off with, which I think is correct, except he had been asked and had done the three-hour calculation from 11 pm to 2 am.

If you work out the rate of that per hour, then it comes out at about 42 ml per hour, which is almost identical to the rate which had been suggested by the doctors at 11.30. So although I can't know this, my assumption would be that the nurses were adjusting the IV fluids appropriately by stopping the 0.18 per cent saline in order to try to meet the request of the doctors to give 0.41 ml per hour.

THE CHAIRMAN: So you don't think she got too much fluid over this period?

A. Not over this period, no. I mean -- sorry, I believe she got the fluid that was intended by the doctors at 11.30. And this goes back to where we started this discussion, which is the criticism made of me by Dr MacFaul and his persistent statement that after -- when fluids should have been restricted, Claire actually got more fluids, which is what he says repeatedly, than even what she was getting before. That's simply not correct. I firmly believe, as I believed at the time, that her fluids were restricted. Whether or not that was totally the correct action is something that we'll come back to, but certainly the doctors intended her

fluids to be restricted and I believe, through the combined efforts of the doctors and the nursing staff, that that fluid restriction was in fact delivered after 11.30 pm.

THE CHAIRMAN: Well, I'm right, am I, that you said at the inquest that the amount of fluid Claire was given between 8 pm and 2 am was greater than planned?

A. That was the period between -- I was ... I think that was in the -- and we could go to it again if you want. But I believe that's in the transcript of the oral evidence that I gave at the inquest. One of the deficits there is that unfortunately we don't know what questions were being asked. So I believe -- that was something Dr Bingham had said in his statement. I believe I was asked a specific question by the coroner about whether I agreed with that statement, which I did. It's just that I don't think that at 8 pm to 2 am is a critical period. And certainly, in relation to this criticism of me, the question is, "What happened after 11.30?".

THE CHAIRMAN: This is actually your question, Mr McCrea, isn't it?

MR McCREA: Yes, it is, and it turns out historically, yes, it is. I don't wish to give evidence, Mr Chairman, but I think the note, in fairness to all concerned, is

between 8 pm and midnight, the reference being 140-043-008. It's my question.

A. My apologies for that.

MR McCREA: Rather than 2 am, it's 8 pm and midnight, where the professor answered the question. He agreed that it was more than should have been provided between those two times.

A. I think we don't actually know what the question was, do we?

THE CHAIRMAN: Well, sorry, we do have on this page -- this is a question and answer. Does this come from a Brangam Bagnall file?

MR McCREA: Yes.

THE CHAIRMAN: If you look at this, professor, at the middle of the page that's on screen, it says Mr McCrea -- that was Mr McCrea who's just been on his feet here, who was the counsel representing the Roberts at the inquest -- and he refers to what Claire's prescription was:

"491 ml between 8 pm and 2 am. 458 ml in four hours, 114.5 per hours, which is far in excess of her prescribed level of 64 ml per hour. Is this not an excessive level of fluid? Is this fluid overload?"

And you say:

"This is not easy. No accurate record of vomit/urine, nor its sodium sent. I agree: amount of

fluid between 8 pm and midnight was more than prescribed, but various medications were given during that time."

This is a note which was made in the Brangam Bagnall file, Brangam Bagnall representing the Trust at the inquest.

A. So I haven't any reason to doubt that for the period between 8 pm and midnight. I think that's probably correct. However, I go back to the fact that this criticism of me is not about the period between 8 pm and midnight, it's about what happened after 11.30 when a decision was made to restrict Claire's fluids and the allegation being that I gave inaccurate information to Claire's parents and have persisted in doing that.

But you know, what I'm attempting to show is that, at the very least, it's something I genuinely believe and can argue from the evidence; I think the other experts have not really considered the question of the timing properly or haven't been asked the correct question.

THE CHAIRMAN: Do you agree that there are difficulties in putting this record together to see exactly how much fluid Claire was receiving at different times? There is some level of detective work involved in it.

A. I absolutely agree, and I'm not being critical of the

other experts involved here. I certainly don't intend to be. I suppose all I'm trying to show is -- I myself was subject to, again, quite significant criticism --

THE CHAIRMAN: Right, your point is that, at the very least, the evidence is not sufficiently clear to say that you gave Mr and Mrs Roberts incorrect information at that meeting?

A. Absolutely, but more importantly for the inquiry, because this is something that's become perpetuated, and we talked earlier about how errors become perpetuated within medical records, and I just think because I genuinely believed from the records, for the reasons I've explained, that Claire's fluids were restricted. I just don't want an error to persist in the inquiry and the various papers as a result of that.

THE CHAIRMAN: Okay, thank you.

I think that that doesn't quite finish us with the note that Mr McAlinden wanted your reply to. Could you give us, please, 238-002-074 and 075 again?

We had been looking at 359 about whether the doctor had responded appropriately with the sodium level at 121.

A. Yes. So I'm -- so there were two aspects to that, okay? One was the rate of infusion, which I have addressed. The second aspect to that was to change the sodium level

of the intravenous fluid, which is something that Dr MacFaul says should have been done and which, therefore, I was wrong in relation to my comment. So I think I need to address that second aspect of it as well.

THE CHAIRMAN: Okay.

A. So I think, again, there are two aspects to this. One is what was intended to be done and, secondly, what actually happened. Probably the easier to deal with, first of all, is what actually happened, given the calculation which I have been through with you already. The 106 ml of fluid, which I think Claire received between 11.30 pm and 2 am, included 45 ml approximately of 0.18 per cent saline, and the remainder was made up of the drugs midazolam and phenytoin.

We know from previous evidence that both of those were given in normal saline. Therefore, Claire received predominantly normal saline between 11.30 and 2 am. You can do a calculation to work out the net effect of the sodium content of the total fluids that are received, and I'm sure Dr Scott-Jupp or Dr Aronson, perhaps, could be asked to do that. And according to my figures, you come out at roughly about 0.6 per cent, so certainly it's above 0.5 per cent saline, so effectively she did in fact receive fluids with a higher sodium content

after 11.30 pm, although I accept that that was not what was intended or decided by the doctors at the time.

THE CHAIRMAN: That was the effect of giving the additional drugs?

A. Yes, it was the effect of the drugs being in normal saline --

THE CHAIRMAN: Yes.

A. -- and also, the impact, I have to say, of the fact that her 0.18 per cent saline was greatly reduced and indeed stopped for an hour, according to the fluid balance chart. So it was the combination of the two.

THE CHAIRMAN: It's a bit hard to see how the decision was taken -- and I don't think we've heard evidence that anybody did take a decision to stop the fluids for an hour at all. Because in fact, one of the big concerns is after 11.30, when Dr Stewart left and was hoping and expecting that Dr Bartholome would attend sooner rather than later, in fact she ended up not being able to attend at all because I assume she was dealing with another emergency elsewhere and there was no further clinical treatment or intervention with Claire between Dr Stewart and then Claire's arrest.

A. I know, and I have also been keeping up with the evidence as much as I can and I also haven't been able to see any reason for that. I'm happy to say that I'm

speculating if I say that it was a nursing action in an effort to try to meet the decision of the doctors to restrict the fluids to 41 ml per hour. So the nurses were recognising that drugs were going in and that perhaps there had been -- that otherwise there was a risk of too much fluid being given. But I mean, I freely admit that is speculation on my part.

THE CHAIRMAN: You would say it's speculation which is based on the volume between midnight and 1 am not increasing?

A. Yes. It's clear that there wasn't any additional -- and I understand that the "H", which I was puzzling over -- somebody in the Children's Hospital should give evidence on this -- but I understand the "H" was a signal that it was stopped, but I don't know that directly.

THE CHAIRMAN: And you would say the "H" fits in with the fact that the total didn't increase?

A. Yes. But people who are working routinely in the Children's Hospital at the time would have to be asked about that "H" and if it means something to them. I'm not certain.

That's what was the impact of what Claire actually received after 11.30 pm.

THE CHAIRMAN: Sorry, it's curious that Dr Stewart -- I'm looking back through his evidence when this was raised. His instinct was to reduce the volume of fluid, but also

to increase the sodium level. Dr Bartholome agreed with him on the first, but not on the second, at least pending her arrival, which didn't materialise. He thought that Claire's total fluid had increased because of the Solution No. 18 continuing at a rate of two-thirds and the phenytoin being introduced over the next hour. So if that didn't happen, it can only be because the fluid was stopped for an hour?

A. Yes, which it appears to have been stopped for an hour, from the fluid balance chart.

THE CHAIRMAN: Okay.

A. As I say, you know, my calculations add up exactly the same as Dr Scott-Jupp's, except I've just taken the extra half hour out of the calculation.

THE CHAIRMAN: Okay.

MR QUINN: Could I ask how that fits with the Claire Roberts timeline, which is 310-001-001? Because when we put the purple graph of the midazolam infusion on top of the blue line of fluids, you can see how it tended to raise the fluid at the end of the graph. Perhaps the doctor could be asked to explain his findings in light of the graph and tell us whether or not he agrees with the graph.

THE CHAIRMAN: But I think is the professor not making a point which hasn't been made before, that the IV fluid

may have been stopped for an hour?
MR QUINN: Yes, that's why I want to know what is the answer in relation to -- no one has yet criticised the graph line as it rises to the right of the page. And when one puts the midazolam infusion on top of that graph, you see how it lifts the original graph up to the dark blue line above, and I just want to know what the professor's reaction would be in relation to whether or not -- can we now rely on this graph or do we not now rely on this graph?
THE CHAIRMAN: If the professor's right that the IV fluid was stopped, then the graph is wrong.
MR QUINN: Yes.
MR SEPHTON: It's not the same, is it?
A. It's the same, yes. I haven't really seen this graph before. But I take it that the dark blue line at the top is the -- is that the total fluid?
THE CHAIRMAN: If you look at the legend at the top, it's "cumulative fluid".
A. The interesting thing is that you see, between midnight and 1 am, that that graph levels off --
THE CHAIRMAN: Yes.
A. -- at the top. And that reflects the cessation of the saline, which is recorded on the fluid balance chart.
THE CHAIRMAN: Right.

A. The graph between 11 pm or 23:00 and midnight is indeed steeper there and that's reflecting -- that portion of it reflects the administration of the phenytoin, which was given over that one hour. I suppose the point I'm making -- and indeed it's the grey line, I believe, at the very top that crosses the dark blue one, the grey arrow that goes down, that's the key point after which the calculation needs to be made. That fits with the -- that's 11.30, which is what it's saying on this chart, that the fluids were reduced at that point.
So although I haven't studied this in detail -- and it's a complex graph -- my initial reaction is that it fits with exactly what I've explained.
THE CHAIRMAN: The question is: does it get there by the same route or a different route?
A. I guess I'm used to looking at complex graphs in my world and my initial reaction is that it fits. I would have to look at the midazolam at the bottom because it's ... If I interpret the midazolam at the bottom, it also stops, according to that graph, at midnight.
THE CHAIRMAN: I think it continues --
A. Does it? Because it's levelled off in the graph. The midazolam line is the bottom one.
THE CHAIRMAN: Yes, but it doesn't stop. It doesn't stop at midnight.

A. Is that meant to be a cumulative total or not?
THE CHAIRMAN: The only cumulative total is the dark blue.
A. So what's the scale then, I wonder.
THE CHAIRMAN: The midazolam at the bottom, that sort of purple line that you've referred to there, that is a sign of it continuing to be administered.
A. But I suppose what is the scale? As somebody who's used to looking at graphs, you expect a scale, and I can't see any scale which is relevant to that midazolam line because the left hand axis, the left hand vertical axis is fluid input, which seems to be a total, and the right-hand axis is the Glasgow Coma Scale. So my reaction is that the midazolam appears to be there without any scale to indicate exactly what it means.
THE CHAIRMAN: Right.
MR FORTUNE: Sir, I'm having a bit of difficulty trying to understand the purple line because I'm just looking at the fluid balance chart, 090-038-135. Taking on board what the professor has said about the halting of fifth-normal, looking at the midazolam, we have got an increase at 11 o'clock from 13.9 to 16.8 at midnight to 19.3 at 1 o'clock, and yet the purple line is effectively flat from midnight to 2 o'clock. Yet the cumulative total, the light blue or dark blue line, the

top blue line, seems to show something of a small increase between midnight and 1, unless I'm misinterpreting it as a straight line, but certainly an increase thereafter. So is the graph accurate, firstly so far as the midazolam is concerned and, therefore, if it's not, does it throw out the cumulative line? I'm looking at Professor Young and there's a nod.
A. Definitely the midazolam line is not right because I agree: (a), it doesn't appear to have any axis or scale to reference it to so you'd expect a scale that shows the ml per hour; and (b) it makes no sense at all that it's flat because clearly, from the fluid balance chart, the midazolam infusion was continuing, if it's a cumulative total, which I think it is from the shape of the line.
MR FORTUNE: Is it possible, sir, that the cumulative fluids could exclude the midazolam? But if so, why should that be?
THE CHAIRMAN: That wouldn't make much sense, would it?
MR FORTUNE: No.
THE CHAIRMAN: One of the points that was made before is that the midazolam was given intravenously and then given in normal saline.
MR FORTUNE: Well, I accept that, but of course, as Professor Young has agreed, the midazolam line is flat

after midnight until 2 o'clock.
THE CHAIRMAN: Okay. Well, we may have to come back and look at that. We've gone into this, professor, because you have a particular issue about this specific criticism of information given to Mr and Mrs Roberts at the meeting.
A. Yes.
THE CHAIRMAN: As indicated by Dr MacFaul. Okay.
A. I mean, I don't know -- so I've addressed what actually happened in terms of the fluids which Claire was given. I suppose we need to talk about the question of the decision and why I felt -- why they did or did not increase the sodium content of the fluids.
THE CHAIRMAN: Well, we have the evidence that Dr Stewart, who seems to have identified the problem very clearly at 11.30, his instincts was to do that and Dr Bartholome, in effect, advised him not to, but she was expecting to go and see Claire very soon afterwards.
A. Whenever I looked at the notes in 2004, and I don't want to be at all critical of Dr Stewart here, but he's kind of been held up as an exemplar of accurate identification of the problem and recording of what should have happened.
THE CHAIRMAN: You're going to be the first person at the inquiry to suggest he might not be.

A. Yes. I think he responded entirely appropriately for an SHO at his stage, but the idea that that this is a model response to identifying a patient with a sodium of 121 is just not correct. So looking at it -- you know, whenever I teach this to the medical students, there are certain key things I would have expected ideally, as an ideal response, that would have been recorded. And the first would have been an estimate of Claire's volume status. So whenever we approach somebody with a low sodium, the key clinical question, when I get phoned up at 3 in the morning because somebody's sodium is 115, I want to know from the doctors, are they dehydrated, are they fluid overloaded, which means that they have oedema or swelling, or do they appear to have normal volume? And we refer to that as being euvolemic.
It's clear, I think, from the notes -- and nobody has suggested that Claire had any evidence of oedema. My understanding of the Adam Strain case is that Adam did have swelling and/or oedema with clear evidence therefore of fluid overload.
THE CHAIRMAN: Yes, there was some debate about the extent of puffiness, as it was described, but there was evidence of some puffiness.
A. Yes. It's clear Claire, from all of the records, didn't

have that sort of fluid overload, so she would have been described as euvolemic, meaning that she didn't appear at all puffy and probably that she didn't appear dehydrated either. So rather than Dr Stewart writing "query fluid overload", what I would have been looking for would be "euvolemic", which was in fact the case. And then sending off the urinary electrolytes and the urinary osmolality.
THE CHAIRMAN: Sorry, euvolemic means that --
A. It means having a normal volume, not being fluid, overloaded in the sense of being puffy and not appearing dehydrated. That's critical because -- and then you need the urinary sodium and urine osmolality. That's the other key investigations. You don't need at this stage a blood osmolality. I know Dr MacFaul referred to that. The use of a blood or serum osmolality is to rule out a condition called pseudo-hyponatraemia, which hasn't really been mentioned to date, I suspect, in the inquiry.
THE CHAIRMAN: No, it hasn't.
A. It's a condition where there's interference with the laboratory measurement of sodium, so you get a falsely low sodium in the laboratory. It was something that was mentioned by Dr Bingham in the inquest was a possibility and I intervened to say, no, that I didn't think it was

the case. It's due to very high levels of lipids or protein in the blood, and you get a normal serum osmolality when you measure it with a machine in the laboratory, but you're calculated osmolality is low. Dr MacFaul did refer to the calculation of osmolality. He didn't give the exact formula, but it's twice the sodium plus twice the potassium plus the urea, which are the main osmotically active substances in the blood.
So you do the calculated osmolality and the measured osmolality. They're normally very, very similar. If there's a difference, then it raises the possibility of a pseudo-hyponatraemia, which is absolutely not relevant here. I wouldn't have asked for a serum or blood osmolality. In this case, I didn't think it did anything useful. But the urine osmolality and the urinary sodium are critically important to understanding the cause and they were the key investigations. So I'd have been looking for somebody -- ideally, at a junior level, in a perfect world -- to at least say "euvolemic" and then say "urinary electrolytes and osmolality" as the next step, and then the third step is: do we need to increase the sodium content? That has to be considered.
Dr Stewart clearly did consider it. So whenever I looked at it, what are the thoughts that should go through your mind, what are the considerations in terms

of doing it, and then what do you actually do? The consideration is whether you think the hyponatraemia is causing the neurological symptoms. In Claire's case, the coma and the possible seizures, as they were felt to be seizures, or non-seizure epileptic activity at the time.

When I reviewed the notes in 2004, I looked at it and said, "Here are some junior doctors dealing with a seriously ill child and they've been told by a consultant paediatric neurologist that she has non-fitting status epilepticus, an unusual but serious condition, and that maybe she has a viral encephalitis, another relatively uncommon, serious condition. She has been, I felt, neurologically stable", and I'm sure we'll come back to this. Then we get this sodium result.

The question in their minds is: is this sodium result causing the symptoms or are these other conditions, which we've been treating all day, are they a sufficient cause of her symptoms? If you conclude these neurological conditions, these underlying ones, are a sufficient cause of her symptoms, then I would have said restricting her fluids is the right thing to do and that's all you do.

If, on the other hand, you think: hold on, this low sodium might be causing the neurological symptoms, we

don't have enough from these other clinical conditions, then you have to take urgent action to raise the sodium. Now, what does that entail? Well, I know various things have been discussed, but certainly at the time, if I'd been asked -- and I believe this goes back to what's in the Arieff paper, even -- you would have given hypertonic saline. Now, that in practice in the Royal, at that time, would have meant 1.8 per cent saline, which was the usual form of hypertonic saline that would have been used. To give hypertonic saline in low sodium in that era would have been very, very unusual and uncommon. The junior doctors probably had negligible experience of it.

THE CHAIRMAN: And even the registrar?

A. Even the registrar -- I think we would have to ask -- but probably would have had negligible experience. In that era, that's one of the things that would have been escalated to me quite often or I would have thought would have had to go to a consultant if you were thinking of doing it.

THE CHAIRMAN: That's one of the points, isn't it?

A. Yes.

THE CHAIRMAN: What seems unavoidable is that at about 11, 11.30, when the sodium result came through, there should have been a more serious engagement of a number of

consultants.

A. What I thought happened is that the junior doctors, whenever I read the notes and looked at them, decided -- and I felt it was a not unreasonable decision given what they had been dealing with all day -- that the status epilepticus and encephalitis were enough to explain the neurological symptoms. They didn't think that the low sodium was making a contribution and if you don't think it's making a contribution, you don't give hypertonic saline, because that in itself has risks associated with it, which again I know will have been mentioned at least by the pathologists in terms of central pontine myelinolysis.

Whenever I looked at the notes in 2004, when I was doing a chart review, that was the chain of events that was in my mind. That's why I felt that they had taken appropriate action, in my judgment, at 11.30 pm.

To go back to the issue of what they might have done, considered giving hypertonic saline, there have been several references -- and Dr Scott-Jupp addressed it, Dr MacFaul has addressed it as well, and this is one point where I would differ with Dr Scott-Jupp a little. Whenever this was discussed with him, he said he would have increased the saline to 0.45 per cent or maybe 0.9 per cent, believing that Claire had SIADH, which is what

I think was also the cause of the hyponatraemia.

Dr MacFaul just talks about increasing the sodium content of the fluids. I don't actually know specifically what he means by that. I would have said: no, it's hypertonic saline. Dr Scott-Jupp said he would very rarely have given hypertonic saline -- I think almost never, in his evidence. And the problem is -- and I wouldn't even necessarily expect a consultant paediatrician to know this -- that in fact in SIADH, if you give half-normal saline or normal saline, it seems intuitively as if it's going to bring the sodium up, but it doesn't. It's more complex than that. That was known at the time. I had mentioned this book, this was the book I was using at the time, it's a very specialised textbook dealing with acid-base and electrolyte balance. It wouldn't have been able in the Children's Hospital, I'm sure. It describes the evidence, the mechanisms, by which giving even normal saline will not raise the sodium in SIADH. They're quite complex, but I'm happy to provide the evidence if it's of interest. That's reiterated in more modern reviews. That's why we give hypertonic saline.

That information would probably only have been known to a real specialist in this area in the early 1990s and possibly even today. I suspect a lot --

THE CHAIRMAN: Are you talking about somebody like Professor Trimble?
A. Not Professor Trimble, no, I don't think so. The reason being Professor Trimble is a very, very good doctor, but she specialised in the inborn errors of metabolism. In terms of these electrolyte problems, that was not an area where she would have had particular expertise or experience. And I recall her asking me to go with her once or twice to see children with electrolyte problems.
THE CHAIRMAN: Mr Fortune?
MR FORTUNE: Sir, can we be very careful? It's sometimes difficult to differentiate when the professor talks about hypo- and hypertonic. There's a reference back on line 8 of that page to "hypotonic":
"That's why we give hypotonic [sic] saline?"
Is that what you meant?
A. Can I see that? I'm sure it's not. I'm sure I mean hypertonic.
THE CHAIRMAN: The one thing we can't get for the witnesses is the running transcript. But thank you, Mr Fortune, we can correct that.
A. I have not used the phrase "hypotonic saline"; I have only talked about hyper.
THE CHAIRMAN: We'll get the transcript corrected so that where it says at page 152 [draft], line 8:

"That's why we give hypotonic saline."
That can be corrected to "hypertonic saline".
A. That has to have a higher sodium concentration than 0.9 per cent. The key is that the osmolality of the fluid you administer has to be greater than the urinary osmolality in order to bring the serum sodium up. And usually, normal saline even won't achieve that, which is why it needs to be hypertonic in the acute management and that's reflected in all our current guidelines, the regional ones and the ones that are used internationally, and also was known, but just, I think, to a small group of experts in the early 1990s.
THE CHAIRMAN: Let's go back to the night of 22 October 1996. It's Tuesday night. It's about 11.30. This reading has come through, giving Claire a sodium level of only 121. She has not appeared to be responding positively to the drug regime which has been administered to her. Dr Stewart is called to see her. He thinks he was called to see her because the phenytoin response level came through and, coincidentally or otherwise, the sodium level came through as well. He then takes or suggests some action and speaks to Dr Bartholome. She's expecting to come along, but doesn't. I will take it that she didn't because I know that she's working overnight under the what seems to me

to be ridiculous regime in the Children's Hospital as the registrar. There's an issue about whether Dr Steen might have been contacted at that time. There's an issue about whether Dr Webb might have been contacted at that time. There's an issue about whether PICU might have been contacted at that time. But we know the end result is that none of them is contacted and the next clinician directed to Claire found her to have arrested and, at that point, it's too late for anything to be done.
A. Mm-hm.
THE CHAIRMAN: At that point she's beyond help.
A. Unfortunately, yes.
THE CHAIRMAN: Do you have a view about her being beyond help at 11.30?
A. This was one of the things which I found most difficult whenever I was asked about this previously. I think I was and it may come up in the response to the Roberts' questions. I thought that probably, even at 11.30, the process was likely to be so advanced that it was not easily recoverable. However, there is a chance, I would have to say, that if other thing had been done then, that it might have been. And the problem to me, at that stage, whenever I looked at it -- and the other thing would have been giving, I think, hypertonic saline, and

I know that's not what expert witnesses have said, but based on my experience that is the thing, if I had been phoned that night -- which is not likely, that is what I probably would have recommended or suggested.
But I understood completely why it hadn't been administered. I felt the decision not to do so, for the reasons I've explained, was an appropriate one.
THE CHAIRMAN: Okay. Thank you very much.
MR McCREA: Mr Chairman, could I go back to the issue about fluid overload?
THE CHAIRMAN: Yes.
MR McCREA: Because I think the point that Mr Roberts was trying to make much earlier is that the notes and records aren't accurate. Secondly, if one takes the period from 11 pm to 12.30 pm and looks at the amount of fluid that Claire, in fact, did receive, you find she received 110 millilitres, I think, of phenytoin. She received 23 millilitres of Solution No. 18, and then received 2 or 3 ml of the midazolam. Divide that, which is 136 in total, over an hour and a half, and you are receiving 90.6 in that period of time, which would be twice plus something more than she should have been receiving. So it very much depends on when the decision was to restrict fluids.
THE CHAIRMAN: It depends what your time period is.

MR McCREA: It does.
A. I completely accept that, and I'm sure that that calculation is correct. But I've outlined why I've gone from 11.30 pm based on the clinical record, and certainly in 2004 -- because this in part comes back to the criticisms that were levelled at me by Dr MacFaul because of the information which I gave. I hope at the very least that people will appreciate that I have done my very best to give accurate information and the rationale for doing it.
THE CHAIRMAN: I understand your point.
MR McCREA: Mr Chairman, the second point is in relation to the accuracy of the notes and instructions that been given. If you decide "H" means halt, then why is it that the fluids are re-commenced?
A. If I can comment on that? I am not saying for certain at all that the "H" means halt. That is speculation on my part. Otherwise I don't know what "H" means. Somebody who works in the Children's Hospital would be a better person to ask about that. It is, however, indisputable, I think, from the fluid balance chart that the fluids did stop between the -- the saline stopped between midnight and 1 am.
THE CHAIRMAN: If the entry at 1 o'clock is correct, then nothing was given.

MR McCREA: Depending on what time you start the calculation and stop it, you can make whatever you wish of the figures.
THE CHAIRMAN: Well, I don't think that Professor Young's been quite so random as to make whatever he wishes out of it.
MR McCREA: No.
THE CHAIRMAN: He's offering an alternative interpretation of records which are imperfect and bringing together some strands of evidence to support the analysis he's given. It's not the only possible analysis, but it's an analysis.
A. I accept that. For me, what this comes back to -- of course, if it helps the inquiry, then I'm very happy. But it comes back to the specific criticisms levelled at me by Dr MacFaul, which I think are not justified at all.
THE CHAIRMAN: Okay.
MR FORTUNE: I'm just rising at this stage -- this is the first time we've actually heard any evidence of there being the "H" there on page 090-038-135. There are, of course, the signatures of two nurses, Murphy and McCann, against the relevant lines.
But more to the point, I was going to ask you to draw Professor Young's attention to 090-022-057, which

is the entry made by Dr Steen. Because if you recall, Professor Young was telling us about the formula as to how to get the urine osmolality. And if Professor Young looks down the left-hand column, the relevant information is available. I know it's a little while ago, but this is the result of the test recommended or sought by Dr Stewart.
THE CHAIRMAN: Agreed?
A. Agreed, yes. Yes, the urinary osmolality -- I'm just looking for the urinary sodium.
MR FORTUNE: 249 is the urinary osmolality.
A. That's the urinary osmolality; I'm just looking for the urinary sodium, which is the other key thing I'd have wanted at the time. That's the only thing which is missing, I think.
THE CHAIRMAN: Okay, thank you. Have we finished then that -- this all seems like a while ago. Can you give us again 238-002-074 and 075?
MR McALINDEN: I think, Mr Chairman, there's only one further substantive criticism relating to Professor Young. That would be at paragraph 362 on page 075.
THE CHAIRMAN: This is the point about the CNS observations?
MR McALINDEN: Yes.
A. Yes, and I think the question relates to my -- the

information I said about Claire's CNS observations having remained stable over a period of time. I guess I probably don't need to go over that evidence, which seemed to me, whenever I submitted it, to have been taken on board. Again, I would say that, because of my work internationally, one of the things I have is a working group that reports to me on measurement uncertainty. So this is an area that I have a --
THE CHAIRMAN: As to whether you give a 1 or 2 or a 3 or a 4?
A. Yes, basically. It's not directly Glasgow Coma Scale related, but that was why I was aware of the issue around measurement, variability relating to it. The question of clinical signs or further deterioration, I know that's been put to a number of experts. My honest interpretation of the notes when I looked at them was that Claire had been seriously ill but stable for most of the day. That was in keeping with my experience of hyponatraemia in children and the fact that often, when things deteriorate badly, it can occur quite quickly and suddenly. So in a sense, that didn't come as a surprise to me. And the question has arisen of whether I accept there was a failure of Claire to improve, despite being given various treatments. I didn't interpret that as lack of stability. If other

experts have done so, then I accept that. But again, just making the point that I made a true and honest assessment of what I felt her condition was and that was the entirely independent information I gave to her parents.

THE CHAIRMAN: Okay, thank you. Mr Sephton?

MR SEPHTON: Sorry to delay matters still further. The professor has told us that his view was that this problem was based on SIADH. I wonder if the inquiry would ask the professor whether that's in contradistinction to fluid overload, and if so, what his reasons are.

A. Well, I know these terms have been used quite a bit and, as somebody approaching this from the position, I think, of an expert, I've been slightly unclear what is meant by "fluid overload" whenever it has been used by some other witnesses. I classify hyponatraemia, as most modern reviews other experts would do, into hypervolemic, euvolemic and hypovolemic hyponatraemia. I associate fluid overload with the hypervolemic hyponatraemias, which typically occur in somebody with heart failure or liver failure -- and Reye's syndrome may have been raised in that context, or renal failure, where you get oedema or swelling of the body, and it's due to the escape of fluid out of blood vessels in

between cells where it causes oedema or swelling.

SIADH, in contradiction, is a euvolemic hyponatraemia. It's sometimes described as a volume-expanded state, so there is some retention of fluid, but the fluid is retained within the blood vessels, which become dilated or expand somewhat to accommodate the greater effective circulating blood volume. So whenever I think -- the question in my mind is: if Claire did not have SIADH, given the fluids that she received, is there any possibility she would have developed hyponatraemia? And my answer to that is: no, no possibility at all. The fluids that she gave [sic] were at the recommended maintenance level for a child or slightly more. In the absence of SIADH, I do not believe she could have developed hyponatraemia unless there was cerebral salt wasting, which is another condition I have mentioned, but which I think is a good deal less common and would be much less likely, but it would have formed part of my differential in somebody with neurological disease and hyponatraemia at the time.

THE CHAIRMAN: But again, is there a question of degree about the extent to which the hyponatraemia develops because of the ... You're saying unless she did have SIADH, hyponatraemia would not have developed?

A. Without SIADH, yes. Absolutely.

THE CHAIRMAN: Which is perhaps different from Adam's case, which you may or may not know about.

A. I know a little bit about Adam's case. My understanding of it -- and forgive me if I'm wrong -- is that in Adam's case it was definitely a hypervolemic hyponatraemia and was due to fluid overload in the presence of the inability to excrete water. In Claire's case, she would have had normal kidney function. Something was stopping the water that was retained within the blood vessels -- something was stopping it being reduced. That can only have been SIADH.

THE CHAIRMAN: It was accepted in Adam's case that there was a miscalculation of the appropriate amount of fluid to give him intravenously before and during his operation.

A. Yes.

THE CHAIRMAN: So that gives him quite a distinct type of hyponatraemia in contrast to Claire.

A. In my opinion, yes, and from I know of Adam Strain's case, yes, completely distinct, in a separate category. That may not be true of some of the other cases and Claire, but certainly Adam.

THE CHAIRMAN: Thank you. Mr Stewart?

MR STEWART: Thank you.

THE CHAIRMAN: Where were we?

MR STEWART: We were in the aftermath of the meeting of

7 December and Mr and Mrs Roberts write their letter on 8 December, setting out responses and a series of questions. And that's at 089-003-006. I understand that this letter was then circulated to yourself and Dr Steen and Dr Rooney started to draft a response and then circulated it and you all made contributions and tried to address the questions.

A. Yes.

Q. If I could take you to 139-139-001. We have part of an e-mail trail where you are discussing the various contributions. From the bottom, reading up, there's one from you:

"Dear all, having reviewed this draft, I have made a few minor changes, which I have highlighted in green, and I have called this version 'draft 3'."

Then above it, there's an e-mail from Heather Steen:

"Have done a few slight changes -- for example 'November' ... Peter Walby spoke to me yesterday. He needs the notes for 24 hours to photocopy and send to a paediatric anaesthetist in GOS who the coroner has asked to review the case. He also wish to see this letter. Heather."

Above that, from Nichola Rooney on 11 January. And she refers to the draft as having reached its final final draft stage. So there was quite a lot of activity

between you to put together a response.
A. I think the activity, as recorded -- and again I'm only working off the e-mail exchanges -- isn't really between us all, in fact, is it? Because I'm just looking at the page there and the e-mail from me certainly goes to Nichola Rooney, Michael McBride and Heather Steen. The one above from Heather isn't copied to me.
Q. Yes. Presumably you would not seen this note that's scribbled on it in the upper right-hand side, which is initialled "APW" and comes from Mr Peter Walby of the litigation management office.
A. I certainly don't believe I've seen it prior to the papers being circulated to the inquiry.
Q. Did you know that the litigation management office was being included in the process of drafting a response to the Roberts' letter?
A. I have no recollection of that at all. It's several years ago and clearly I was aware of Mr Walby's involvement subsequent to meeting with the Roberts family and before the inquest because I met with him on one occasion and had some correspondence, but I can't recall if I was aware at this stage or not.
Q. Well, he's involved himself to the extent that he's making comments and if you read down through it, he asks Nichola Rooney:

"Please ensure I get a copy of the final letter. I will need to send it with the questions to HMC [Her Majesty's Coroner]."
Were you aware that the responses you were drafting were going to the coroner as well?
A. Again, I can't say at that stage, but from the records that I've seen, the correspondence, I suspect I wasn't aware of that, but I honestly don't know.
Q. I was going to go through some of the responses with you in some of the same vein as we went through the minute of the meeting. Some of the same inaccuracies crop up.
THE CHAIRMAN: Could we break now until 4.05 and see how much more we can get through? Thank you very much.
(3.55 pm)
(A short break)
(4.11 pm)
THE CHAIRMAN: We're looking at the response to the points raised by Mr and Mrs Roberts.
MR STEWART: Thank you, sir. If I can bring up the relevant page of the Roberts' letter with the questions on one side of the screen and the responses on the other, it might assist. First of all, 089-003-006. And on the other side of the screen, 089-006-012.
Really, the observations that I wish to take you to, Professor Young, are that in some respects the responses

given were inaccurate. There were small errors of inaccuracy creeping in, in many cases the same inaccuracies as crept into the minute of the meeting. And in other respects, I was going to suggest that the responses were perhaps superficial and perhaps even misleading and some of the questions posed weren't answered. So that's the sort of terrain we're going to cover.
A. We'll have to cover those points specifically one at a time.
Q. Of course. The first is the small inaccuracies, and here we have question 1 on the left-hand side:
"What was Claire's initial diagnosis on admission to the hospital?"
That is answered, we can see, at 1(a):
"Claire arrived at A&E at 8 pm on the evening of Tuesday 21 October and the history given to staff was that she had been vomiting as school that day."
It's the same point again. Little errors.
A. I wonder, just before going on to this, if we could maybe move a back a little to the process by which the response was constructed, which I obviously have been trying my best to understand or reconstruct. So I think what you said to me -- and I agree with -- is that Nichola started off by doing a rudimentary response

without any of the medical evidence.
Q. Yes.
A. Since she had no relevant qualifications to provide that. And it was then circulated, I suspect, to a group of people, probably Dr Sands, Dr Rooney and myself. I'm not sure if we know that.
Q. I'm not sure Dr Sands had any input. If it was circulated to him, I'm not sure he responded.
MR FORTUNE: I think Professor Young means Dr Steen because it's Dr Rooney's letter.
A. Apologies. It's been a long day and I'm struggling a little bit. I meant Dr Steen and we don't think Dr Sands.
MR STEWART: Dr Rooney, yourself and Dr Steen had an input and, it seems, Mr Walby.
A. Okay. Then we would have drafted in or filled in parts of the answers. My belief is that Dr Steen would have completed and responded to those questions which were part of the clinical journey, which she had dealt with in the initial meeting, and I would have responded in relation to those questions related to fluid and electrolyte balance. I'm not sure if that can be reconstructed from the drafts. I received the drafts in black and white and I'm told that there were colours in them and thought that it would have probably been

possible to see exactly what parts I contributed to the answers.

Q. In any event, the suggestion has to be made to you that if you were conducting any sort of an attempt to properly answer these questions and you were having an input, you should have been checking them completely.

A. And I accept that point and am happy to apologise for the fact that I would have focused here, I believe, on those questions where I felt I had input. I don't know if I had the charts at this stage or not. Very possibly, if I had been doing it, I would have been working off the minute partly, and we've already discussed this concept that errors tend to be completed.

THE CHAIRMAN: So if the factual errors in 1(a) themselves can be traced back to the earlier documentation, that's the point we covered just before lunch today, isn't it, it doesn't inspire confidence in the family; it makes them wonder if anyone is taking their daughter's death seriously. And that's something that, particularly in the circumstances of Claire's case, being referred to back by Mr and Mrs Roberts to the Royal eight years after her death, it makes it even more regrettable that that happened at all.

A. Clearly, I regret that significantly and any oversight on my part in relation to allowing those errors to

persist is something I'd like to apologise for.

MR STEWART: I was thinking that a poor impression will be formed. When the parents, Mr and Mrs Roberts, can have no confidence in that level of detail, their confidence in the rest of it may be undermined. You appreciate that as a --

A. As a point, yes, I do appreciate that. However, what I can assure you is, certainly in terms of my contribution to the letter and its content, that I was determined to answer the questions as fully as I could and to the best of my ability.

Q. What about question 4? On the right-hand side, can we bring up 089-006-013? Question 4 is posed on the left:

"Claire's medication was very important and aimed at controlling her seizures. Without this medication, her condition could have deteriorated more rapidly. The combination of drugs should not have had an adverse effect ..."

Sorry, that's the answer. The question was about the administration of the drugs and whether the mixture could have had a worsening effect and whether the medication should be stopped and so on. The answer at 4 on the left is that it was very, very important, aimed at controlling her seizures and, without it, her condition would have got worse:

"The combination of drugs should not have had an adverse effect on sodium levels."

Given what we now know about the possible overdoses of phenytoin and midazolam, I would suggest that that seems to indicate that there was a failure to review the drug records.

A. As you're fully aware, and I have commented on earlier, we had not recognised the presence of the overdose with midazolam and phenytoin. I've explained why I would not have noticed that. I have highlighted the fact that I think it was a difficult thing to spot in the light of at least four independent external paediatric experts too, with the inquest too, with the coroner failing to identify it. So it was an honest and true response at the time, based on our knowledge, but I accept that we had failed to identify the overdose of the drugs.

Q. Were you really relying upon Dr Steen to fill in that part of the response?

A. As you'll appreciate, it's very difficult, at this distance, to reconstruct it. I had thought today it might have been possible from the colours on the drafts if we had those, but from memory I would say almost certainly that I would have contributed the last line:

"The combination of drugs should not have had an adverse effect on sodium levels."

THE CHAIRMAN: That would still be your position?

A. Yes.

THE CHAIRMAN: The problem is that Mr Roberts is getting, in question 4, to a concern which has emerged more starkly at this inquiry than it did before. So in a sense, for all the experts and all the lawyers involved at different stages, Mr Roberts was ahead of us.

A. Absolutely. I'm very happy to accept that. As I indicated earlier, I was surprised at the detail in this response. It indicated that Mr and Mrs Roberts had successfully taken on board a very large amount of complex information. These were difficult and very pertinent questions, not questions which it was completely straightforward for us to answer, but certainly I was determined to do my best to provide the best answers I could in the circumstances.

THE CHAIRMAN: And it is a point, isn't it, that while the combination of drugs should not have had an adverse effect on sodium levels, the combination of drugs would have had an adverse effect on other aspects that day? For instance, to the extent that any of them had a sedative effect, that's a different issue, and that's not directly the issue Mr Roberts raised, but it's an issue which one can get into from him raising questions about drugs.

A. I think what I would say to that -- I mean, firstly from a personal level, as I've indicated earlier, I have no experience in using anti-epileptic drugs in children, so it wouldn't really have been something I felt able to comment on. I would say that the sedative effect of the drugs is not an adverse effect as such, it's one of the effects that the drugs have and partly my understanding is that contributes to how they're used in treating the epilepsy.

I guess in response to these questions, we could have written essays, probably, in some cases, and could have provided a very large amount of information. Probably when you see the comments I've made about the sodium to the inquiry, you'll realise I had a huge amount of information and knowledge about it.

Certainly, I was trying to provide focused and accurate answers to the questions, which would help to provide some information in the knowledge that the case was moving on to the next level and was going to the coroner, possibly to the inquiry here.

THE CHAIRMAN: In a sense, there's almost cross-purposes here because Mr Roberts and Mrs Roberts are raising the issue of the anticonvulsants and antibiotics in terms of sodium level and your answer to that is that shouldn't have an adverse effect on sodium level.

A. Yes.

THE CHAIRMAN: But that does lead into other issues about the prescription of those drugs, whether that prescription was appropriate, but in this time after the UTV documentary has been broadcast, the focus is on hyponatraemia, the focus is on fluid balance, which becomes a related, but rather different area.

A. I accept that. Certainly whenever I responded, I felt I was addressing mainly the fluid and the sodium issues. The broader aspects of Claire's case were somewhat outside my expertise. I felt this was a very complicated case and indeed, to an extent, I think that has been borne out by all of the disparate opinions. I could not have given a sort of certain, clear answer to these questions.

THE CHAIRMAN: Just when you say that: Claire's case is a complicated case medically, isn't that right?

A. Yes.

THE CHAIRMAN: But is that not exactly the sort of case that doctors and, to some extent, nurses can collectively learn something from?

A. Absolutely, it is, yes.

THE CHAIRMAN: For instance, what happened to Claire on 22 and 23 October highlighted specific issues about, for instance, the overwhelming level of pressure on the

doctors overnight. But nothing was picked up from it. Let's set aside hyponatraemia for a moment, let's set aside what sort of hyponatraemia it might have been. Let's set aside all that and let's set aside the fact that this is an inquiry which is focusing, but is not exclusively restricted, to hyponatraemia. Is what happened to Claire not a classic example of a child dying, where many people should have sat around together and said, "Medically, how did this happen? And in terms of hospital management and governance, what can we do to avoid this?"

A. I would certainly accept those comments. Although I'm not aware of the details of the other cases, I suspect myself that Adam Strain's case was a very unusual, special set of circumstances. And I think I can half understand why that didn't necessarily strike the doctors as having much wider applicability. My own view is that Claire's case probably did have much wider applicability and there was more potential to learn general widespread lessons from it. I wasn't working in the Children's Hospital in the mid-1990s and others will come and will address the issues around governance, et cetera. The things you've said about the pressure that staff were working under is, I think, absolutely true, and we heard something about that earlier today.

I can't say that we have moved forward enormously, and you may cover some of the journey at later stages of the inquiry. Now we have morbidity and mortality meetings, where any case like this would definitely be considered in the sort of way that you have described, I would like to think. But certainly, any patient who dies, particularly in circumstances which are unusual -- and, at the very least, these were unusual circumstances -- I think nowadays there ought to be careful consideration of what lessons can be learned.

THE CHAIRMAN: I think my point is a bit stronger than that, professor. My point is: in 1996, it should have been obvious that however many lessons were learned from it, people sat down together to see if lessons should be learned from it. It's even the first step which I'm concerned is lacking.

A. Yes. I understand. I don't think I have enough knowledge to comment on exactly what happened in 1996.

MR FORTUNE: Sir, to assist Professor Young, you will recall that Dr McKaigue talks about a mortality meeting taking place. We have no idea what was actually discussed at that meeting because, of course, it was the practice that there be no minutes. But that was clearly the ideal opportunity for everybody connected with Claire's case and, indeed, senior managers to be involved.

THE CHAIRMAN: Yes. I'm not sure, Mr Fortune, how far we're going to get on that. That's a suggestion that there would have been, in November 1996, a mortality meeting. I'm not sure how far we're going to get on that, partly because there are no records at the time and I'm not sure whether in November 1996, which would be pre-autopsy report, what would have been known, apart from laying down a marker perhaps -- well, there are some issues we should look at, but laying down a marker: when the autopsy report comes in, let's look at Claire's case again.

MR FORTUNE: Sir, that was the only meeting to get anywhere near a discussion.

THE CHAIRMAN: Yes, thank you.

MR STEWART: Just following on from the chairman's comments, did you at any time express the view that you didn't think any particular lessons could be learned from this case?

A. Sorry, I don't understand that question.

Q. Have you ever expressed the view that, in your opinion, there were no particular lessons to be learned from this particular case, from Claire Roberts?

A. Have I ever said there were no lessons to be learned from this case? I don't believe so, no.

Q. No particular lessons. Can I refer you to 140-041-004.

This is a note taken by the trust solicitor at the inquest. It doesn't seem to be showing up. (Pause).

Can you try 140-043-004?

THE CHAIRMAN: No, we don't have that, I think.

MR STEWART: There are two separate paginations on this page. This is a note taken by Brangam Bagnall & Co solicitors on behalf of the Trust of the hearing at inquest. You were asked:

"Should this case have been reported in 1996?

"Dr Young: Perhaps not back in 1996.

"Re the inquiry?"

In other words, should be reported to this inquiry. And your answer:

"This should be left to the inquiry, and not for [you], but doesn't personally think there are any particular lessons to be learned from this case. This should be left to Mr O'Hara."

Do you remember now giving that as your opinion?

A. I don't remember giving that as my opinion, no. I'm not sure I've seen that document. And obviously, I can't comment on the likely accuracy of the minute or note since I did sign off on some minutes and notes at the inquest, which I did record as accurate --

Q. Yes.

A. However, if -- and I really can't remember -- for the

moment we accept that it might reflect something that I said, what could I have meant? I think the only context in which I might even have said anything like that would have been in the context of 2004, whether there were any further lessons to be learnt in the relation to the management and prevention of hyponatraemia in children. And I think that, in 2004, my view then would have been that because of all of the efforts which had been made and the new guidelines which had been implemented in the Children's Hospital, that probably, at that point in 2004, there would not have been any further lessons to have been learnt in relation to management of hyponatraemia from Claire's case. In 1996, that would have been a completely different matter.

THE CHAIRMAN: Well, I think we can -- when we get that reference, I'll take your explanation of how it might be that you are recorded as saying something along those lines, but the context you're putting it into is 2004. But in 1996, it was a completely different matter and there were lessons to be learned in 1996?

A. Yes.

THE CHAIRMAN: Thank you.

MR STEWART: I wonder if we could go back to those two pages on the screen side by side. The first is 089-003-007 and the second, alongside it, please, is 089-006-014.

I was going to ask you about question 8 because I'm not sure that the answer given is clear and not misleading. Paragraph 8:

"Follow-up meetings in January 1997 with consultants and doctors at the Royal Hospital and the post-mortem report (our condensed version) ..."

That's a letter written by Dr Webb, I think, explaining the content of the report:

"... dated 21 March 1997 defined the cause of death as cerebral oedema linked to a viral infection. No statements were made about hyponatraemia. Given that Claire's sodium levels dropped so suddenly within a 27-hour period, that is to say acute hyponatraemia, why was this condition not defined?"

The answer given at 8(a) is:

"Hyponatraemia was not thought at the time to be a major contributor to Claire's condition."

Might I stop there? Would you agree that hyponatraemia is noted in the chart? It's part of the diagnosis on discharge, it's noted as a diagnosis by Dr Webb in PICU, and indeed it appears, as we saw earlier, under the hand of Dr Stewart in Allen Ward. Would it therefore, in the light of that, be correct to say that:

"Hyponatraemia was not thought at the time to be

a major contributor"?

A. I think the inquiry has heard from almost all of the doctors who were looking after Claire at the time. And certainly whenever I reviewed the notes, despite the fact that hyponatraemia was recorded, my opinion was that hyponatraemia was not thought to be a major contributor to her condition. I think I've covered that at some length. If indeed the doctors had felt hyponatraemia was a major contributor to her condition and had not taken appropriate action, more appropriate action to address that, then I would have been very concerned. So certainly my view and reading of her notes -- and indeed I think it fits with the evidence that many of the doctors have given here -- is that they didn't recognise hyponatraemia at the time as being a major contributor to her condition. They were attributing most of the symptoms to status epilepticus and encephalitis, rightly or wrongly.

Q. In other words, you were saying, having read the chart, that you appreciate that the doctors at the time didn't really think of it in those terms, but I'm suggesting to you that perhaps, on a slightly different question, it should have been obvious to them that it was a contributor.

A. I think that's a more difficult question for me to

answer. But certainly, whenever I looked at the chart in 2004, I identified it very quickly as a significant contributor. But the questions of awareness of hyponatraemia and its significance and likely contribution in the Children's Hospital medical staff and more widely in 1996 is one that's been discussed quite intensively.

Q. That's the answer given to the Roberts' request for information about why it was not really defined at the time. Then it goes on to say in paragraph 8(a):

"It is noted from the post-mortem report that the presence of hyponatraemia was indicated in the clinical summary provided to the neuropathologists conducting the post-mortem."

Is that clear and straightforward? The post-mortem report, of course, doesn't mention the word "hyponatraemia".

A. I would have to go back and call that up and I'm speaking from memory, but I think it gives the serum sodium level. Does it?

Q. Yes, indeed it does, it does. But:

"It is noted from the post-mortem report that the presence of hyponatraemia was indicated in the clinical summary provided to the neuropathologist."

What was indeed provided in the clinical summary was

the sodium level of 121.

A. Which is hyponatraemia and the pathologists, I'm sure, fully understood that there was hyponatraemia.

Q. But this answer is going to Mr and Mrs Roberts. They ask why was this condition not defined. And then it goes on -- it's slightly -- perhaps the wrong word is "slippery" -- but it's not really straightforward in its answer is what I'm suggesting to you.

A. I'm sorry, I don't myself accept that. I think that telling a pathologist that the sodium is 121 millimoles per litre is telling the pathologist that the patient has hyponatraemia. Whenever somebody phones me up from the ward, they don't say, "We have a patient with hyponatraemia", they say,"The sodium is 115".

Q. Yes, but you're telling the Roberts, who are not neuropathologists, that the post-mortem report notes that hyponatraemia was indicated. And I have to say, it doesn't.

A. Well, no, it does note that hyponatraemia was indicated. It does not use the word "hyponatraemia". I think that the answer to that was given to the Roberts family is correct, even though the word "hyponatraemia" is not used in the post-mortem report. And we didn't say -- or the letter doesn't say that the word hyponatraemia is used in the post-mortem report. It says that

hyponatraemia is indicated, which indeed it is.

Q. And you think that's an open, transparent, helpful response to Mr and Mrs Roberts?

A. I felt at the time, as I still do, looking at it, that it's an accurate answer to the question. And if it's considered to lack transparency, if we should have said instead of that wording that it's noted on the post-mortem report that the sodium was 121 millimoles per litre, then I apologise for that.

Q. The paragraph goes on to say:

"The subsequent neuropathology report commented only on the low-grade sub-acute meningoencephalitis and neuronal migrational defect."

That's not quite right, is it? It comments on a number of things.

A. I think, as I indicated earlier, I am not even sure that I had seen the post-mortem report, rightly or wrongly. I certainly wouldn't have had it in front of me and that definitely would have been a section that Dr Steen would have completed.

Q. It brings me back to that observation. You are this highly-qualified individual, who considers himself independent to this process, to help bring information to the Roberts. You're not even checking the answers being given by Dr Steen herself to the Roberts.

A. I think I accept that. I've been very clear about what I consider to be the purpose of my review and its objective and its limitations, and Dr McBride I'm sure will speak to that as well. It was to review the contribution which hyponatraemia and fluid management may have made to Claire's death and to make a recommendation on whether the case should be referred on to the coroner or not. My subsequent involvement was doing my best at the time to give the relevant information to Claire's parents. If I've done that inadequately, it was an honest effort, then I can only apologise.
Q. Do you remember how much time you spent on this work?
A. What do you mean by this work?
Q. In checking the chart, checking the responses, making suggestions, amending.
A. I think there are a number of different phases. I've indicated that my initial chart review, based on which I reached my conclusions, was about one hour. Obviously, there were e-mails doing the rounds subsequently. I would imagine that the more likely process was that I was receiving the e-mails and probably not working from the charts at that stage, but working perhaps from the note of the meeting and also my memory and knowledge of the area to provide answers.

I can't tell you how long that would have taken me. As you will appreciate, like everyone else, I have a very, very busy job and a lot of pressures. So I would not, in practice, have sat down with the note for several hours to check every detail. Absolutely not.
Q. No. Can we move on to paragraph 10? On the right, can we have 089-006-015? Question 10 towards the bottom on the left-hand side, Mr and Mrs Roberts ask:
"Given that Claire's death was sudden, unexpected and without a clear diagnosis, why was the coroner not informed or an inquest held?"
The answer is:
"The coroner had not been informed at the time as it was believed that the cause of Claire's death was viral encephalitis."
If you'd looked at the chart, you'd have seen that the medical certificate of cause of death completed by Dr Steen did not include viral encephalitis as a cause of death.
A. I'm certain that I didn't see the death certificate. It may or may not have been in the chart.
Q. The chart itself contains Dr Steen's entry of what she wrote on that certificate. It's at 090-022-061. There we are. At 18.45, on the left hand corner, "McKaigue". And then in Dr Steen's handwriting, she's entered:

"Death certificate issued: cerebral oedema secondary to status epilepticus."
That indeed is what went on the medical certificate for the cause of death and what was then translated on to the death certificate issued to the Roberts family. Seeing that, how could you allow the Roberts to be informed by this letter that it was believed at the time the cause was something not on the death certificate?
A. I think I've described previously fairly carefully how I carried out my review and its focus. I have explained that I was very much focused on the events related to fluid balance and sodium. I suspect -- and I paid very little attention to events after Claire suffered the respiratory arrest. So I may not even have read that at the time, certainly didn't pay it any attention, and I'm certain that that part of the letter would have been relying on information coming from Heather Steen.
THE CHAIRMAN: Do you accept that it doesn't sit easily?
A. Yes, absolutely, and I do accept that, yes.
THE CHAIRMAN: I think the problem we keep coming back to on is that the Roberts, they have a daughter who died unexpectedly. There are various other circumstances between 21 and 23 October, which are unsatisfactory. They never really quite understand or have explained to them in a way which makes sense to them why she died,

and when they go back to the Royal after the UTV documentary is broadcast, they have a meeting and then a response to queries which they raise, which are imperfect, if I can put it that way. Do you understand how Mr and Mrs Roberts might feel that this isn't just a bit shoddy in various aspects, but it also makes them think, "Is there something more sinister going on?". That would be an entirely natural reaction for the Roberts to have, wouldn't it?
A. Certainly, chairman. I accept the mistakes and errors, and I regret that. I think I've tried to outline the parts I would have highlighted and, in general, the parts I would have dealt with, I would have thought might have been apparent from the drafts. The bits you've highlighted in general are often information that's not being provided by me, but I accept I had a contribution into the overall process. I do understand a little bit the pain which the Roberts family have felt and their dissatisfaction with the whole process which has taken place, but certainly if there have been errors or mistakes made, then I'm certain that that's what they are. This idea or suggestion that there has been some form of cover-up -- in all of my involvement in this case, I've never ever even had any possible sense of that. I think what we're

talking about are mistakes, which have been, as far as I'm concerned, honestly made.

THE CHAIRMAN: At the very least, you understand why we have to raise these issues?

A. I understand.

MR STEWART: Would you agree if a proper and systematic review of the case had been conducted at that time, those mistakes probably would not have been made?

A. "I'm not sure" is the answer to that because we had two independent experts at the coroner's inquest, which is what I believed was going to happen: Dr Bingham, a very eminent paediatric anaesthetist from Great Ormond Street, and Dr Maconochie. I believed that that should give confidence that there was a robust external assessment of Claire's management and condition. Despite that, and indeed the subsequent police investigation, two more experts, then there were clearly significant issues which were not picked up. The type of investigation which you describe might or might not have addressed the issues. It may be that it's taken something like this inquiry to do it and the very large number of experts involved.

Q. Isn't the point that all those experts were really focusing on a given question in the case and not reviewing the case in a more holistic case?

A. I don't believe that's the case.

THE CHAIRMAN: To a degree, in the same way as you've been focusing on specific aspects rather than an overall view?

A. Yes, what I'm not sure about is the role of Dr Bingham and Dr Maconochie at the inquest. Certainly, I would have understood that they were focused on the whole management of Claire and events leading up to her death, not the specific thing that I was focused on.

MR STEWART: Moving on to another part of the process with which you had a role, and that's providing a statement for the coroner and your appearance at the inquest.

Mr Walby of the litigation management office wrote to you on 31 March 2005 asking for a statement at 139-124-001.

He says:

"I would be grateful if you would provide a draft statement outlining your analysis of the situation, which led to the discussion of the child's death with the parents."

He tells you:

"This will be a legally significant statement and you may wish to consult your professional body or legal adviser before submitting your draft to this office."

Further at 139-120-001, he sends you a reminder on

30 April. I'm sure you were very busy. And then at 139-118-001, a note is taken in a litigation management office, I think, or a telephone call from you on 10 May 2005, to say:

"Professor Young rang. Has completed statement and has been approved by medical defence organisation."

So you took it off and had it approved by your professional indemnity insurers; is that right?

A. Actually, I have no recollection of this at all, I have to admit. This is the only time in my entire career when I've been involved with a coroner's inquest and I would have had no real knowledge of the processes which would have been involved in it. With Mr Walby having written to me and suggesting that I should perhaps have the statement checked by my organisation, the Medical Protection Society, then I think it's quite likely that I would have followed his advice. But I've absolutely no recollection of it.

Q. Very well. Moving on to 139-114-001, this is a week later. You e-mail, I think, Walby's office to say:

"Please find attached my report on Claire. You may need to put this in the correct format for me to sign. I'm happy to make any changes."

What did you mean when you said to Mr Walby, "I'm happy to make any changes"?

A. I think it's fairly straightforward: you may need to put this in the correct format for me to sign. So I think I was referring to changes around the formatting of my report.

Q. Thank you. And page 139-113-001. It's the following day. This note is taken at the litigation management office:

"I talked with Professor Young. He has not discussed the statement with anyone other than the Medical Protection Society. He agrees not based purely on notes, also from e-mails passed from Dr N Rooney, as they did meet with family."

Can you remember that, can you explain that?

A. I'm not sure what needs explained. I think it's relatively clear.

Q. Okay. Then the note continues:

"Re 'comments from other staff' said this sentence was suggested by MPS."

This would look like a phrase contained in your statement. And seemingly you discussed it and you told Mr Walby this sentence was suggested by the MPS.

A. Are you suggesting there was something wrong in me contacting the MPS?

Q. No, I'm not. Mr Walby suggested that you might like to do that and I'm not saying that you did anything wrong

at all. What I am asking about is this discussion that you and Mr Walby had about a phrase, "comments from other staff", and it seems that you were explaining that to Mr Walby and saying, "Yes, that phrase came from the MPS". It was perhaps inserted by you into the statement in response to a suggestion from the MPS.

A. Possibly so. I would have to go to the statement. I would have to look --

Q. We'll have difficulty finding the first version. Then do you see immediately above that phrase --

A. Sorry, I'm not sure what that means either. Was there a first version, which is what you're referring to?

Q. I don't have a first version, as submitted by you, with a phrase "comments from other staff", in it.

A. Is there a version of my inquest statement that contains that "comments from other staff" which --

Q. No, there's not. If you look above, do you see the annotation in a distinctive spidery handwriting?

A. Yes.

Q. It says:

"Asked Professor Young to remove these."

Do you remember a discussion with Mr Walby where a phrase in your statement was discussed, you said it had come from the Medical Protection Society, and he said, right, well, it might be better if you just took

it out?

A. No, I've absolutely no recollection of that at all.

Q. Okay. Because then we move on to 139 --

THE CHAIRMAN: Just to make it simple, the point is, as you explained a few minutes ago, when you said to Mr Walby that you were content to make any changes, what you meant was make any changes in format.

A. Yes, absolutely, I would believe so.

THE CHAIRMAN: That does not appear, insofar as we can gauge it from this note, to be a change in format. That's a change to a substantive line or sentence in your statement.

A. I honestly have no recollection whatsoever of this.

THE CHAIRMAN: We know from Dr Webb's evidence that his statement, his draft statement, was changed at Mr Walby's suggestion in a substantive way -- perhaps not in a fundamental way -- where he said: I think [he] made an a mistake about not raising Claire with the PICU anaesthetists at about 5 o'clock. Mr Walby encouraged him -- let's put it neutrally -- to change that line. So Mr Walby did not restrict himself -- this may be perfectly legitimate; it's an issue we'll explore tomorrow -- to suggesting changes in format. So what you have here is you have a statement, you run it through your Medical Protection Society, they suggest

something apparently -- according to this, they've suggested a particular reference -- and at one point, Mr Walby raises that with you and then asks you to remove it. And so far as we can glean from the statement put before the coroner, it was removed.

A. All I can say about this, because I've no recollection of it at all -- firstly, it looks like I wrote a statement without this phrase in and sent it to the Medical Protection Society --

THE CHAIRMAN: Yes.

A. -- it looks as if they recommended inserting it --

THE CHAIRMAN: Yes.

A. -- it looks as if Mr Walby, who I understood to be assisting the coroner, then suggested that the phrase should come out. I didn't originally intend the phrase to be in, obviously, before I sent it to the MPS. It had not been in my original version of the statement. That, I think, is the implication of that: I had written a statement without it, the MPS had asked for it to go in, so then Mr Walby asked for it to go out again. Since I had initially written the statement with the words out and that had been my statement, then very possibly at the time, if he had suggested it, then I wouldn't have given it much of a second thought if my original statement hadn't contained that phrase.

THE CHAIRMAN: I'm making no comment at all at this stage, and it might turn out to be the most innocuous phrase that you could insert or delete, but it's not a change to format.

A. I accept that. I honestly have no recollection of this. It's the only time in my career -- what I know I certainly would not have allowed to happen is any significant change to a statement that distorted the intention of my meaning. And since the original statement I wrote didn't have it in, then certainly whenever I --

THE CHAIRMAN: Thank you.

MR STEWART: There may be no net gain or loss to the essential meaning of your statement, but it was your willingness to go along with the idea -- to put something in, take something out -- when what you're doing is providing a statement for Her Majesty's Coroner. That's the issue we're exploring.

A. And my understanding at the time was that Mr Walby was assisting the coroner, was effectively acting as his agent, certainly that he was advising me on the correct way to submit the statement, but the content of the statement had to be mine in the sense of it.

Q. Did you have a sense that Mr Walby was acting as an agent to the coroner?

A. Acting on behalf of the coroner in some way or assisting the coroner. I may be using the wrong phrase there. I'm not a legal person and it may be that "assisting the coroner" is a more correct phrase.
Q. I take it you too were assisting the coroner.
A. I hope so, I hope I've assisted the correspond, the family, and indeed this inquiry, throughout. Certainly I have done so to the best of my ability.
Q. Let's move on to 139-111-001. This is the next email in this chain where you send then to Mr Walby:
"Please find a modified version attached. Please let me know if you would like any further changes."
Are you happy really to go along with Mr Walby's intentions in really to your statement for the coroner?
A. Not certainly in terms of the substantive content. I've already indicated that. I've already explained that I had absolutely no experience whatsoever of dealing with the coroner and that I viewed Mr Walby as the expert in doing so.
Q. Then at 139-111-002, we find a copy of the statement, which doesn't have the phrase "comments from other staff" within it. That's then sent by you to Mr Walby. At 139-110-001, Mr Walby writes to you:
"Further to previous correspondence regarding the above named, please now find enclosed your statement,

which has been redrafted onto a witness statement form. Please re-read the statement and, if you are in agreement with its contents, please sign and date and return to these offices."
If we go to 090-052-159, this is the redrafted statement that you were asked to date and sign. It has been put on to a police witness statement paper. Did that surprise you?
A. I remember being asked about this in my initial list of questions, and I think I commented on it in my initial witness statement to say that I had really no idea how it was getting on to this paper. And it's now clear to me. So if I can summarise my understanding just to check I've got it right because you're obviously bringing things back to me here. I wrote an original statement that went to the MPS who inserted a phrase. Then Mr Walby recommended the phrase come back out. I agreed to do that. So it was back really to my original statement that I had drafted myself. And then, with Mr Walby's assistance, it went on to police headed paper.
I have dealt with the police on a number of occasions in a professional capacity and I don't think this -- I have no recollection of it striking me as particularly unusual, obviously I guess because clearly

it was something Mr Walby was very used to.
Q. Fair enough. You didn't date it. That's presumably an error. At the top left-hand side, on a blank line, it says, "Signature of member by whom statement was recorded or received". I think the idea is that this is something which you give to a police officer. It's a member of the police force, a policeman, who receives it. Didn't that strike you as being odd?
A. You know, I really don't think this is something I can comment on or help you with at all. It didn't strike me as being odd at the time. I had the impression it was very much part of a routine process within the Trust and now, when I read through the evidence and files, I do understand that it was routine process. So my guess is anybody dealing with me around it would just have treated it as a normal part of business and probably I accepted it as such.
Q. Very well. You then proceed to --
MR FORTUNE: Sir, before my learned friend goes on, isn't the important point about this particular format -- and it applies to other witnesses, including Dr Steen -- that it is the declaration at the top that is being drawn to the attention of the maker? And it's the declaration that is to be signed so that it drives home to the maker the importance of telling the truth. Does

it matter whether it's on a form supplied by the PSNI in this particular case?
MR STEWART: It might be more important if the initial statement before modification, editing and possible correction were put on the police paper, yes.
MR FORTUNE: Sir, it's quite normal for doctors to submit draft statements or reports to their protection bodies seeking advice. As Professor Young has said, he was new to making a statement of report.
THE CHAIRMAN: Yes. If this point needs a bit more development, we can do it with Mr Walby tomorrow. Thank you.
MR STEWART: Moving on, so you're preparing for the inquest, it's the first inquest you've been engaged in, and you then have sent to you the statements of the other people involved: Dr Steen, Dr Webb, Dr Sands. If we go to 139-042-001, you see at the bottom there's "To Ian Young":
"Please find attached the following documents for your information."
And you were sent those statements and indeed the post-mortem report, and you read them and at the top of the page your response then to the litigation management office is:
"Peter. Thank you for the additional report, which

I've looked at. I would like to mention the following relevant issues. Dr Webb states on page 14:

"'Claire's hyponatraemia led to her developing cerebral oedema (brain herniation). The swollen brain will herniate downwards results in brainstem compression and cardiorespiratory arrest.'

"This seems to me a clear statement that Dr Webb believes that hyponatraemia played a significant part in Claire's death. Dr Webb indicates elsewhere in his statement that he believes that responsibility for Claire's fluid management lay with the medical team. Dr Webb also draws attention to the failure to take an electrolyte sample on the morning following Claire's admission, which he states was routine practice. In addition, he states that he believed, at the time, that such a sample had been taken and that if he had been aware that the sodium of 132 had been taken the previous evening, he would have requested an urgent repeat. These are substantial issues which were not fully discussed during our meeting this morning, and which could certainly become significant at the inquest."

What in particular were you drawing Mr Walby's attention to apart from the obvious in that?

A. My understanding at the time was that my role was to

assist on the key issues being drawn out at the inquest. So in highlighting those issues and believing Mr Walby to be assisting the coroner, then that was my intention.

Q. Was it perhaps that you can see that there was a gap opening up between Dr Steen and Dr Webb and that Dr Webb was essentially saying, "Not me, it's the medical team", and there was going to be a difficulty at the inquest if the witnesses were going to start giving conflicting evidence and blaming each other?

A. Not at all. That would not have been a matter of concern for me. The purpose of the inquest was to try to find the reason for Claire's death. I'll say in passing that whenever I reviewed the notes, and subsequently, it never occurred to me for a moment that anyone other than Dr Steen was the responsible consultant in Claire's case.

THE CHAIRMAN: Do you have an issue with what you summarised Dr Webb as having said there?

A. That was certainly clearly the interpretation I took from his statement in terms of key issues which I felt hadn't been drawn out previously.

THE CHAIRMAN: Yes. But what you have done is summarise Dr Webb's position; do you think that position is right?

A. There were two questions. The first -- so I think it's clearly his position. So first was the issue of drawing

an electrolyte sample in the morning following Claire's admission. That's been discussed quite extensively.

THE CHAIRMAN: It has.

A. And at the time, that was not the information that had been given to me from other sources. And since I wasn't working in the Children's Hospital, I wasn't really in a position to comment on that. The second issue there, if such a sample had been taken and he would have requested an urgent repeat, I absolutely do accept that, the second half.

THE CHAIRMAN: Right. Let's go to the paragraph above:

"This seems to me a clear statement that Dr Webb believes that hyponatraemia played a significant part in Claire's death."

When you discussed, towards the start of your evidence, the three contributors, rightly or wrongly, then he's closer to your line of thinking than Dr Steen was in terms of emphasis?

A. Absolutely, at this point. And I hadn't, I think, been aware of that before, which is why I was highlighting it, because I thought the coroner's case was going to be looking at the three slices of the pie and Dr Webb did seem to me to be closer to my position, and indeed the eventual formulation which I suggested when asked by the coroner.

THE CHAIRMAN: Then the paragraph that you did take me to a moment ago, when it really draws attention to the failure to take a sample in the morning, that's an indication that Dr Webb has realised that he has misunderstood the notes because his evidence to the inquiry was that, when he saw the notes, he thought the sample had been taken that morning.

A. Absolutely, and I think that indicates, before the coroner's inquest, that Dr Webb's position certainly was that he had misunderstood the timing of the sample. Otherwise, he would have requested another one urgently.

THE CHAIRMAN: And you agree with him on that?

A. That there should have been? Absolutely, yes.

THE CHAIRMAN: So the sample which was taken on Claire's admission the previous evening should have been updated on the Tuesday morning.

A. I think as you have said yourself before, and I agree completely, if that had happened, very probably this all could have been avoided -- in terms of the hyponatraemia contribution, at least.

THE CHAIRMAN: We'll never know, but there's a very good chance it would have shown some reduction in the sodium level?

A. I'm pretty certain. Based on my long experience with this, I'm pretty certain it would have been between 125

and 130.
THE CHAIRMAN: At which point you do begin to worry?
A. Below 130 would have been a trigger to anyone, I think, in that period, that it was more significant.
THE CHAIRMAN: Yes, thank you.
MR STEWART: Do you think it important that Dr Steen should learn of your discovery of what Dr Webb had said?
A. I don't think there was any discovery. My understanding or my impression at the time was that it was better for everybody going to the coroner's inquest to see the statements from everyone else, and certainly I remember that I had access, I think, to all of the statements before I went.
Q. So why was it important for everyone to know each other's points of view?
A. From my perspective, clearly there were issues which needed to be teased out for the coroner and with the independent experts who were looking at the case. There were clearly always going to be differences in clinical opinion, I think, in terms of the contribution of what I've called the three slices of the pie. I think it's very helpful to know what others think when you're going to engage in that sort of discussion.
Q. Yes. But let's say those others didn't share the same view as you or you knew that two of the other members of

the team giving evidence were actually going to disagree one with the other. It'd be pretty important to make sure you got your lines squared.
A. I think that is certainly very helpful information for somebody to know. I think, for any doctor who's reflective, what it makes you do is make you think about your position and your justification for it and have you really got it correct. It helps you to marshal your arguments. There was space here for differences of opinion -- that was my view -- because it was a difficult case; it wasn't a straightforward wrong or right in some of its aspects.
Q. Would you want those differences of opinion explored at the hearing or other not?
A. That's what I thought would be happening, that everyone would have a chance, and the coroner would consider it all in light of the independent external opinions.
Q. And you'd have been happy if everyone had gone along and disagreed?
A. I'd have been happy for that to happen, yes, because I think that's the best way you can assist the coroner.
Q. In terms of assisting the coroner, I have just a couple more questions. It's in relation to something that arose indeed in your evidence to the inquest. At 139-145-001, it's a copy of a letter written to Mr and

Mrs Roberts on 17 December. At the top of the second paragraph, you'll see he said to them:
"As you have been informed by Professor Ian Young of the Queen's University Belfast, our medical case note review has suggested that there may have been a care-management problem in relation to hyponatraemia and that this may have significantly contributed to Claire's deterioration and death."
Do you know what "a care-management problem" meant at that time? Do you understand the terminology, care-management problem?
A. I must admit, no, it was not terminology that had any special significance for me at all at the time. I have seen subsequently, from the inquiry's website, although I wouldn't pretend to fully -- I saw it in passing that it was in fact a phrase that had some special significance, but it didn't have any special significance to me.
Q. It's the acts and omissions of clinicians in relation to the care of a patient, and indeed you were asked about this -- you are quite right -- at WS178/1, page 7. This is your witness statement request, paragraph 4(a). Arising from that letter you were then asked:
"What was the care-management problem of which you informed Mr and Mrs Roberts? The care management

problem which I referred to was the possible role of hyponatraemia in Claire's deterioration and subsequent death, and the way in which the management of her fluid balance and monitoring of serum electrolytes contributed to the development of the hyponatraemia."
That's the position that you would hold to, that was what you meant by the care-management problem, was it?
A. I myself didn't use the phrase "care-management problem", I don't think, at any stage.
Q. No. What you meant by that phrase would have been --
A. I didn't mean anything because I haven't used the phrase.
Q. Right. I think you know what I am asking you: had you used that phrase, whatever phrase you did use, the import of your message to Dr McBride was, "the possible role of hyponatraemia in Claire's deterioration", and so forth.
A. Absolutely. That's what I said to Dr McBride: that on that basis, I believed the case should be further forwarded to the coroner.
Q. You were asked about this letter at the inquest -- and, sadly, this is again at the same page that we tried to bring up on the screen earlier. It's given two separate pagination numbers: either 140-041-004 or 140-043-004. This is the solicitor, Brangam Bagnall's note. We've

got it this time.

We have cross-examination by Mr McCrea, and the letter, 17 December, Mr McBride, that's the letter I referred you to a moment ago, was read. The second paragraph:

"Mr Lavery objects, unfair to confront the witness with a letter he's not seen before. Dr Young was allowed to read the letter, as is Michael Lavery and the coroner. The letter is then received by the coroner pursuant to rule 17. This paragraph relates to a 'care-management problem'. Dr Young asked to explain this comment. He did not use this term to Dr McBride, he is fairly sure of this. He merely discussed with Dr McBride whether this case should have been referred to the coroner."

That's not quite the same answer as the witness statement to the inquiry, is it?

A. Well, I'm ... So I have no, again, no recollection of this, nor can I comment on the accuracy of the minute or what exactly was asked to me. But I think --

THE CHAIRMAN: Sorry, but professor, that response which is noted from the inquest seems to be along the lines of the evidence that you've been giving today.

A. Yes.

THE CHAIRMAN: Right. So that is consistent with what

you have been saying today: what you were engaged to do by Dr McBride. I think the point that's being raised with you is, if we go back to 139-145-001, when the -- sorry, I have got the wrong ...

MR STEWART: WS178/1, page 7.

THE CHAIRMAN: Thank you. When you were asked about this at 4(a), what you informed the inquiry was that:

"The care-management problem was the possible role of hyponatraemia in Claire's deterioration and death ..."

That's fine because that's the emphasis question:

"... and the way in which the management of her fluid balance and the monitoring of electrolytes contributed to the development of the hyponatraemia."

A. This, I think, relates to the information given to Mr and Mrs Roberts.

THE CHAIRMAN: Given to Mr and Mrs Roberts by Dr McBride on foot of the information which you provided Dr McBride with. You were given the notes, you did --

A. Right, okay.

THE CHAIRMAN: -- a case note review. You informed Dr McBride that you believed Claire's case should be referred to the coroner. You've indicated to us that you believed that that's what he thought already, so you were confirming his view. In this answer, what you have

said to us is that:

"The care-management problem that you were referring to was the way in which the management of her fluid balance and monitoring of electrolytes contributed to the development of hyponatraemia."

Which is going further.

A. I think in the meeting with the Roberts, if we go back to it, there were two key issues which I talked about as having changed and which I thought would have made a difference to Claire. One was the choice of type of fluids and then I also talked about the frequency of electrolyte monitoring and how that would have changed. So those, I felt, were the two issues which I discussed in the context of fluid management and what had changed.

THE CHAIRMAN: Okay.

MR STEWART: What I would suggest is that the note of the evidence given to the inquest might indicate that, so far from you welcoming an open debate about the questions arising in this case, you weren't actually giving very much away to the coroner, "No lessons to be learned from this case", and you simply told Dr McBride that this matter should be referred to the coroner.

A. Let me say that I think that's a complete distortion of what actually happened and what I said. We covered earlier the issue of whether lessons could be learnt and

I indicated clearly the very specific context in which I might possibly have said that about 2004 and about the management of children with hyponatraemia. And the context of that was all of the changes which had taken place in relation to hyponatraemia and fluid management in children, the new Northern Ireland guidance and how that had been implemented within the Children's Hospital.

MR STEWART: Thank you. I have no further questions, sir, unless there are any from the floor.

THE CHAIRMAN: Okay.

MR McCREA: A few minutes, please.

THE CHAIRMAN: Mr McAlinden, do you want a few minutes?

I think, professor, we have virtually reached the end of your evidence, unless there are any particular points. I'm going to rise for a few minutes.

Mr McAlinden, I've received a letter this afternoon, which you may not have seen yourself yet. It's from your solicitors about privilege being waived for a single letter that had been previously claimed and a desire for it to be circulated so that Mr Walby can refer to it tomorrow.

I am concerned -- Mr McCrea, wait one moment, because you may have something to say about this. I'm not going to make a decision about it tonight. You will

know that privilege was claimed by DLS by the Trust for exchanges and letters. We've received notification this afternoon that Mr Walby wants to refer tomorrow to a letter for which privilege had previously been claimed, so that privilege is now waived for that letter, but only for that letter, so that Mr Walby can refer to it in his evidence tomorrow. And Mr McAlinden, I will need to look at this tonight, but I'm not sure if you can pick and choose among your privileged letters and correspondence documents and decide "I'm going to waive privilege for this single document, but retain privilege for the remainder". So I'm going to circulate your covering letter tonight and we can pick up the issue tomorrow morning. Okay?

MR McALINDEN: Yes.

THE CHAIRMAN: I'll rise for a few minutes to see if there are any outstanding issues.

(5.22 pm)

(A short break)

(5.35 pm)

MR STEWART: Thank you, sir.

If I may, for the sake of completeness, just mention one matter, please, to Professor Young. That's in relation to the amendment made to your statement for the coroner at the suggestion of Mr Walby, and indeed

Mr McAlinden has now provided me with a copy of the first draft of your statement, which was in file 139. It's at 139-172-001. At the end of the second paragraph, the phrase appears:

"I did not have access to comments from all of the other medical practitioners involved in Claire's care."

I wonder, is that the phrase that was removed? Because the version I have is the same. It may be the same statement, but a different reference. Because if we look at 139-111-002, there it appears again:

"I did not have access to comments from all of the other medical practitioners involved in Claire's care."

So it doesn't seem as though it has been amended at all. That is a different copy of the same document because Mr Walby's handwriting has been removed from that. I'm not sure if Mr McAlinden can cast any further light on this.

THE CHAIRMAN: If I've understood it correctly, what you're trying to do is tidy up the point about how the professor's draft statement goes to MPS, they suggest that a phrase is included and the professor's happy to put it in, and then it comes back from Mr Walby with a suggestion that it's excluded; is that the point?

MR STEWART: Yes. The phrase "comments from other staff" has been removed, and it turns into, I think, "comments

from all of the other medical practitioners".

MR McALINDEN: I think the point is this: that there was no initial statement with a phrase "all the other staff". That is simply just someone's interpretation of what appeared in the statement as opposed to there being another draft with the words within inverted commas in that draft. It's always been the case that the draft statement provided by Professor Young contained the phrase:

"However, I did not have access to comments from all of the other medical practitioners involved in Claire's care."

THE CHAIRMAN: I am not sure that was quite the point that was being raised earlier. The point that was raised earlier -- and it's a question of how much, if any, significance is attached to it -- is that the professor had drafted a statement, it had gone to MPS, who had added a reference, which Mr Walby then suggested he should take out, and he agreed to take it out but it wasn't really your phrase in the first place --

A. Yes.

THE CHAIRMAN: -- and therefore you're quite happy to remove it. But that's not the one, is it?

MR McALINDEN: Yes.

MR STEWART: There was clearly a modification because the

e-mail at 139-111-001 says so.

MR McALINDEN: If you look at 139-172-001, you may see the thought process that went into that:

"This needs to be more specific ... MPS [et cetera]."

There is a bit cut off. We'll have to provide you with a full copy of that, but Mr Walby will be able to explain what the discussion was with Professor Young in relation to that issue. It's just to draw to the inquiry's attention, at the very earliest stage, that the draft statement was provided to the inquiry.

THE CHAIRMAN: Thank you very much. Was there anything further? Mr Stewart?

MR STEWART: No, sir, thank you.

THE CHAIRMAN: Mr McAlinden or anybody else? Sorry, you are last. No other questions? Mr McAlinden? Sorry.

MR McALINDEN: If I could take Professor Young to his inquest statement at 091-010-064. It's number 5. I would like Professor Young to comment on the content of that, bearing in mind the suggestion that he was somehow or other involved in some form of cover-up.

A. Yes, thank you. That was a comment from Dr Bingham, who was one of the independent external experts at the coroner's inquiry, who raised the possibility in his statement that the sodium result of 121 millimoles per

litre was a laboratory error and, in fact, that Claire might not have been suffering from such severe hyponatraemia. As Mr McAlinden points out, I intervened to essentially challenge that and to say that it was not possible that the 121 would represent laboratory error and that it was a genuine result.

I guess it goes back to the suggestion that somehow I was trying to be unhelpful to the coroner or to hide anything. I conducted the original chart review within the Trust, I recommended to Dr McBride that hyponatraemia was likely to be involved in Claire's death and that the case should go to the coroner. At the coroner's inquest, I intervened again when perhaps there would have been a possibility of the hyponatraemia being downplayed to correct what I felt was a mistaken opinion from Dr Bingham.

THE CHAIRMAN: Yes. Thank you very much.

Professor, that's the end of your evidence. Is there anything further that you wanted to say?

A. There was a couple of other issues that I expected to be asked about because they related to me, and wasn't.

THE CHAIRMAN: Okay. If we can get through them now, we will. We haven't, with any witness, to the inquiry despite the way it may seem, gone through every single point with every single witness, but if there's anything

that you feel particularly that you want to say to emphasise something which is already before us, I'm quite prepared to hear you.

A. One was the suggestion -- and it came in the opening statement of governance from counsel to the inquiry -- that my review, in some way, touched upon communication and that I considered communication with the family as part of my review.

THE CHAIRMAN: I understand. Your response was that you had a clearly-defined role, which was a case note review.

A. Yes.

THE CHAIRMAN: And rather than a review of the general communications between the doctors and nurses on the one hand and the Roberts family on the other, is that your point?

A. Yes, I definitely was not conducting such a review or even considered the issues.

THE CHAIRMAN: Yes. Okay.

A. The second point relates to the telephone contact I had with Dr Webb -- and I appreciate this came up in particularly the Roberts family governance opening. I think a slightly sinister connotation was placed on it potentially. I completely understand the reasons for that, but I just wanted to address it and highlight the fact that I was asked in my witness statement about

whether I had had any contact to the inquiry. I don't know if we can get that up.

THE CHAIRMAN: This will be your first witness statement?

A. Yes.

THE CHAIRMAN: We'll see what we can do. Sorry, the question you were asked was ... (Pause). The statement is witness statement 178/1, I'm just looking for a ... This is about contact with Dr Webb.

A. Yes.

THE CHAIRMAN: It's page 4, paragraph (f):

"Did you attempt to interview Doctors Webb, McKaigue or members of the nursing staff?"

Was this part of your engagement through Dr McBride?

A. Yes. I just wanted to be absolutely clear about this because there's an e-mail indicating I had e-mailed doctors -- there's an e-mail exchange, first of all, saying that Dr Steen raised the fact that Dr Webb ought to be contacted, and then an exchange between Dr McBride and myself about who should do it. Dr McBride asked me to do it. I do have a clear recollection -- although Dr Webb, I think, didn't -- of speaking to Dr Webb on the phone. I wanted to be absolutely clear that the purpose of that was to inform him that the case was being referred to the coroner so that he would have knowledge of that and that, indeed, I think I let him

know that the Roberts family had written to the hospital after the television programme, that I had reviewed the case and had recommended it should be referred to the coroner, and that was the nature of that exchange.

THE CHAIRMAN: Okay. Was there any further point?

A. No, I would just like to say a general thing, first of all, to the Roberts family. I appreciate absolutely at the core of this are the tragic deaths of several children, and Claire Roberts was one of those, and just to expression my enormous sympathy and indeed my admiration to them for their persistence in trying to fully understand what happened.

Secondly, to say if I have made any mistakes during my involvement in it, then I apologise for them, but they've been honest ones and I've done my very best throughout, I think, to assist the entire process and everyone involved.

Certainly I have never, ever encountered any suggestion or even hint of a desire on the part of the Trust or anyone I've interacted with to cover up what has happened in this case. That's all I wanted to add.

THE CHAIRMAN: Thank you very much, professor. It has been a long day and I'm grateful to you for staying with us to complete your evidence.

(The witness withdrew)

As the professor leaves, we'll pick up the evidence tomorrow morning at 10 o'clock. Is it Dr Hicks first?

MR STEWART: Yes. Then Dr Taylor and Mr Walby.

THE CHAIRMAN: Okay. Shall we deal first of all at 9.45 with this issue about the document?

MR McALINDEN: If you would give me a very short while, I would hope to have an answer for you in the next five or 10 minutes in relation to that issue, so that if the documentation can be disclosed, it can be -- well, attempts can be made to make sure you have it later on this evening rather than tomorrow morning. So if you can just bear with us for a short while --

THE CHAIRMAN: Of course we'll wait.

(5.47 pm)

(The hearing adjourned until 10.00 am the following day)

I N D E X