Tuesday, 26 February 2013

(9.30 am)

(Delay in proceedings)

(9.47 am)

THE CHAIRMAN: Good morning. Mr Egan, you're now for Mrs McGrath?

MR EGAN: That's correct.

THE CHAIRMAN: And Mr Campbell, you have joined us for a number of the nurses. Thank you very much. Okay, Mr Reid?

MR REID: Thank you, Mr Chairman, if I can call theatre nurse McGrath, please.

MRS MARIAN MCGRATH (called)

Questions from MR REID

MR REID: Good morning. Is it Miss or Mrs McGrath?

A. Mrs.

Q. Thank you. You have made two witness statements to the inquiry. The first is dated 20 June 2005 and the second is dated 29 May 2012; is that right?

A. That's right.

Q. And subject to any oral evidence you may give this morning, do you wish to adopt those witness statements as your evidence before the inquiry?

A. Yes.

Q. Thank you. If we can bring up your witness statement at



WS050/1, page 2, please. We can see there you say that you are a registered general nurse and that's still the case.

A. Yes.

Q. And that you qualified in 1976 and you've been a theatre nurse since 1977 and you have been on night duty in theatres in Altnagelvin Hospital since 1980.
Am I correct in saying as well that you trained at Altnagelvin from 1973 to 1976; is that right?

A. That's correct.

Q. So you have been at Altnagelvin now for almost 40 years?

A. 40 years.

Q. So I presume you have seen quite a few changes over the 40 years; would that be right?

A. Yes.

Q. By June 2001 then, you had been a qualified nurse for 25 years and in theatres for 24 years.

A. That's correct.

Q. So it's fair to say you're a very experienced theatre nurse, Mrs McGrath? Would that be fair?

A. Yes.

Q. You want to be modest.
If we now turn to your witness statement at WS050/2, page 2, we can see there you say:
"From 1977 to 1980, I was on day duty in theatres



and I cared for children when they came in to theatre, while receiving their anaesthetic, assisting at the surgery, and recovering them from their anaesthetic.
"From 1980 to 2010, I worked at least two nights per week in theatres undertaking the three roles above within the emergency setting."
Over the last three years you've been working on day duty in DESU recovery. What is DESU?

A. It's the Dedicated Elective Surgical Unit and it doesn't involve any emergency surgery; it's only elective.

Q. We see there on page 2 of your witness statement WS050 that you were asked to specify the training you had received in fluid balance management and you say:
"During my initial training with Altnagelvin, I received basic fluid balance ... and the importance of documentation, recording, observation and monitoring of the patient."
Is that right?

A. That's correct.

Q. Did you have any training in fluid balance management or electrolyte management after your initial training from 1973 to 1976?

A. Just ongoing, during work in -- when working.

Q. Would that just be picking it up through custom and practice and watching others or would that be through --



A. And listening to others, yes.

Q. Would there be any set training programmes or anything like that?

A. No.

Q. Just the experience of working in theatres?

A. Day-to-day, yes.

THE CHAIRMAN: Can I ask you: did you pick up anything specifically as time went on beyond what you had learned during your basic training? In other words, from about 1976 when you qualified and over the next 25, 35 years, did you pick up much more about fluid balance --

A. Yes.

THE CHAIRMAN: Like what?

A. I would have learned more about the different types of intravenous fluids that were used, not a great deal about what they were made up of, but I would have learned a lot of the anaesthetists had preferences of types of fluid used and got to learn about that.

THE CHAIRMAN: Right.

MR REID: Would that be the individual anaesthetists or --

A. Yes.

Q. -- would that be the anaesthetists as a whole?

A. Individual anaesthetists.

Q. So one anaesthetist might have a particular preference that's different to another anaesthetist?

A. Yes.
Q. What was the most commonly used fluid by anaesthetists in and around 2001?
A. Hartmann's solution.
Q. When I asked you about the most commonly used, was that the most commonly used intraoperatively during the operation?
A. Yes.
Q. And what was the most common fluid used post-operatively?
A. If the anaesthetists were prescribing for post-operative fluids, it would have been Hartmann's.
Q. And if they weren't?
A. If they weren't prescribing -- you mean for a child or an adult?
THE CHAIRMAN: A child.
A. It would have been Solution No. 18.
MR REID: Mm-hm.
THE CHAIRMAN: If the anaesthetists were prescribing the post-operative fluid, they would give Hartmann's; and if they weren't prescribing, then it would have been Solution No. 18?
A. Yes.
THE CHAIRMAN: Just to make it clear: in the event it's not the anaesthetists who are prescribing the post-operative



fluid, who is prescribing the post-operative fluid?
A. In 2001, at that time, the common practice was the post-operative IV fluids used in Ward 6, in the paediatric ward, was a continuation of the preoperative prescription, which was Solution No. 18.
THE CHAIRMAN: And whose decision was that? Can you help us with where this -- you'll know in Raychel's case why this practice is important.
A. Yes.
THE CHAIRMAN: What I'm interested in finding out, if you can help us, is where this practice came from.
A. I don't know where it originated from. It was a practice developed over the years and it continued.
THE CHAIRMAN: Had it been the practice for some years before 2001?
A. Yes.
THE CHAIRMAN: Okay. Can you give us examples of when an anaesthetist would prescribe the post-operative fluids, which you thought might be Hartmann's, as opposed to the established practice taking over, which would be Solution No. 18?
A. For a child?
THE CHAIRMAN: Yes.
A. Sometimes the anaesthetist did prescribe Hartmann's and then when the child got back to the ward, it was changed



to Solution No. 18.
THE CHAIRMAN: But were there times when the post-operative fluid was prescribed by the anaesthetist as Hartmann's and then the anaesthetist would be told, no, that's not the way we do things in Altnagelvin, that's not the way we do things with children?
A. Yes, sometimes.
THE CHAIRMAN: And however nicely or gently he's asked to do it or she's asked to do it, they switch to Solution No. 18?
A. Yes.
THE CHAIRMAN: At that point the anaesthetist can either stand her ground and say, "No, I want Hartmann's", or they say Solution No. 18?
A. Yes.
THE CHAIRMAN: Do you remember any example of an anaesthetist saying, "Well, I don't care what the normal practice is, I prefer Hartmann's"?
A. Yes.
THE CHAIRMAN: And can you remember, for instance, any individual anaesthetist who did that?
A. I can't remember a name, but I can remember it happening and that they prescribed Hartmann's post-op, but I don't know when they got back to the ward who changed it, but --



THE CHAIRMAN: When a child goes back to the ward, then at that point that's the end of your involvement; isn't that right?
A. Yes.
THE CHAIRMAN: You're a theatre nurse, so you're in the theatre with a child, you're in recovery with a child, are you?
A. Yes.
THE CHAIRMAN: And then when the child goes back from recovery or from theatre to the ward, is that often the last that you see of the child?
A. Yes.
THE CHAIRMAN: Thank you.
MR STITT: Mr Chairman, [inaudible: no microphone] point of view that I'm coming from in relation to my question. I wonder, sir, would you consider refining your question of the witness to discriminate, if possible, by what are the elements of the post-operative fluid regime. In other words, are we talking about the recovery ward, the recovery room, as opposed to -- in other words, is the prescription from the anaesthetist to cover the recovery ward only or is the witness saying that it was meant to go on to the ward also, but changed because of protocols?
THE CHAIRMAN: And then eventually -- yes. If we take this

point that Mr Stitt helpfully makes.

So the operation's over. We're not focusing on Raychel, but generally at the moment. A child has had an operation. Post-operatively the anaesthetist might prescribe Hartmann's, but there's also a practice of prescribing Solution No. 18. And how long does that initial post-operative fluid run for or prescription last for? Are we talking about a few hours and then by that time the child is back on the ward, the IV fluid runs out and then the ward decides what to do?

A. No. What normally happens is the intraoperative fluids, which are in progress during the surgery, are continued in the recovery room.

THE CHAIRMAN: Okay.

A. Then those are discontinued before the child goes back to the ward.

THE CHAIRMAN: So the child does not leave the recovery room on the intraoperative fluid regime?

A. No.

THE CHAIRMAN: So when the child leaves the recovery room to go to the ward, is the child then on post-operative fluids?

A. There's no fluids attached.

THE CHAIRMAN: So the child goes back to the ward without any IV fluid?



A. Without any IV fluid, yes.

THE CHAIRMAN: And when the child arrives back on the ward, it's the ward team's responsibility to decide what the ward fluids are?

A. Yes, which at that time -- was normal, it was Solution No. 18.

THE CHAIRMAN: I might be mistaken, but I think a couple of weeks ago I picked up a slightly different impression that after an operation was over, there were post-operative fluids given, they might last, for instance, for five or six hours, back on the ward, and then, when they run out, it's at that point that the ward team would decide what the fluid regime should be on the ward.

A. Yes.

THE CHAIRMAN: Is that not right?

A. That would be right if it was Hartmann's that was prescribed and running.

THE CHAIRMAN: Okay.

A. But none of the anaesthetists in Altnagelvin prescribed Solution No. 18 post-op.

THE CHAIRMAN: None of them did?

A. No.

THE CHAIRMAN: Okay. Sorry, that's not quite what you said a few moments ago, is it? I think you said a few



moments ago -- was that your point?

MR QUINN: That was one of my points. That's not what was said and I'm unclear about this now.

THE CHAIRMAN: I thought you said there were times when anaesthetists would prescribe Hartmann's post-op.

A. Hartmann's, yes. They didn't prescribe Solution No. 18 --

THE CHAIRMAN: Okay. So --

A. -- post-op.

THE CHAIRMAN: So there were some times when the anaesthetist prescribed Solution No. 18 post-op, but what then happened on the ward was beyond your knowledge, except your understanding is, back on the ward, they used Solution No. 18?

A. Solution No. 18 was the fluid used across the board, both for medical and surgical patients and the paediatric ward.

MR QUINN: If we look at the transcript, this witness is saying it was Solution No. 18 on the ward -- "Hartmann's prescribed by the anaesthetist full stop", whereas earlier on it was on the [draft] transcript as "post-op". And perhaps that could be clarified because I'm unclear about whether this witness is saying the anaesthetist prescribed Hartmann's full stop, meaning that was it, the anaesthetist did not prescribe 18. So



that's point 1. The second point is my recollection from the previous evidence was that the patient normally went back up to the ward with a drip attached.

THE CHAIRMAN: Which might last for a number of hours.

MR QUINN: That's what my recollection was.

THE CHAIRMAN: I don't know if you were here a few weeks ago when we heard some evidence about this, but the impression I got and Mr Quinn got, obviously -- and maybe others -- was that a child would often leave recovery and go on to the ward with fluids attached and that those fluids might last for a number of hours.

A. It's very unusual --

THE CHAIRMAN: Really?

A. -- for a child to leave recovery with fluids attached.

THE CHAIRMAN: So there would normally be a break in fluids being given to a child between the child coming out of recovery and the child going on to the ward?

A. Yes, it wouldn't have been a long break.

THE CHAIRMAN: Only a few minutes, is it?

A. Just from the time it took to get from recovery back to the ward.

THE CHAIRMAN: And then --

A. And the drip was usually attached more or less right away then. It was the same coming to theatre.

THE CHAIRMAN: When the child was back on the ward then,

from your perspective, does the child then become the responsibility of the ward team and not the anaesthetist?

A. Yes.

THE CHAIRMAN: When you say none of the anaesthetists in Altnagelvin prescribed Solution No. 18 post-op, when you say "post-op" do you mean in recovery?

A. No, for the ward.

THE CHAIRMAN: Right.

A. Because in recovery they continued with the Hartmann's, which was in use intra-op. Back then, there wasn't a separate recovery. They were recovered in the theatre.

THE CHAIRMAN: Right.

A. So they weren't moved out at all. They were still in the same room.

THE CHAIRMAN: Okay. If that's general background, then Mr Reid, we'll go on to develop that in terms specifically of what happened in Raychel's case.

MR REID: Yes, Mr Chairman, I am certainly going to return to the topic of post-operative fluid management.

Maybe just because it's an issue at the moment, can I just check this: Mrs McGrath, you're saying generally the intraoperative fluids would be continued in recovery and since recovery is still in the theatre, the patient



stays in the theatre; is that right?

A. Yes.

Q. And then in some circumstances the anaesthetists would prescribe the post-operative fluids, but that would be only on occasion. The normal practice would be that the fluids would be managed on the ward whenever a patient returns to the ward; is that right?

A. Yes.

Q. And if the anaesthetists don't prescribe anything, then generally the patient, when they return to the ward, goes on the same fluid regime as their preoperative fluids --

A. Yes.

Q. -- which was normally Solution No. 18.

If the anaesthetist, at the time of recovery, did prescribe Hartmann's, would the Hartmann's that was still being used in surgery -- which was attached, I presume; is that right?

A. That's correct.

Q. Would it remain with the patient as they were transferred to the ward or would it be detached and then reattached when they got back?

A. It would be detached.

Q. It would be detached?

A. Detached.



Q. So even if the anaesthetist did prescribe the Hartmann's, would the bag just be brought with the patient but detached to the ward and then hooked up again?

A. No. They're always detached in the recovery room because the giving set that's used in theatre and the ward are different, they're not compatible with the pumps that are used. So they would be detached.

MR REID: I think, Mr Chairman, that's the evidence that we have heard before: that there was different equipment, so they had to be detached and reattached.

So would that Hartmann's bag, if Hartmann's was prescribed in recovery by the anaesthetist for post-operative fluids on occasion, would that bag that had just been detached be brought with them to the ward or not?

A. The Hartmann's bag?

Q. Yes.

A. No, it wouldn't be taken.

Q. So would the anaesthetist and yourself therefore be expecting a new bag of Hartmann's to be put up on the ward?

A. Yes, if Hartmann's was prescribed.

Q. And if Hartmann's wasn't available on the ward, would that affect that in any way?



A. I can't say because I understood that it was always Solution No. 18 that was used in Ward 6.

THE CHAIRMAN: I presume now, as a direct result of what happened with Raychel and Raychel dying, you know the significance of the difference between Solution No. 18 and Hartmann's.

A. Yes.

THE CHAIRMAN: And everybody learnt this awful lesson as a result of Raychel's death.

A. Yes.

THE CHAIRMAN: Before June 2001, had you ever wondered why it was that Hartmann's, which was given in surgery and in recovery, was then discontinued and a different solution given back on the ward?

A. Yes.

THE CHAIRMAN: Had you wondered about that?

A. Yes.

THE CHAIRMAN: Why did you understand that there was a difference? Because it wasn't the anaesthetists who were saying a child should go on to Solution No. 18; that was the ward decision.

A. It was just normal practice in Ward 6 that Solution No. 18 was used all the time for medical and surgical patients.

THE CHAIRMAN: I'm not saying you should have done anything

about it, but did that ever strike you as being a bit odd or curious?
A. I did ask why.
THE CHAIRMAN: And can you remember what you were told?
A. Just that Ward 6 preferred to use Solution No. 18.
THE CHAIRMAN: Ward 6, is that the children's surgical ward?
A. It's combined paediatric -- combined surgical and medical.
THE CHAIRMAN: Okay. Just to get it clear so I understand this: is Ward 6 the only combined surgical and medical for children?
A. It's the only paediatric ward.
THE CHAIRMAN: So when you say "Ward 6", that effectively means the paediatric ward?
A. Yes.
THE CHAIRMAN: It was the preference on Ward 6 -- your words were:
"Ward 6 preferred to use Solution No. 18."
So at some point somebody who has overall responsibility for this area has decided that Solution No. 18 is the solution which will be used on Ward 6 --
A. Yes.
THE CHAIRMAN: -- for both medical and surgical children patients.
A. Yes.



THE CHAIRMAN: Okay.
MR REID: Just two questions arising from that. The first is: was Solution No. 18 the common fluid used in adult wards as well?
A. No.
Q. What solution was commonly used on the adult wards?
A. Hartmann's.
Q. Do you know why that was?
A. No. Just ... A lot of doctors preferred using Hartmann's.
Q. This is something we will return to, but Dr Jamison said that it often happened that whenever the patients were transferred to the ward, that even if the anaesthetist had written a prescription for post-operative fluids, that the fluids would be re-prescribed as soon as the patient went on to the ward and that re-prescription would be for Solution No. 18. That was Dr Jamison's evidence; does that sound correct to you?
A. Yes.
THE CHAIRMAN: That makes it a bit pointless then, doesn't it, for the anaesthetist to prescribe something that is immediately reversed or soon afterwards reversed when the child goes on to the ward?
A. Yes.
THE CHAIRMAN: It's easy for me to sit here and ask this



question some years afterwards, but did it strike you that that's something the doctors should have sorted out between themselves as to what fluids should be used?
A. Yes.
THE CHAIRMAN: It might not take very long for the doctors to sit down together and have a discussion about why you're saying we should use one and why we're using another. This was something that you yourself had queried or expressed a bit of curiosity about.
A. Yes.
THE CHAIRMAN: Do you have any idea, before June 2001, when it had occurred to you this seemed a bit curious?
A. When it would have?
THE CHAIRMAN: Yes. You'd been there for quite a while.
A. I would have found -- if a new doctor came to the hospital, a new trainee, and learned about this practice, there would have been -- they would have questioned it and there would have been sort of discussions then.
THE CHAIRMAN: Then they just fell into the Altnagelvin way of doing things?
A. Yes.
THE CHAIRMAN: And that was it?
A. Yes.
THE CHAIRMAN: Okay, thank you.



MR REID: Mrs McGrath, we'll return to the post-operative fluids. But if I could ask you to take it back. In June 2001, what would you say your knowledge of hyponatraemia was?
A. Very little. I had heard of it, but I had never encountered a patient who had suffered from it.
Q. You'd never encountered a patient who had suffered from just low sodium or was it you'd never had a patient who'd suffered from dilutional hyponatraemia?
A. There would have been patients in theatre, adult patients, with low sodium.
Q. But were you aware in June 2001 of the consequences of hyponatraemia?
A. Not as much as now.
Q. Were you aware in June 2001 of Adam Strain's inquest or case?
A. No.
Q. And did you know the factors that could cause a low sodium?
A. Not in depth, no.
Q. For example, did you know that electrolytes could be lost in vomiting?
A. Yes.
Q. You did know that?
A. Yes.

Q. Okay.
THE CHAIRMAN: When you say you knew that, did you know that from basic training or was it just something you'd picked up over the years?
A. Both, from basic training and picked up over the years.
THE CHAIRMAN: Did you know that although you don't have to immediately replace all the sodium, but if you lose a lot of electrolytes, that something should be done to correct that?
A. Yes.
THE CHAIRMAN: Thank you.
MR REID: If I can bring up your witness statement, 050/1, page 2, please. There we see, just in the second paragraph:
"On the night of 7 June 2001, I was the nurse in charge of theatre along with Staff Nurse Vivienne Ayton and Registered Nurse Heather Shaw."
What time did you start duty on 7 June?
A. Quarter to 8, 7.45.
Q. Is that the usual time you would start duty for the night shift?
A. Yes.
Q. What time then did you finish the next day?
A. 8 o'clock.
Q. In the morning?



A. Uh-huh.
Q. You have said there you were the nurse in charge of theatre. What's involved in that role?
A. The nurse in charge organises the case load for the night, organises who's going to scrub for any surgeries, who's going to assist with the anaesthetic and who's going to do recovery. Normally at night-time we work together, although we didn't have set roles. One would have said, "I'll scrub", or whatever. We also -- apart from surgery that was organised, we were responsible for getting the theatres ready for the lists the following day and clearing up from the previous day's lists as well.
Q. Okay. Staff Nurse Ayton was involved in Raychel's surgery. Was Registered Nurse Shaw at all involved in Raychel's surgery?
A. Yes, her and me assisted the anaesthetist.
Q. Okay. So all three of you were involved in the actual surgery itself?
A. Yes.
Q. And you and Registered Nurse Shaw assisted the anaesthetist?
A. To anaesthetise, yes.
Q. What was Staff Nurse Ayton's role during the surgery?
A. She was scrub nurse, she scrubbed for the surgery.



Q. If we can bring up 020-010-018. If we see at the bottom left, we can see it says:
"Name of nurse taking case ... signature, Vivienne Ayton."
And, "Name of nurse checking swabs", and your own name. First of all, what is involved in the "nurse taking case"? What does that mean?
A. It's the nurse who's scrubbing, to assist the surgeon and ...
Q. So that's really --
A. Hand the instruments and swabs.
Q. If we move on to -- if we can bring up 020-012-020. That's the theatre nurse's care plan. Who filled that in?
A. I did.
Q. That's your signature at the bottom?
A. Yes.
Q. And the next page, the intraoperative nursing care. 020-013-021. Again, that's all filled in by yourself?
A. Yes.
Q. And finally, the next page 020-014-022, which is the recovery area care. Again, that's all filled in by yourself?
A. Yes.
Q. Thank you. In terms of the arrangements for surgery,



when did you first find out that Raychel was being brought in for surgery that night?
A. It wasn't very long after we came on duty.
Q. So you came on duty at 7.45?
A. Yes.
Q. How long do you think afterwards you were told that you would have a patient for surgery?
A. It wasn't long. Maybe about half to three-quarters of an hour.
Q. Were you told that there might be a patient coming for surgery or were you told that the theatre was definitely going to be used?
A. I was told that Raychel was definitely coming, but it would be 11 o'clock.
Q. So you think you were told at that stage, maybe half past 8 or so, that the theatre would definitely be used for the evening?
A. Yes.
THE CHAIRMAN: Does it make any difference to you whether it's a definite or only provisional? Do you just have to set everything up anyway and if the surgery doesn't go ahead, it doesn't go ahead?
A. If it was only a query, I wouldn't have sent for -- you don't send for the patient until you find out is it a definite.

THE CHAIRMAN: Right.
A. I wouldn't set anything up until then.
MR REID: How long would the set-up take?
A. Sorry?
Q. Setting up the theatre, how long would that take?
A. Roughly about half an hour.
Q. Okay. Were you aware in any way that the surgery was dependent on Raychel's condition? For example, if her condition got worse then surgery would be required.
A. No.
Q. As far as you're concerned, the surgery --
A. Was definite, yes.
THE CHAIRMAN: Or, to put it the other way maybe, if it didn't improve, it would be required that ... Your understanding from about 8 -- and I presume you're not being absolutely precise about times -- but roughly by 8.30 or before 9 o'clock, your understanding was that Raychel, this girl who turned out to be Raychel, was definitely coming in for surgery?
A. At 11, yes.
MR REID: The reason I'm asking, Mrs McGrath, is that Raychel's parents thought or their impression, at the very least, was that the surgery was only going to happen if Raychel's pain increased and that arranging the surgery was a precautionary measure. Do you have



any knowledge of that being the case?
A. No.
MR QUINN: Mr Chairman, just at this stage, I wonder would my learned friend be kind enough to ask whether the circumstances in which the nurse was told that the theatre would be used by 11 -- because that seems to be a pertinent point here. You'll recall that the parents went home. They were certainly of no mind that there was going to be definite surgery, whereas this nurse seems to be --
THE CHAIRMAN: In other words, was it to be at some point after 11 o'clock or precisely 11 or what?
MR QUINN: That's why I wanted the question asked.
MR REID: Who was it who informed you that Raychel was coming in for surgery and surgery was going to take place at 11 o'clock?
A. Mr Makar, the SHO on that night.
Q. Did he telephone you or speak to you in person?
A. I can't remember if he came to theatre or he phoned. I can't remember.
Q. Do you recall a conversation with him that night?
A. Yes.
Q. You do recall? Apart from what you've already said, do you recall anything else on that phone call?
A. No. We have -- when someone phones or comes up to book



a case, there's a book that you take the details of the name of the patient, ward, surgery to be performed, time booked, and time for surgery.
Q. Are those kind of books still kept for surgeries in theatre?
A. Yes.
Q. Are you aware whether records of those surgeries back to 2001 would have been kept?
A. I don't know.
THE CHAIRMAN: When you say "a book", is it a book?
A. It's like a file.
THE CHAIRMAN: Like that (indicating)? A file like that?
A. Like a lever-arch file.
THE CHAIRMAN: That's a lever-arch file, just for the record. That file would have a separate page or a couple of pages for each booked surgery? Would it be a single page?
A. No, just like a line for each case.
THE CHAIRMAN: Oh right.
A. It's divided into, I think, five on the front and five on the back.
THE CHAIRMAN: Okay. Where are those records kept?
A. I don't know.
THE CHAIRMAN: They're part of your records, are they?
A. Sorry, you mean records I would have kept?



THE CHAIRMAN: We have some of your records, as Mr Reid has just taken you through.
A. Oh, that file is theatre's.
THE CHAIRMAN: Right.
A. It's kept at the reception desk in theatre. So if anyone phones or comes up to book a case ...
THE CHAIRMAN: Okay. Mr Lavery, I wonder at some point over the next day or two, could we have a check? I don't think we have that document.
MR LAVERY: We can certainly make enquiries to check.
THE CHAIRMAN: Thank you very much.
MR REID: Would that be described as a theatre logbook, would that be a fair description, or is that another document entirely?
A. We referred to it just as the booking book.
Q. And on that, would you note the time that it was booked?
A. Yes.
Q. So you know the time it was booked and the time that the surgery would be intended to happen?
A. Yes.
Q. You remember Mr Makar speaking to you or phoning you or speaking to you in some way --
A. Yes.
Q. -- telling you that a child was being brought up for theatre. Did he say what type of surgery it would be?

A. Yes. An appendicectomy.
Q. And saying that the theatre would be needed at 11 pm?
A. Yes.
Q. Can you recall anything else as part of that discussion?
A. Um ... He may have said that she wouldn't be fasted until that time.
Q. So she wouldn't be ready until 11 o'clock?
A. She wouldn't be ready until 11 because she wasn't fasted until 11.
Q. Do you recall if Mr Makar mentioned any senior colleague or anybody that he had spoken to about the surgery?
A. No.
Q. And do you have any knowledge of Mr Makar speaking to Mr Zawislak or anybody senior?
A. No.
THE CHAIRMAN: Was it unusual for surgery on a child to be as late as 11 o'clock or is that just something that happened from time to time?
A. No, it was very common.
THE CHAIRMAN: And sometimes after that, sometimes after midnight?
A. Sometimes after midnight if the child was ill or very sore.
THE CHAIRMAN: So the time of the operation, coming up to midnight or after midnight, that didn't strike you as



being out of ordinary?
A. No.
MR REID: Can I ask you, Mrs McGrath, we've heard different evidence about midnight as a key time. Were you aware whether starting an operation before midnight or after midnight was of any consequence?
A. Yes, they didn't like operating after midnight unless it was a critical case. The words used was "life or limb".
Q. Do you know whenever the anaesthetist examined Raychel? Do you have any knowledge as far as that's concerned?
A. Sorry, when he did?
Q. Yes.
A. No, I don't know what time he did.
Q. And can you recall what time Raychel was brought to theatre?
A. I would have sent for her about 11. So I think it was roughly about 11.20 when she came.
Q. Would it have been the theatre nurses who would have contacted Raychel's parents or would it have been the ward nurses?
A. It wasn't the theatre nurses.
Q. Am I correct in saying that the theatre as well is in a different floor from Ward 6?
A. Yes.
Q. Ward 6 is on the sixth floor.



A. Yes. And theatre's on the first floor.
Q. That's a general theatre that takes both adult and paediatric patients?
A. Yes.
Q. So Raychel was brought up around 11 o'clock. Who was present then whenever Raychel was brought into theatre?
A. She came into the anaesthetic room first, we kept the table in the anaesthetic room and changed her from the bed over to the table in the anaesthetic room before we wheeled her in. Dr Gund and Dr Jamison were there, Nurse Shaw and myself.
Q. Can you recall the ward nurse who brought Raychel up, or ward nurses?
A. Nurse Bryce brought her down from the ward.
Q. Staff Nurse Bryce?
A. Staff Nurse Bryce, yes.
Q. Were Raychel's parents present at that time?
A. Her mum was with her, yes, her mummy.
Q. Her mum was present in the anaesthetic room?
A. She came down from the ward with her, yes.
Q. Do you remember any discussions between any of the doctors, the surgeons and the anaesthetists, before the surgery?
A. Between both sets or ...
Q. Can you recall any discussions, anything discussed?



A. No, Dr Jamison, Dr Gund were just talking in the anaesthetic room while we were waiting for Raychel to come, just about the general workload that night.
Q. And what were they saying about the workload?
A. Just, I think, Dr Gund was asking Dr Jamison had she been to the labour ward and what intensive care was like. It was just a general conversation.
Q. Were they saying that it was normal or busy or quiet or ...?
A. I can't remember.
Q. Okay. Do you recall any discussion by Mr Makar or by Dr Gund or by Dr Jamison about whether or not the surgery should go ahead?
A. No.
Q. Would nurses ever be part of the decision in 2001 about whether surgery would go ahead?
A. No.
Q. Okay. This is the first time you see Raychel on that night.
A. In the anaesthetic --
Q. In the anaesthetic room.
A. Yes.
Q. What was her condition like, how did she look?
THE CHAIRMAN: Sorry, do you remember?
A. Yes, she was quiet and I asked her how she was feeling.

I said, "You have to get over to our bed now", and I said, "Will you be able to do that?", and she said, "My tummy's just a bit sore", but she got over okay.

MR REID: She was quiet, but she was still responsive to your questions?

A. Oh yes, yes.

Q. I think you have said in your witness statement you thought she was a bit lethargic and apprehensive; is that right?

A. Well, I suppose it was after 11 o'clock at night and she was in a strange surroundings and she knew she was coming for an operation, so I'm sure she was a bit apprehensive.

Q. Was she in any pain?

A. She said her tummy was a bit sore, but she wasn't holding her tummy or anything.

Q. She wasn't crying or anything of that nature?

A. No, no.

Q. Because Mrs Ferguson has commented on Raychel's form in her witness statement, WS020/1, page 4. She says at the very bottom:

"Clarify whether Raychel was experiencing any pain when she arrived at theatre."

She thought:

"Raychel did not seem to be in any pain as she was



being wheeled down into theatre and she was chatting away to the nurse about her sports day."

Is that similar to how you saw Raychel or is that different?

A. I'm just saying what Raychel told me when I asked her how she was. She just said her tummy was a bit sore.

THE CHAIRMAN: How her mum sees her and how you see her might be two slightly different things?

A. Oh yes, yes.

MR REID: Her tummy was a bit sore; is that as far as it was?

A. Yes.

Q. Did you speak to Mrs Ferguson in the anaesthetic room?

A. Yes, both to Raychel and her mummy.

Q. And do you know what you discussed with Mrs Ferguson in the anaesthetic room?

A. Just in general that Raychel would be moved over to the theatre table. At night-time we went into theatre for the induction of the anaesthetic and she would have a face mask.

Q. Did you say anything about how long the surgery might last?

A. No.

Q. Do you recall Mrs Ferguson asking how long the surgery might last?



A. No.

THE CHAIRMAN: It would be a normal question for any parent to ask, wouldn't it? Not necessarily to you, but they would want to know somewhere along the line from the --

A. Sometimes they do, yes, in the anaesthetic room. Sometimes they do.

MR REID: And if you had been asked, what would your answer have been as to how long it would be before she was back after an appendicectomy?

A. It's a very hard question to answer because it could take anything from -- for a straightforward appendicectomy, it could take anything from an hour and three-quarters to two hours plus before they're back on the ward.

Q. In Mrs Ferguson's witness statement, she says --

THE CHAIRMAN: It's the top of that page.

MR REID: No, no, it's a different point, Mr Chairman. I think it's on the next page:

"A nurse said that Raychel would be back on the ward within the hour and they returned at half past midnight, expecting Raychel to be back."

Would you have said, given what your previous answer was, that she would be back on the ward within an hour?

A. No.

Q. And do you know whether the nurse she is referring to is



you or not?

A. I don't think I would have said she would have been back in an hour.

Q. If we bring up your witness statement at WS050/1, at page 2. Just in the third paragraph of your answer there, at the very end you say:

"Raychel had a Venflon in situ in her right arm through which she had been receiving intravenous fluids, Solution No. 18, in the ward. These fluids were discontinued before coming to theatre as was normal practice. I was informed the fluids had been up for about an hour."

First of all, who were you informed by that the fluids had been up for about an hour at that stage?

A. It would have been the ward nurse who handed over to me in the anaesthetic room, Nurse Bryce.

Q. It was part of the questioning previously, but when you say the fluids had been discontinued, what then happened to that bag of Solution No. 18 that was being used on the ward?

A. I don't know.

Q. Was it still with her at the time or had it been disconnected?

A. No, no, it wasn't with her when she came to theatre, no.

Q. In those circumstances, is the bag normally discarded or

is it left in the theatre ready to be reattached? Are you aware of --
A. In the theatre?
Q. The Solution No. 18 was discontinued --
A. In the ward and left in the ward, and it was left in the ward.
THE CHAIRMAN: And --
A. It didn't come to theatre with her.
THE CHAIRMAN: When a child goes back to the ward and if the child is going to go back on to Solution No. 18, do you know if the child goes back on to the same bag?
A. I don't know.
THE CHAIRMAN: Would there be any reason why the child shouldn't? If the child doesn't go on to that bag, it sort of wastes what's left of the bag, doesn't it?
A. They probably do go back on it.
THE CHAIRMAN: Is there any reason you can think of, just off the top of your head, as to why the same bag should not be reconnected on the ward again?
A. No.
MR REID: I think Mr Makar said in his evidence that he thought it might not be hygienic for the same bag to be used. Do you have any hygiene issues as far as that's concerned?
A. No, if it was covered where it was unattached. If there



was a cover put on, there's no reason why not.
Q. I presume there's almost a valve or something on the bag that whenever -- it doesn't leak until the tube's attached and then the fluid comes out of it; would that be right?
A. You can actually switch it off, turn it off, and then that stops the flow of fluid coming out then.
Q. There's almost a tap on --
A. Like a tap, yes. Just roll down.
Q. If I can ask you then about the surgery itself. You say you were assisting the anaesthetists and the anaesthetists in the surgery were Dr Gund and Dr Jamison; isn't that right?
A. That's right.
Q. How long was Dr Jamison present for? You said she was in the anaesthetic room. How long was she present for during the actual surgery itself?
A. She was there the whole time Raychel was being anaesthetised and she was there when the anaesthetic part finished and then we started positioning and putting the sterile drapes on. I think she may have left shortly after that then.
Q. So you think she was there during the induction section and the --
A. She was definitely there, yes.



Q. But then during the knife to skin section of the surgery, you have no recollection of whether she was present?
A. No, I think she left then, but she came back.
Q. Okay.
THE CHAIRMAN: Would that be what you would expect? This wasn't expected to be a difficult operation, so --
A. Yes, that was normal.
THE CHAIRMAN: -- you wouldn't expect two anaesthetists to be there throughout, would you?
A. If the two had been free, if the senior anaesthetist hadn't to go to do other duties or whatever in intensive care or the labour ward, she would have stayed.
THE CHAIRMAN: Right. You can't remember the detail of it, but they had already been talking earlier on about what else was going on that night?
A. Yes.
MR REID: If we look at the fluid that was administered during the surgery, if we bring up reference 020-009-016, please. This is the anaesthetic record. We can see there in the centre, it says "Hartmann's 1 litre". Whose responsibility is it to note the fluids given during the surgery?
A. It's the anaesthetist's.
Q. The anaesthetist?



A. Yes.
Q. Because on the ward we've seen the fluid balance charts and, on those, it's the nurses who note each hour the IV fluids given; isn't that right?
A. Yes.
Q. Is it the case that it is a different scenario in surgery?
A. Yes. The anaesthetist is responsible for the intraoperative fluids and the amount and for documenting it.
Q. And during your many years in the theatre, has it ever been your responsibility to note the fluids that have been administered during the surgery?
A. No.
Q. Do you know how much Hartmann's was given during Raychel's surgery?
A. No, I don't know exactly how much was given.
Q. Do you have any explanation why it wasn't noted how much was given during the surgery?
A. No. Anaesthetists vary on what way they document and record the amount they've given.
Q. Do the majority of them record how much is given or is it done sometimes? How regularly is it done?
A. The majority wouldn't, no.
Q. The majority wouldn't record how much was given?

A. No.
Q. Is it that they wouldn't record how much was given through the surgery or even at the end of the surgery they wouldn't note how much was given?
A. I think they write up at the beginning if they're putting up a litre, say, of Hartmann's, mark that in, intending maybe when the surgery is finished to mark up how much was infused.
THE CHAIRMAN: Your experience is that although they're supposed to mark up how much Hartmann's a child has received, a lot of them don't do that?
A. No.
THE CHAIRMAN: Okay.
MR REID: If we can bring up alongside that document the fluid balance chart at 020-020-039, please. This is Raychel's fluid balance sheet for the evening of the 7th into the early hours of 8 June 2001. It's a little small, but just in the centre, at about midnight/1 o'clock, it says, "At theatre", and there's no record of the fluid balance recorded for those times. Can you see that there?
A. Yes.
Q. Whose responsibility is it to note the fluids that were given in theatre on to the fluid balance chart?
A. That wouldn't normally be done.



Q. It wouldn't normally be done?
A. No.
Q. Did you ever see that being done?
A. No.
Q. If we say, for example, it was 200 ml in this case, you wouldn't normally see someone note the fluid balance chart at that point and say, "Given 200 ml during theatre"?
A. No.
Q. Would you accept that without that being noted that it could be difficult for a doctor or a nurse who's looking at that record to know then what fluids were given during theatre?
A. Normally, the handover to the ward nurse when the child's gone back to the ward, we would verbally tell the nurse the amount of fluid was infused intra-op or the whole time she was in theatre recovery.
Q. So you're saying --
THE CHAIRMAN: Sorry. This is nurse to nurse?
A. Yes.
THE CHAIRMAN: "We would verbally tell the nurse the amount of fluid infused."
And that's somebody on your side, or the theatre nurse, telling the ward nurse who's taking the child back down?



A. Back to the ward, yes.
THE CHAIRMAN: Back to the ward, yes. Is that done by just looking at the bag to see how much has gone from the back?
A. No, normally we would ask the anaesthetist.
MR REID: Would you ever see it then that the theatre nurse might note on either the fluid balance chart or in the nursing notes that 200 ml, for example, had been given during surgery?
A. It wouldn't be in the nursing notes it would be noted, no.
Q. We've seen the various care plans and recovery care plans that have come up. Would you ever note on those sheets "200 ml given during surgery"?
A. Now I would. Back then, no.
Q. Can I ask why you have changed your approach?
A. Because the fluid balance sheet now in paediatrics is totally changed, so everything's documented.
Q. Okay.
THE CHAIRMAN: Is this as a result of what happened with Raychel?
A. Yes.
MR REID: Would you accept that the fact that neither the anaesthetists nor the theatre nurses nor the ward nurses note the amount given during surgery means that, apart



from your informal handover to the ward nurses, anybody looking, for example, at that fluid balance chart won't know what was given during surgery?
A. Yes.
Q. And in fact, even if you look through the notes, apart from this retrospective note, you might even think that a litre of Hartmann's might have been given during that surgery.
A. Yes.
Q. If we bring up your witness statement, 050/1, at page 2, please. Six lines from the bottom of the page, you say:
"The operation then proceeded uneventfully and at approximately half past midnight Raychel was moved back to her own bed. As is normal practice at night-time, Raychel was kept in theatre to recover as the recovery ward is closed at night. Raychel was quite slow to wake up, but the anaesthetist felt this was due to the opioid drugs administered."
That's your recollection?
A. Yes.
Q. Okay. So as we've discussed earlier, she was kept in the same theatre that she was being operated in in order to recover from the drugs; is that right?
A. Yes.
Q. When you say then "she was moved back to her own bed",

what do you mean by that?
A. Moved back from the operating table into her own bed.
Q. Is that the trolley that had been brought back from Ward 6 and you move her on to that trolley?
A. No, she came from Ward 6 in her own bed and was moved form her own bed onto our trolley, the theatre trolley, and it was from that trolley she was moved back then to her own bed at the end of the surgery.
Q. And that bed is then brought back to Ward 6?
A. Then her own bed's gone back to Ward 6, yes.
Q. At this point, at half past midnight, the surgery was over but Raychel was recovering. In surgery such as this where it's a child being operated on and you know the parents are outside, would it be usual at that stage for a message to be sent out saying, "Surgery's over, the child's in recovery now"?
A. No.
Q. And why is that?
A. It just wasn't done.
Q. Is that done now?
A. Not really, unless the child had been very sick beforehand or the surgery was prolonged.
THE CHAIRMAN: So what's the first update? Not just talking about Raychel, but typically what is the first update that parents get after surgery is completed on a child?



A. They're now brought into recovery as soon as the child wakens, which is different from back then.
THE CHAIRMAN: Okay. Back then, back in 2001, what was the first update that they would have had?
A. Probably when we phoned the ward for the nurse to come down to collect her. The nurse probably would have said, "I'm going in to collect Raychel now from theatre".
THE CHAIRMAN: Okay.
MR REID: So if we bring up the recovery area care plan at 020-014-022, please. We see there at the bottom, these are the observations you do regularly as she recovers in the recovery area; is that right?
A. Yes.
Q. So there's 12.45, 12.55, 1.05, 1.15 and 1.30, and we see "level of consciousness". At 12.45 she's asleep. At 12.55 she's asleep. At 1.05 she's asleep. At 1.15 she's awake and she continues to be awake at 1.30. Are we to take from that that the first point at which she recovers from the anaesthetic is around 1.15?
A. No, at 12.55 she's still got an ET tube in there, so some time between 12.55 and 1.05, that was removed.
Q. Okay.
A. She was wakening up and pushing it out of her mouth. So she was responding then even though she was still



asleep, as it were. She was responding, she was able to open her eyes and ...
Q. So these days whenever you would phone down to say, "Oh, she's wakening up", at what stage at Raychel's recovery would you have phoned down?
A. Sorry, phoned?
Q. You say that you would have ...
THE CHAIRMAN: If this was a record of what had happened last week with a child, at what point are the parents brought in?
A. Probably at the 1.05.
THE CHAIRMAN: After the tube is removed?
A. Yes.
MR REID: Actually, in Raychel's case, what time would you have phoned down to the ward to say she's ready for transfer?
A. The half one, at the last observation. She would have been awake and responding and talking at that stage.
THE CHAIRMAN: Not 1.15, no?
A. 1.30. The last one.
MR REID: Because that's the time of transfer; is that right?
A. That's when I phoned the ward to say she was ready to go back.
Q. How long would the patient normally be kept? It seems



she doesn't really change that much between 1.15 and 1.30. How long would they be kept there at the same level of consciousness before you would transfer them?
A. It depends how long it took for the child to waken after the actual surgery was finished and the ET tube removed. Usually about 20 minutes then after that.
Q. Okay. The reason I'm asking you about this is that Raychel's parents feel that they weren't kept informed and, in fact, they thought there was a delay in Raychel coming back from surgery. If I can bring up Mrs Ferguson's deposition at 012-028-145, please. It's in the centre:
"A nurse said that Raychel would be back on the ward within the hour."
Which I have already discussed with you. So at half past midnight they returned to the children's ward waiting on Raychel:
"Raychel did not return until about 10 minutes past 2 and I questioned a nurse as to the delay before she arrived. All I was told was they had no word yet. When Raychel returned we were so glad to see her that we didn't ask what the delay had been."
I think you have said it would have been about half one you would have asked for the transfer. Do you know what time she returned to the ward?

A. I think it was about 1.50 she left theatre.
Q. And I suppose that would have taken five to ten minutes --
A. The handover to the ward nurse and ...
Q. Mm-hm. Do you understand the Fergusons' frustration, their child being in surgery and them not knowing what's going on?
A. Yes.
THE CHAIRMAN: I think on one interpretation, this might look worse to Mr and Mrs Ferguson because of what then happened to Raychel. But at that point, if you stop it at a bit after 1 o'clock, it seems as if Raychel was slower to come round than a child might normally be. I think that's in your own statement.
A. She was slightly slow to waken up, yes.
THE CHAIRMAN: So that takes a few minutes longer. Then you observe her for a while to make sure everything's okay in recovery, and recovery happened to be in the theatre that night because it is night-time. Then you contact the ward, then the ward arranges to bring her down, there's a handover, and it's then when she's back on the ward that her parents see her and it is not until a bit after 2 o'clock. So if things hadn't gone so disastrously wrong afterwards, that's a bit slower than expected but nothing fundamentally out of the norm;



would that be right?
A. No, it wasn't out of normal at all.
THE CHAIRMAN: Okay.
MR REID: Just while we're at that point, you're saying on that transfer there would be a handover with the ward nurses. First of all, can you recall a handover in the early hours of 8 June?
A. Yes.
Q. Would you normally have been present during that handover or would it have been one of the other theatre nurses?
A. No, I did the handover because I recovered Raychel, so whoever does the recovery does the handover.
Q. And what would you normally explain during the handover?
A. Number 1, what operation was performed and the wound, the status, what it was closed with, whatever. Then go to the anaesthetic sheet and tell the nurse all the drugs we used, what fluids, IV fluids, she had, and what she's written up for post-operatively for her pain then afterwards.
Q. It's an issue we'll move on to in a second, but would you have then also described what post-operative fluids she was going to be on?
A. What she was going to get, yes.
Q. What would that have been based on? Would that have



been based on the preoperative fluid regime, what the anaesthetist had said?
A. At that time, yes, normal practice was that all children had Solution No. 18 post operatively.
Q. So you explain the operation and how the wound is and the drugs she's on and would you also say that she was on 80 ml an hour preoperatively and that's what she'll be on post-operatively, for example?
A. Normally, they went back on to the same rate post-op as pre-op.
Q. Would you have been that detailed or would you have simply said, "Discontinue the pre-op fluids"?
A. The same prescription.
Q. But would you have said to the theatre nurse, "80 ml an hour of Solution No. 18", or would you say,"Just continue the pre-op fluids"?
A. Just continue the same prescription.
Q. Okay.
THE CHAIRMAN: And you would say that because that's just what happened at Altnagelvin at that time?
A. Yes.
THE CHAIRMAN: And if the anaesthetist had a different view, you would tell -- or a different prescription -- the ward nurse who you're handing over to what the anaesthetist wanted, but it was a matter on the ward for



the ward team to decide what fluid to give?
A. Yes.
THE CHAIRMAN: Right.
MR REID: I asked you there what you would normally do. Can you remember any specifics of what you actually said in the handover that night?
A. Well, before the nurse came from the ward, there was a general discussion about her post-op fluids, first of all between the two anaesthetists, and then I sort of said what the normal practice was in the hospital at that time, which was that the prescription for the pre-op fluids was continued post-operatively.
Q. Okay. So there was a discussion between doctors Gund and Jamison; is that right?
A. Yes.
Q. And this is in the recovery room as Raychel's being recovered?
A. Yes. It's in the theatre, but she was being recovered in the theatre.
Q. Is it just the three of you present or is there anyone else present at that point?
A. Sorry?
Q. Was it just the three of you, doctors Gund and Jamison and yourself, or was there anybody else present?
A. No, initially there was just the three of us and the

ward nurse would have arrived then.
Q. Okay. Do you know who the ward nurse was?
A. It was Nurse Patterson who came to collect her.
Q. Was she present whenever some of this discussion was going on?
A. Towards the end of it, yes.
Q. How much do you recall of the actual discussion that took place?
A. Um ... Well, I think Dr Gund ... I remember him saying he would have liked to have prescribed Hartmann's post-op, and then the discussion sort of round that, that even if it was prescribed that the practice on the ward -- that it was Solution No. 18 that was used, Hartmann's wasn't used.
THE CHAIRMAN: Is that what you intervened to say? Correct me if this is wrong, but I've now got the impression that Dr Gund and Dr Jamison are describing what Raychel's post-operative fluids should be.
A. Yes.
THE CHAIRMAN: Dr Gund is saying, "I would prefer it to be Hartmann's", and at that point did you intervene and say, "Normally what happens here, doctor -- because he was relatively new to the hospital, wasn't he?
A. Yes, he was.
THE CHAIRMAN: "Doctor, what normally happens here is that



children go back on to their pre-op fluids, which is Solution No. 18"?
A. I don't know whether it would have been Dr Jamison or me or a combination of both of us. I think maybe Dr Jamison may have started by saying the paediatric ward don't use Hartmann's solution.
THE CHAIRMAN: And when you contributed something, was that really to confirm to Dr Gund what Dr Jamison had said?
A. Yes.
THE CHAIRMAN: Right. So Dr Gund was saying, "I want to give Hartmann's", Dr Jamison is saying, "That's not what they give on the ward, on Ward 6", and you were confirming to Dr Gund that Dr Jamison was right and that's not what children got on Ward 6.
A. Yes?
THE CHAIRMAN: Ward 6 didn't use Hartmann's.
A. Yes.
THE CHAIRMAN: And can you recall how the conversation continued or did Dr Gund just say, well, whatever?
A. I think the ward nurse had arrived at that stage and I think the conversation was -- I understood at the end of that conversation with the anaesthetists that the post-op fluids were being left up to ward practice, normal ward practice.
THE CHAIRMAN: Thank you. So Dr Gund wasn't -- it wasn't



what he had wanted to happen, but he wasn't forcing the issue?
A. No.
THE CHAIRMAN: And anyway, when a child goes back on to the ward, it's not his position to force because he doesn't control what happens outside surgery?
A. No.
THE CHAIRMAN: His role as the anaesthetist is over, is it?
A. His role has finished, yes.
THE CHAIRMAN: Thank you.
MR REID: Can I ask you just about what you said in your witness statement, WS050/1, page 3? You say on the third line down:
"At this stage, the infusion of Hartmann's solution was discontinued with fluids to be recommenced on the ward. When the ward nurse arrived ..."
And later on:
"Finally, I checked the fluid balance chart and anaesthetist's verbal instructions, which stated that No. 18 Solution, which was in progress pre-op, should be recommenced on return to the ward."
If I can concentrate on those words "the anaesthetist's verbal instructions". You've told us about the discussion that was going on and what you understood at the end of the discussion.



A. Yes.
Q. But here you're saying that you were instructed by the anaesthetist verbally to recommence the pre-op fluids. Do you have any explanation why the difference between those two versions of events is --
A. No, I just understood the outcome of the discussion between the anaesthetists and myself was that the post-op fluids would be commenced on the ward according to normal practice.
THE CHAIRMAN: Is this fair, that I read that to mean that when you're referring to the "anaesthetist's verbal instructions" you're referring to what Dr Gund said after he'd been advised by you and Dr Jamison that, on Ward 6, they don't use Hartmann's, they use Solution No. 18, and he went along with that?
A. Yes.
THE CHAIRMAN: And when you refer to the anaesthetist who gave the verbal instructions, is it Dr Gund you're referring to?
A. It was a combination of ...
THE CHAIRMAN: I don't want to get too pedantic about it, Mrs McGrath, but in essence the anaesthetist doesn't control what happens on the wards, so on your understanding of it, he can't give an instruction to the ward team about what fluid is to be given to Raychel on

the ward. That's their decision.
A. The anaesthetist's decision?
THE CHAIRMAN: No, it's the ward team's decision.
A. Oh, the ward team's, yes.
THE CHAIRMAN: Because she's actually leaving recovery without any fluids and is going back down to the ward.
A. Yes. That's what I understood when they said to leave the management of the post-op fluids to ward practice.
THE CHAIRMAN: Yes.
A. I understood from that that it was Solution No. 18 to be continued.
THE CHAIRMAN: If you can't answer this, please don't get involved in a discussion with me that's hypothetical, but if Dr Gund wanted to sort of force the issue, if he felt more strongly about it, was it really for Dr Gund to take that up with some doctor on the ward?
A. Yes.
THE CHAIRMAN: Right.
MR REID: Was the rate of fluid administration discussed at any point during your general discussion with doctors Gund and Jamison?
A. No. It was just the type of fluid.
Q. The rate was 80 ml per hour. Were you aware in 2001 of the calculations that were generally used in order to calculate a rate of fluids?



A. I had a basic knowledge.
Q. Were you aware of what's --
A. But nurses didn't calculate rates or IV fluids.
Q. Were you aware of the Holliday-Segar formula or anything of that nature?
A. Yes, so many ml per kilogram.
THE CHAIRMAN: When you say "nurses didn't calculate rates", do you mean theatre nurses or ward nurses or both?
A. No, as a rule we didn't calculate because we weren't prescribing.
THE CHAIRMAN: Right. When you say "we", you are certainly referring to theatre nurses, you weren't prescribing in theatre, and the same applies to ward nurses or not?
A. I don't think ward nurses prescribed, no.
THE CHAIRMAN: But you had a general idea, so that if a child seemed to you to be getting clearly too much or clearly too little, you would raise a query about that, would you?
A. Yes.
THE CHAIRMAN: Thank you.
MR REID: Raychel had a weight of 25 kilograms. Would you have known whether 80 ml per hour was an appropriate rate for a girl of 25 kilograms?
A. I would have thought it was about right.
Q. Okay. In actual fact, it seems that it was an excessive



rate and it should have been more about 65 ml or so per hour for someone of a weight of 25 kilograms, and other experts have said that it should have been reduced further, post surgery, because of SIADH. If we just concentrate on the 65, at least, which is the number given by the Holliday-Segar formula, you can see that that 80 is in excess of that 65.
A. Yes.
Q. But you say that you wouldn't have known that it was excessive at the time in June 2001, the 80 ml per hour rate?
A. No.
Q. If you had known it was excessive, would you have done anything about it?
A. If she had been having that in theatre, you mean, or in the ward?
THE CHAIRMAN: I think what you've just said, Mrs McGrath, if I've understood it correctly, is you had an idea of what the fluids should be, but you didn't do the precise calculation because you didn't prescribe the fluids.
A. Yes.
THE CHAIRMAN: But if a child was clearly getting too much or too little, you would raise a query about that with the doctor.
A. Yes.



THE CHAIRMAN: Right.
MR REID: Mr Chairman, I'm aware that we've been sitting now for a hour and a half. I have a few other matters still to go through, but they should be reasonably short. It might be useful to take a five or ten-minute break at this stage.
MR QUINN: Before we break, I'm just asked the broad question: was Nurse Noble present when they were discussing either the type of solution, that is the protocol on the ward, or the rate? Can this nurse help us in any of those issues?
THE CHAIRMAN: She had come up from the ward.
MR QUINN: I don't know whether she had come up at this stage or not. There was a general discussion between the two anaesthetists and this nurse and I'm not sure whether or not Nurse Noble was there at that time.
THE CHAIRMAN: I think what Mrs McGrath said was before the ward nurse came, there was a general discussion about post-op fluids.
Please don't try to guess this. If you remember tell us and if you don't remember, also tell us. Do you remember at what point Nurse Noble arrived?
A. Nurse Noble wasn't in theatre. Nurse Noble never came to theatre. It was Nurse Patterson who came to take Raychel back to the ward.

THE CHAIRMAN: So it's Nurse Patterson who comes up. Would she have come to theatre?
A. Yes.
THE CHAIRMAN: And do you have any idea how much, if any, of this discussion about post-operative fluids, Solution No. 18 and Hartmann's, she would have heard?
A. She would have heard that it was Solution No. 18 to be recommenced on the ward.
THE CHAIRMAN: Well, she would have heard that, I think, from you because you did the handover.
A. The actual discussion?
THE CHAIRMAN: Yes.
A. No, I don't know how much she heard.
THE CHAIRMAN: Am I right in saying that she would have heard that from you because you did the handover to her; right?
A. Yes.
THE CHAIRMAN: But do you know if she would have heard any of the discussion involving you and the two anaesthetists?
A. I can't remember what time she came in.
THE CHAIRMAN: Right. We'll take a break for a few minutes and resume and get your evidence finished. Thank you.
(11.17 am)
(A short break)



(11.35 am)
MR REID: Mrs McGrath, just a few queries arising out of your evidence before the break.
I think you said that you had no recollection or no knowledge of any contact between Mr Makar and Mr Zawislak; is that correct?
A. Yes, that's correct.
Q. As far as you are aware, if surgery had to happen in the evening and the SHO had been down to casualty or to the ward to see a patient and thought that they required surgery, do you know who had to be contacted in terms of the surgical hierarchy to say that surgery was going to be taking place? This is in June 2001.
A. Would I need to have known?
Q. No, did you know? For example, was it usual for the consultant, the on-call surgical consultant, to be contacted if a surgery was going to take place?
A. If it was a straightforward case that the SHO surgeon and anaesthetists were happy enough with, no. They didn't need to be informed, no.
Q. I think Mr Zawislak said that he would have been contacted normally in order to be told that the SHO was going to be busy in theatre for a bit so he might have to cover and that was really the extent to which he would be contacted and, if anything more complicated



happened, then in those situations he would contact the consultant anaesthetists. Are you aware of any of those kind of arrangements?
A. If he had problems in theatre, if he ran into problems in theatre, yes, they would have contacted the next, more senior --
Q. But you're not aware of any policy or protocol that said that the SHO had to contact, for example, the surgical consultant if a surgery was going to take place out of hours?
A. No.
Q. Okay.
THE CHAIRMAN: Not as long as it was apparently straightforward surgery?
A. If it was straightforward and no concerns.
THE CHAIRMAN: If it was more complicated or if there were concerns, then from what you'd seen happening around you over the years, you'd have expected there would be some contact with the consultant?
A. Yes, and if there wasn't, I would have asked them --
THE CHAIRMAN: Right.
A. -- to consult with them.
THE CHAIRMAN: Okay. But for instance, on the night of Raychel's surgery, it wouldn't have seemed to you that there was any need for consultant involvement?



A. No.
THE CHAIRMAN: Okay.
MR REID: We've discussed the ward protocol was that Solution No. 18 would be administered as the fluid of choice for paediatric patients in 2001.
A. Yes.
Q. Simply, how did you know, as a theatre nurse, what the ward protocol was in terms of Solution No. 18?
A. I learnt over the years with the nurses coming to collect the children from theatre to take them back to the ward.
Q. And how would they have informed you of that protocol? What would they have said, for example?
A. It wasn't a protocol as such, it was like a practice that had developed over those years.
Q. So were you told on just a number of occasions that the normal practice on the ward was --
A. That Solution No. 18 was in use.
Q. Likewise, how did you know, as the theatre nurse, that the anaesthetists' prescriptions for post-operative fluids were sometimes subject to re-prescription once the patient reached the ward?
A. By listening to the anaesthetist.
Q. And what were the anaesthetists saying about this? First of all, were the anaesthetists saying this for

some time before Raychel's surgery?
A. Some of them would have, yes.
Q. And what was the anaesthetists' attitude to the fact that this was happening? Were they just saying that it did happen or did they have an opinion as to --
A. No, they didn't have an opinion, they just said it happened and --
Q. So as far as you're concerned, they weren't annoyed or anything about the fact that their prescriptions were being rewritten?
A. No.
Q. By this stage in June 2001, you'd been in the theatres at Altnagelvin for 24 years. For how long had the common practice on the ward been that Solution No. 18 was being administered?
A. I couldn't say the exact number of years, but it was quite a while. Quite a number of years.
THE CHAIRMAN: It was years?
A. Years, yes.
MR REID: Was it decades?
THE CHAIRMAN: I wouldn't worry. If it's years, it's years.
MR REID: Very well, Mr Chairman.
You were speaking before the break just about the discussion that happened between doctors Gund, Jamison and yourself and how Dr Gund, who had only been at



Altnagelvin for a matter of weeks, had said that he wanted Hartmann's prescribed post-operatively and then you and Dr Jamison had advised him of what generally happened on the ward with a post-op paediatric patient. Is that a fair summary of what your evidence was?
A. Yes.
Q. How often did that particular kind of discussion happen? Was this the first time a discussion like that had happened?
A. With Dr Gund?
Q. With the anaesthetists in general, post surgery, when they're discussing the post-operative fluids.
A. It would have happened more commonly when the doctors changed over.
Q. As in new anaesthetists came in?
A. New intakes, say, at the beginning of the year or the middle of the year, it would have happened.
THE CHAIRMAN: So in fact, correct me if this is wrong, but my impression is that the new anaesthetists coming in were often a bit surprised to find that Hartmann's wasn't used on Ward 6 and that it was Solution No. 18?
A. Yes.
THE CHAIRMAN: That had been going on for some years with a number of anaesthetists, but nobody ever felt the need to, that you're aware of, to push the point or to raise



any major concern about it?
A. Yes. That's correct.
THE CHAIRMAN: Or did they? Did anybody push the point at all that you remember?
A. I can't remember anyone having done that, no.
MR REID: If I can bring up your witness statement at WS050/2, page 5, please. At (d) you're asked:
"In 2001, was it the practice in Altnagelvin Hospital that a new prescription should be written for IV fluids where a decision has been reached that fluids commenced before surgery would be recommenced upon the patient's return to the ward?"
Your answer was:
"In 2001, to the best of my memory, it was normal practice for IV fluids which had been commenced before surgery to be recommenced upon the patient's return to the ward without a new prescription."
Can I ask you what you mean by "without a new prescription"? Can you just explain that?
A. Without another fluid balance sheet, without the Solution No. 18 being prescribed again on a fluid balance sheet. It was prescribed pre-op on a fluid balance sheet, so that was continued post-op.
Q. So if we bring up 020-021-040, this is Mr Makar's preoperative prescription for Solution No. 18 at 80 ml



per hour. Are you saying that post-operatively they would have just simply continued that same prescription?
A. Yes.
Q. Without a need for another prescription?
A. No.
Q. And does that mean then it doesn't actually require a doctor to review the prescription in any way? It's simply that the previous prescription of the pre-op fluids is continued.
A. Yes.
Q. So the nurses just follow that preoperative plan?
A. Yes.
Q. And I know this is getting out of your realm as a theatre nurse, but would that mean that no one would actually review the fluids or could potentially review the fluids until a ward round by a doctor, which could be the next morning?
A. Possibly so, unless there was a doctor in the ward for seeing another child or whatever.
Q. Or if those fluids --
A. Or if those fluids ran out and needed a continuation.
Q. We've talked about how the fluids are --
THE CHAIRMAN: Sorry, I think we looked during the break at Dr Jamison's evidence and I think it's not quite the same on this.

I don't expect everybody's evidence to tie in perfectly, Mrs McGrath, it would be a lot easier if it did obviously. But if we can bring up the transcript of Dr Jamison's evidence, which was on Thursday, 7 February. On that day's transcript, I think it's about pages 108 to 109. If they could be brought up together, please.

MR REID: I think the official transcript might be pages 109 and 110, Mr Chairman.

THE CHAIRMAN: Just before you move away from those pages, if you look at the top of page 108, line 3, Dr Jamison says:

"Often it's a combined responsibility. The initial post-operative period is usually taken on by the anaesthetist."

That continues and then at the bottom on page 109, over on the right-hand side, at line 22, she says:

"Yes. As I said, the initial post-operative period is usually subject of the anaesthetist's responsibility."

And then I think if we go on to 109 and 110. I say at line 24:

"So in a situation like Raychel's, let's suppose she's back on the ward at about, say, 1 o'clock, 2 o'clock, whatever the precise timing is. The fluid



that she's on, you would expect to be the post-operative fluid as prescribed by the anaesthetist and then, at some later point, maybe at the ward round in the morning or maybe before that, the surgical team takes over responsibility for the fluid, does it?"

And she says:

"The prescription goes with the patient to the ward."

I understand that to mean that Dr Jamison is saying that the anaesthetist's prescription goes with the patient to the ward:

"If circumstances change on the ward or the patient's condition changes on the ward, it's usually the responsibility of the team looking after the patient to then look at the fluid balance and see if it needs altered or changed. And that would be, in this case, the surgical team."

Then she says:

"If everything goes untoward [sic] ..."

I think that must be "if nothing goes untoward":

"... it would be the post-op fluid prescribed by the anaesthetist to run until it was reviewed."

And she says that that review would be at the ward round or unless the bag had run out prior to that.

Dr Jamison seems to be saying --



A. Yes.

THE CHAIRMAN: -- that there's an anaesthetist who prescribes the post-op fluid, which goes with the child to the ward, and that remains the post-op fluid until the bag runs out or there's a ward round or there's some change in circumstances.

A. Yes.

THE CHAIRMAN: Am I right in thinking that's a bit different from what you've been saying to me?

A. Well, there was no prescription that went with Raychel. The anaesthetist didn't prescribe any different fluids for Raychel.

THE CHAIRMAN: Right. So what happened here was that, on your memory, Dr Gund was going to provide Hartmann's and then --

A. He was talking about Hartmann's, yes.

THE CHAIRMAN: And then from information he got from you and Dr Jamison, he didn't prescribe Hartmann's, but he didn't then prescribe anything at all?

A. No.

THE CHAIRMAN: Right. Well, maybe I've misunderstood Dr Jamison slightly. But would there normally be a post-operative prescription by the anaesthetist or is what happened in Raychel's case that there was no post-operative prescription the norm?



A. A lot of the time there wouldn't be a prescription because it's understood that the post-op fluids are recommenced with the prescription of the pre-op fluids.

MR REID: Mr Chairman, it might assist if we go over to page 111. If we leave up 110 and go to 111. We can see there that Dr Jamison explains that usually the anaesthetist would prescribe fluids for the post-operative period, which in usual practice would be Hartmann's:

"It would be my experience in Altnagelvin at that time that even if the anaesthetist prescribed Hartmann's solution on the post-op part of the chart, it was commonly subject to a default re-prescription of No. 18 at that time. Often when a patient went back on the ward, the fluids were -- the post-op Hartmann's was changed to No. 18 and No. 18 was used commonly on that ward at that time."

THE CHAIRMAN: But what Mrs McGrath is telling us is that in fact, maybe because of this difference of view between the anaesthetists on the one hand and the surgical team on the other, it was very often there was no prescription of post-op fluid from the anaesthetist at all, it was just left to the ward.

A. Yes.

MR REID: I think, subject to correction, Dr Jamison does

say that at some point in her evidence.
THE CHAIRMAN: Thank you.
MR EGAN: Mr Chairman, if I may, even within page 111, if one goes to line 3, where Dr Jamison is asked from her statement, the question:
"Before you commenced the surgery, did you have any understanding of who was going to be responsible for prescribing Raychel's post-operative fluids? If so, who did you understand would be responsible for prescribing Raychel's post-operative fluids?"
And your answer was:
"It was commonplace for fluids to be managed on the paediatric ward if it was a post-op child."
THE CHAIRMAN: Yes. I think what I'm getting at here, Mr Egan, that is quite right, so what Mrs McGrath is explaining in a little more detail is that sometimes there wasn't actually a post-operative fluid prescription by the anaesthetist at all --
MR EGAN: Indeed.
THE CHAIRMAN: -- which seems on one view to be a bit curious and it seems to me, according to Mrs McGrath's evidence, that a number of anaesthetists over the years had expressed some surprise about that in Altnagelvin because it's not consistent with practice in other hospitals.



MR EGAN: Indeed. And in that instance, the fluid management chart pre-op fluid prescription was simply recommenced.
THE CHAIRMAN: Yes. Mr Stitt, were you going to say something?
MR STITT: Yes, I was just coming in, Mr Chairman, in relation to an observation you made, that if there wasn't another prescription, it was just left to the ward, and I was going to pick up on that, again from a systemic perspective, to indicate that the evidence seems to be that it wasn't just left to the ward, there was actually a prescription which was preoperative, which was continued, so there was a generic prescription which continued when the patient came back to Ward 6.
THE CHAIRMAN: So in a sense, it's a reactivation of an existing prescription?
MR STITT: Yes, rather than just being --
THE CHAIRMAN: That previous prescription, the preoperative prescription has been, let's say, interrupted by what happens in theatre, and then it is reactivated after a child like Raychel comes back out of theatre and goes back down to the ward.
MR STITT: That's my understanding of this witness's evidence and it ties in with page 40, where originally we have the prescription of the No. 18.



THE CHAIRMAN: Page 40 of?
MR STITT: I beg your pardon, of the Altnagelvin notes, file 20. 020-021 --
THE CHAIRMAN: The one we had up on screen a few minutes ago, yes.
MR STITT: 020-021-040, if that could possibly come up. It is prescribed preoperatively, so there is a route, there is a basis for the prescription. It's not re-prescribed.
THE CHAIRMAN: And it hasn't lapsed because Raychel has gone to surgery, it has been interrupted because Raychel has gone to surgery and then it resumes when she returns from surgery.
MR STITT: Yes. My understanding -- and I may be wrong on this point -- from the evidence so far is that the bag remains on the ward.
THE CHAIRMAN: That was Mrs McGrath's evidence. Typically, there's no reason why the use of the same bag cannot resume because there's no hygiene reason that you are aware of, that you can think of offhand, that would stop that. So a patient such as Raychel goes back on to the same bag.
MR STITT: Yes, although I thought I had seen somewhere that it was often a new bag that was used when a patient came back to the ward.



THE CHAIRMAN: Yes, thank you.
MR STITT: My point is really the prescriptive one.
THE CHAIRMAN: Thank you. That means not only is the patient back on the same type of fluid, but the patient is back on the same rate unless it's altered.
MR STITT: Yes.
THE CHAIRMAN: Because that is the prescription which is renewed and the illustration here is it's 80 ml an hour of Solution No. 18.
MR STITT: That's what happened.
THE CHAIRMAN: Yes, okay.
MR REID: Can I just check something with you, Mrs McGrath? During surgery, the responsibility for fluids and fluid balance is the anaesthetist's; isn't that right?
A. Yes.
Q. Between the end of surgery and the transfer from recovery -- the recovery period, if we can call it that -- who is responsible for the fluids during that section?
A. The anaesthetist is still normally there, so the anaesthetist continues that responsibility.
Q. As far as you're concerned, who is responsible for the fluids once the patient leaves the recovery area?
A. Leaves the recovery area to go back to the ward?
Q. Yes.

A. It becomes the ward nurse's responsibility then.
THE CHAIRMAN: So your handover to the ward nurse is --
A. To the nurse.
THE CHAIRMAN: -- a new link in the chain of responsibility?
A. Yes.
THE CHAIRMAN: Thank you.
MR REID: You say the ward nurses, but in terms of the doctors, whose responsibility is it when a patient like Raychel is returned to the ward?
A. Well, by virtue of the fact she had a surgical operation, she would be under the care of the surgical team.
Q. So as far as you're concerned, the anaesthetist has responsibility for the fluid balance up until the transfer to the ward. At that point, the responsibility switches to the surgical team; would that be correct?
A. Yes.
Q. Okay. And generally, the prescription, as we see on screen, is continued until another prescription is made or the patient's reviewed or the bag runs out?
A. Yes.
Q. We've heard in your evidence and similar evidence from doctors Gund and Jamison that, in general, the anaesthetists sometimes prescribe post-operative fluids and sometimes they don't, and in either case that might



be subject to a re-prescription when they get to the ward of Solution No. 18; would that be your evidence?
A. Yes.
Q. The surgeons who have given their evidence so far, Mr Zawislak and Mr Makar -- and also the consultant Mr Gilliland, in his witness statement to the inquiry -- have all said that generally that the initial post-operative fluids were usually a continuation of the fluids prescribed during the surgery. If I can bring up witness statement 044/1, page 4, please.
This is Mr Gilliland, the consultant surgeon's statement to the inquiry. The middle section:
"Initial post-operative fluids are usually a continuation of fluids prescribed intraoperatively. This prescription would be started by the anaesthetist in theatre and taken over by the surgical team on return to the ward. Thereafter, the prescription of IV fluids for patients is usually the responsibility of the pre-registration house officer."
Mr Makar and Mr Zawislak have said that they would expect the anaesthetist to prescribe the post-operative fluids and for that then to be reviewed at the ward round or whenever the bag ran out. There seems to be a difference there, Mrs McGrath, between the surgeon saying that they would expect the anaesthetist to



prescribe during that initial period until the bag ran out or until a review at the ward round and the view that you and the two anaesthetists have said, that generally once they got to the ward, the Solution No. 18 would be commenced. Can you explain why there's any difference between the two?
A. I can't explain why there's any difference, just that I know what normal practice was, that it was Solution No. 18 only was used in Ward 6.
Q. Okay.
THE CHAIRMAN: But you're saying a bit more than that, Mrs McGrath. I'm not being critical of you at all for this, but I'm just being clear you're saying a bit more than that. It is because anaesthetists like Dr Gund had been told over the years that Ward 6 doesn't use Hartmann's, they hadn't pushed the point on Hartmann's and they had left post-operative fluids to be decided on Ward 6 rather than prescribing fluids themselves.
A. Yes, that's correct.
THE CHAIRMAN: And what appears to have happened then, certainly in Raychel's case -- and it doesn't appear from the evidence that that's necessarily unusual, but we'll see more as the next couple of weeks go on -- that what then happens is that the child goes back to the ward and is then put back on to the preoperative fluid



because the prescription for that is reactivated or it's --
A. Yes.
THE CHAIRMAN: -- still relevant.
A. Yes.
THE CHAIRMAN: So a child post-operatively goes on to a preoperative fluid regime.
A. Yes.
THE CHAIRMAN: Thank you.
MR QUINN: Can I ask also, would it ever be a case where the rate is reconsidered? We have here an issue about the rate as well because some experts and some doctors may say that the pre-surgical rate could be higher because of certain issues, whereas after the surgery the rate should be reduced because of certain issues that my friend has covered. So perhaps that question could be asked.
THE CHAIRMAN: Can you help on that? In Raychel's case it's not just that she went back down to the ward, to Ward 6, on Solution No. 18 rather than Hartmann's. Another element of it is that the rate of fluid which she received was, on some of the evidence before the inquiry, excessive. It may have been excessive beforehand, but there's more evidence that it was excessive afterwards. Do you know from your experience

and from conversations that you've been part of whether, even if the type of fluid that a girl or boy would go back on to was Solution No. 18, whether the rate of fluid was reconsidered?

A. Normally, the rate continued the same post-op as it was pre-op in my experience.

THE CHAIRMAN: And just to make it clear, your experience is based on what you've picked up by doing these sort of handovers as a theatre nurse to the ward nurse --

A. Yes.

THE CHAIRMAN: -- after a child comes out of recovery and goes back to the ward?

A. Yes.

THE CHAIRMAN: And also in terms that you've been telling, as Dr Jamison was doing -- really saying to Dr Gund, "Look, it's for the people on the ward to decide what happens on the ward, it's not for the anaesthetists"? Is that the gist of what you were saying to him after Raychel --

A. Saying to Dr Gund?

THE CHAIRMAN: Yes.

A. No, I just said that the practice was that the fluids were recommenced in the ward post-op.

THE CHAIRMAN: Recommenced as before?

A. As before, the prescription pre-op.



THE CHAIRMAN: So that's the type of fluid and the rate?

A. At the same rate, yes.

MR REID: Mrs McGrath, just before the break, I asked you about the handover. Can I just confirm: who did you do the handover to?

A. It was Nurse Patterson.

Q. And I asked you what you would have asked, but can you recall what you actually did say?

A. Not exactly, no.

Q. Would you have any reason to think it was different from what you would normally have said, the list you gave earlier?

A. No. None at all. Everything was straightforward.

Q. If I can bring up your witness statement at 050/2, page 6, please. You're asked here at question 5:

"In 2001, what did you regard as the appropriate nursing approach to a child who was still experiencing episodes of vomiting more than 12 hours after surgery, and who was in receipt of hypotonic intravenous fluids? Please set out the steps a nurse should have taken in those circumstances."

Your answer is that in 2001, because you worked in theatre, you wouldn't commonly have been caring for a child 12 hours post-surgery as the child would have returned to the ward by that stage:



"Had I been in that situation, I would have: 1, called the doctor; 2, given a brief history of the child and their current condition; 3, stated the volume and frequency of vomiting; 4, communicated my concerns."

That's your evidence, isn't it?

A. Yes.

Q. And at page 7, you say in answer to question 6:

"In 2001, I understand that if a child who is already on hypotonic intravenous fluids was experiencing prolonged vomiting, the child would have required urgent medical intervention."

Is that correct?

A. Yes.

Q. Okay.

THE CHAIRMAN: Just while we're on this, Mrs McGrath, Raychel was back down on the ward at let's say 2 o'clock, 2 am.

A. Yes.

THE CHAIRMAN: And the operation seemed to be a straightforward appendicectomy. There doesn't seem to have been anything more complicated which emerged during the operation.

A. No, it was straightforward.

THE CHAIRMAN: Would you have expected, in the normal run of things, that Raychel would have gone home the following



evening?

A. I would have thought the following evening would have been a bit soon.

THE CHAIRMAN: Okay. So you would have expected her to be in overnight. From your general experience as a nurse and many, many children having passed through your care, how would you expect Raychel to be as that day wears on. It's 2 am when she goes back to the ward. By around say lunchtime or late afternoon, what state might you expect Raychel to be in?

A. I suppose by late afternoon/teatime, I probably would have expected her to start eating a light diet anyway. Maybe she would be up mobilising and maybe for the IV fluids to be starting to be wound down, maybe.

THE CHAIRMAN: Would you still expect her to be -- I'm sure there maybe isn't such a thing as a typical case, but in many cases would you expect the IV fluids to continue right through into the following evening and the following night?

A. They could do, yes. I've seen patients with quite severe post-op vomiting.

THE CHAIRMAN: In their cases, the fluid continues?

A. The fluid would continue, yes.

THE CHAIRMAN: That's Solution No. 18?

A. If it's a child, yes, it would be Solution No. 18.

THE CHAIRMAN: Okay, thank you.
MR REID: I see, by the way, I left off a step, which is at the top of page 7, which is:
"Also to ask them to attend urgently."
Your two answer to those questions, was that knowledge common among nursing staff in Altnagelvin in June 2001, the answers to those two questions?
THE CHAIRMAN: Sorry, which? I had taken the witness away from --
MR REID: If I can bring up page 6 alongside that. I referenced these two questions and the answers you gave about what you would do with a child who was experiencing episodes of vomiting more than 12 hours after surgery, and you gave the list of things you would do and then you also say that a child would have required urgent medical intervention.
Your responses to those questions, was that knowledge common among nurses in Altnagelvin in June 2001?
A. I can't really comment for other nurses, you know, how they would think or feel.
Q. Where were you taught that that should be the response to vomiting post-operatively?
A. Just doing my everyday work.
Q. And you gleaned that from your everyday work. Would you



expect other nurses to have done the same?
A. I'm sure they would have, yes.
Q. Okay.
THE CHAIRMAN: Sorry, just before we leave, you have question 6 there on the right-hand side of the screen at the top. These two lines:
"In 2001, I understand that if a child who was already on hypotonic intravenous fluids was experiencing prolonged vomiting, that the child would have required urgent medical intervention."
What do you mean by "urgent medical intervention"?
A. A doctor to come to see them quite quickly.
THE CHAIRMAN: There's an issue we're going to explore over this week and next week because there is evidence that doctors were called. There is evidence that nurses on the ward did call doctors.
A. Okay.
THE CHAIRMAN: There's then an issue about what the doctors knew and there's also an issue about what the doctors did when they were called. But when you say that the child would have required urgent medical intervention, you mean that to mean that, as a nurse, I would have called for a doctor to come urgently to see the patient?
A. To assess the child or patient, yes.
THE CHAIRMAN: And then to decide what, if anything, should



be done because this vomiting was going on and although that can happen, does it suggest that there's something wrong underneath?
A. It could do.
THE CHAIRMAN: It suggests there's something wrong underneath, which is why you want the doctor to intervene.
A. Yes.
THE CHAIRMAN: Thank you.
MR REID: Can I just ask you about that answer? You say that:
"I understood that if a child who was already on hypotonic intravenous fluids ..."
What's the relevance of the fact that they were on intravenous fluids in terms of your answer to that question? You say that the child would have needed urgent medical attention if they were experiencing prolonged vomiting. What's the relevance of the hypotonic intravenous fluids?
A. Well, I probably would have thought maybe the fluids that the child was on would need reviewed as regards the electrolyte content of those fluids.
Q. That's because as you were saying earlier, you knew that vomiting causes electrolyte losses; would that be right?
A. Yes.



Q. Okay. How would you define prolonged vomiting? Would you have contacted a doctor after a single vomit, after two vomits, after three vomits?
A. It would depend how long apart the three vomits were and the amount.
Q. If I can quickly bring up the timeline at 312-001-001, please. This is an one-page summary of Raychel's case. You can see the dark blue line that goes across the page, there are different symbols, circles and red squares that represent vomiting, the yellow ones are the ones that were recorded on the fluid balance sheet. If you look simply at the yellow circles, there's one at 8 am, one at 10 am and one at 1 o'clock, and then 3 o'clock, 9 pm and 10 pm and 11 pm. At what point would you have considered that Raychel was experiencing prolonged vomiting and would require urgent medical intervention if you'd been a nurse in that situation?
A. It's very, very difficult for me to answer when I wasn't present there on the ward. I really don't feel I could answer that question properly.
THE CHAIRMAN: Could I ask you this, just to step back a bit. What you see there, is there any doubt that that amounts to prolonged vomiting?
A. The yellow circles?
THE CHAIRMAN: And the red squares. But even if you take

only the --
A. Yes.
THE CHAIRMAN: -- only the yellow circles which go from 8 am until 11 pm, that's seven vomits in, I think, 15 hours, from 8 am to 11 pm, that's prolonged vomiting, isn't it?
A. Yes.
THE CHAIRMAN: Then there's an issue -- there's some additional vomiting which we know about, even though it's not always recorded in the notes, but even without any additional vomiting, would you agree that that's a significant number of vomits?
A. It's a significant number, yes.
THE CHAIRMAN: Thank you.
MR REID: Just before we leave it, would three vomits in the space of five hours, as in between 8 am and 1 pm, would you consider that vomiting that should require medical intervention?
A. That would be the morning after her surgery. Probably not because at that stage you'd probably be thinking maybe it's nausea relating to the anaesthetic or the drugs she received during the anaesthetic.
THE CHAIRMAN: Maybe you can help me on this, Mrs McGrath. If that is nausea or a reaction to the drugs, would you expect that reaction between 2 am and 8 am? Because on this record, Raychel appeared not to vomit for about six



hours and then started to vomit at about 8 o'clock and vomits regularly after that. If there's a reaction to the drugs or if there is nausea because of the drugs --
A. Every child is different. I've seen children in recovery waken up literally vomiting and continuing to vomit quite profusely.
THE CHAIRMAN: Is that because of a reaction?
A. It's put down to a reaction maybe to some of the drugs that were administered during the anaesthetic.
THE CHAIRMAN: The fact that Raychel doesn't appear to vomit at between 2 am and 8 am means that for the first, what, six or seven hours after the operation, she doesn't have that reaction.
A. Yes.
THE CHAIRMAN: But then something's going wrong and she does start vomiting and stays vomiting through the day.
MR REID: Mr Chairman, I should highlight that there were anti-emetics given during the surgery, ondansetron and cyclizine, part of the Cyclimorph, and the experts generally do agree that the vomiting in the early part of the day, one of the factors that may have caused it was the use of the opioids during the surgery.
THE CHAIRMAN: Right. Okay.
MR STITT: May I intervene, if I may, from my perspective? And it's to do with the line of questioning which is



asking this witness to comment on a very central issue in this inquiry. She's doing her best, clearly, to help the inquiry, but there are two caveats to that. One is that she has stated clearly for years she has been a theatre nurse and specifically states in her statement that she has not been involved in the treatment of children on the wards. So therefore, I would caution against too much weight to be given to her answers, with respect to the witness.

Secondly, following on from that, she is being asked to comment from her non-involvement and non-expert position on what should or should not have been done, which will depend ultimately on the actual evidence.

We've put the cart before the horse here. I'm quite certain that this inquiry will look at this timeline very, very carefully and a conclusion will be reached as to the frequency of actual vomits, whether they be recorded or observed, and also the amount of such vomits. In my submission, it is perhaps a little unfair to ask this witness to pin any opinion and give an opinion on something which is not yet proven. And also, on top of that, she's said it's not just the frequency of vomiting, it's the amount of the vomit.

That too is a very difficult area which will require forensic examination, and I'm quite certain this inquiry



will do that, but at this stage I again urge caution in putting too much weight to an answer given by an early witness before this is examined.
THE CHAIRMAN: I accept that there is an issue about the weight to be attached to Mrs McGrath's evidence, but I'm not intending to recall Mrs McGrath at a later point, which is why I'm asking these questions now. But also, I'm interested to hear what she says because of her obvious experience over many years, maybe more years than she cares to count, in Altnagelvin, her experience with the children who come through theatre and her knowledge through her discussions with ward nurses about what then happens afterwards and how those children progress.

So I accept your point about the weight to be attached to this (a) because of her focus on theatre nursing and, secondly, because some of these issues have to be factually established, though on the second point about factually establishing them, there will be a number of witnesses giving evidence about what they saw at different times, so it's going to ultimately involve piecing all this together anyway.
MR STITT: Exactly. I don't object to the line of questioning, and I hope I made that clear; it's a question of weight. What you're asking the witness to

do, Mr Chairman, is to give a definitive opinion on something which is yet to be properly explored.

THE CHAIRMAN: No, I don't think that's quite fair about our line of questioning. I wasn't asking Mrs McGrath for a definitive opinion and I'm not sure if there's anybody who will give a definitive opinion. I'm asking a very experienced Altnagelvin nurse to give her opinion on some issues on which her opinion would carry some weight. The amount of weight it carries will depend on what then emerges.

MR QUINN: Could I also add, Mr Chairman, when this nurse made her second statement, which is WS050/2, she was a client of the DLS at that time, so she made all of these answers, particularly on pages 6 and 7, dealing with all of these issues, which is a sworn statement of May 2012. She made all of these answers when under the advice, I would assume, of Mr Stitt's predecessor.

THE CHAIRMAN: Yes, thank you. Mr Reid?

MR REID: The only remaining topic I have to ask Mrs McGrath about is just what happens after Raychel's death.

When did you first learn of Raychel's death, Mrs McGrath?

A. Early the following week, on the Monday, I think, when I was on duty.

Q. And who did you learn that from?



A. My fellow nurse colleagues.

Q. In theatre or --

A. In theatre, yes.

Q. Did you do anything as a result? Just in the short-term, did you contact anyone or speak to anyone as a result of Raychel's death?

A. No.

Q. Would you have expected to have been involved in any review process or internal hospital inquiry in regard to Raychel's death?

A. Not necessarily because there was no issues around the time she was in theatre, as I thought.

Q. And were you involved in any internal review or inquiry?

A. No.

Q. Were you invited to the critical incident meeting of 12 June 2001?

A. No.

Q. If we just turn to your witness statement, 050/2, page 9, please. You say there, at the bottom, in the middle section, as you've just said in evidence, you weren't asked to take part in any process designed to learn lessons from the care and treatment Raychel received. You say at 14(d):

"Raychel's death highlighted for me the need for clearer written documentation in all areas of care."



And at (e):

"That protocols and procedures must be kept under review, ensuring that practice is updated and standards maintained."

To what extent in your experience over the last 10 or 12 years has the written documentation improved?

A. Number 1, now there's ... It's 100 per cent clear who prescribes post-op fluids for children and what they are.

Q. Who --

A. The anaesthetist prescribes. And what the fluids are. So everybody in the multidisciplinary team is aware of who's responsible for what. And there's a much clearer form for documenting everything on as well.

Q. For what period of time does that prescription apply, that post-operative prescription by the anaesthetist?

A. As far as I'm aware -- I'm not looking after post-op emergency children any longer now, since 2010. But as far as I'm aware, for the first 12 hours, and then there's an EP done, an electrolyte profile done then.

Q. Is there anything else that you think could be done better or could be improved in order to assist this in any way further?

A. No, I think there's been a lot of amendments made and all for the better.



THE CHAIRMAN: So if there's any tiny consolation for Mr and Mrs Ferguson, it's that some lessons have been learned after Raychel's death?

A. Yes.

MR REID: If I could just ask my learned friends if they have any other queries? I have one from Mr Quinn.

MR STITT: None, thank you.

MR EGAN: I referred some matters to Mr Reid and he has covered them.

MR REID: The further issue Mr Quinn has asked me to ask is: after the surgery itself, at what point would you consider that a blood test for electrolytes would be appropriate? How long after the surgery do you think such a blood test should be done?

MR QUINN: Given she's agreed that there was vomiting of a substantial nature. That's the scene.

MR REID: I was going to move on to that point.

You've agreed there was prolonged vomiting during the next day having looked at the timeline which we brought up with the yellow circles. Given that, when you have thought it appropriate that an electrolyte test should have been done?

A. In the ward, post-op?

Q. Yes.

A. I can't answer that because without being on the ward,

it's impossible, without being present at the time, it's impossible to answer that.
Q. Do you know how often electrolytes were tested?
A. I know there was an electrolyte profile done pre-op.
Q. Would an electrolyte profile normally be done post-operatively?
A. Not usually, no. Not on a routine --
THE CHAIRMAN: But one of the changes now is that there is --
A. There is one now, yes.
THE CHAIRMAN: And that's done about 12 hours after surgery?
A. Yes.
THE CHAIRMAN: So you've got a preoperative electrolyte profile, then you've got the surgery, then you've got the anaesthetist prescribing fluids for the next 12 hours, then at that point you have an electrolyte profile.
A. Which indicates then -- decides whether fluids are continued or discontinued or changed or kept going.
THE CHAIRMAN: Yes.
MR REID: Nothing further, Mr Chairman.
THE CHAIRMAN: Mrs McGrath, thank you very much for coming today and giving us your evidence. Unless there's anything else you want to add, you're now free to leave.
A. Thank you very much.



THE CHAIRMAN: Thank you for your time.
(The witness withdrew)
MR REID: Mr Chairman, it might be appropriate maybe to have a short lunch.
THE CHAIRMAN: We'll need to start. I don't want to start short or early lunches already. We'll break for just a couple of minutes.
(12.35 pm)
(A short break)
(12.45 pm)
THE CHAIRMAN: Mr Wolfe?
MR WOLFE: Good afternoon, sir. The next witness is Mrs Ann Noble.
MRS ANN NOBLE (called)
Questions from MR WOLFE
MR WOLFE: It is Mrs Noble, is it?
A. Yes.
Q. You have produced three witness statements for the inquiry --
A. That's right.
Q. -- the first dated 30 June 2005 --
A. Yes.
Q. -- the second dated 22 June 2012 --
A. Yes.
Q. -- and a more recent short statement, dated



14 January 2013.
A. Yes.
Q. Are you satisfied with the accuracy of those statements?
A. Yes.
Q. And would you wish to adopt them as part of your evidence to the inquiry?
A. I do.
Q. Of course, today the inquiry has an opportunity to ask you some questions arising out of those statements and arising out of the circumstances surrounding Raychel's death, which will obviously go to supplement your written evidence.
A. Okay.
Q. I want to commence by asking you some questions about your experience and background as a nurse, Mrs Noble. You've been a nurse now since in or about 1985.
A. Yes, I qualified in 1985.
Q. And you're currently employed in the Altnagelvin Hospital.
A. Yes.
Q. And your grade now is band 5; is that correct?
A. Band 5, that's correct.
Q. Just help us a little. In terms of band 5 compared to where you were in 2001, which was the time you nursed for Raychel, have you progressed in your profession or



are you broadly speaking at the same grade?
A. I'm at the same grade. I am a registered nurse, I'm not a registered sick children's nurse. I have not gone on to do my children's nursing. At that time, I worked a lot at night duty to fulfil family commitments. I had five children and it was impossible to travel and to work around a course with five children at that time.
Q. Yes. So if we could just pause there. Although the banding, the names of the banding have changed over the years with the introduction of Agenda for Change and all that, you're a band 5, which is, broadly speaking, where you were in 2001?
A. Yes.
Q. I think you pre-empted me by telling me that you're not a registered children's nurse and you never have been.
A. I never have been, no.
Q. In essence, you're a registered nurse.
A. Yes.
Q. Does that mean your training was in adults?
A. Adults initially, yes.
Q. And you've told us you trained from April 1982 to April 1985. If we could perhaps just have up your witness statements, in ease of people's note taking, at WS049/2, page 2. Do you recognise that document?
A. Yes.

Q. The parties can read that for themselves, but it sets out your training and then a brief history of your employment.
A. Yes.
Q. You came to Altnagelvin in 1990; is that correct?
A. Yes.
THE CHAIRMAN: In fact, as a result of another unit closing.
A. Yes.
THE CHAIRMAN: And moving into Altnagelvin; is that right?
A. Yes, I had initially been based in the Waterside Hospital, and it was a children's infectious fever unit. When I left work initially, I had had a sore back and I was brought back to a lighter area of work, which was the children's infectious fever unit. When that unit amalgamated with Ward 6, I went up to Ward 6.
THE CHAIRMAN: And you have referred there to having a number of children and, when you were working in June 2001, you were still working at nights.
A. Yes.
THE CHAIRMAN: How many nights a week were you working?
A. I worked full-time and I did four nights one week and three nights the next.
THE CHAIRMAN: Thank you.
A. And myself and my husband worked opposite one another so



that we could fulfil a parent being with our children at all times.
MR WOLFE: As you say there at paragraph (b), about two-thirds of the way down of the page, you started as a D grade and then the next paragraph, at paragraph (c), you achieved a promotion; is that right?
A. Yes.
Q. And became an E grade in October 1999, about two years before Raychel came to your hospital.
Although you aren't a registered children's nurse, all of your experience appears to have been in the area of paediatric nursing; is that correct?
A. That's correct.
Q. And broadly speaking, allowing for breaks in employment and part-time work and what have you, by 2001 you had something in the area of 12 to 15 years' children's nursing experience.
A. That's right.
Q. The vast majority of that was in Altnagelvin Hospital?
A. It was.
Q. And in terms of the child patients that you cared for and managed, would that have been a mix of medical and, if you like, surgical patients?
A. Predominantly medical, but yes, all the surgical children came to the children's ward as well.



Q. As the inquiry understands the position, the paediatric ward in Altnagelvin was a ward that could cater for just over 40 children.
A. That's right.
Q. And roughly speaking it would always have been the case that the majority of patients resident in the hospital at any one time would be medical patients.
A. That's correct.
Q. In terms of surgical patients, presumably given that appendicitis is a typical or common childhood disease or condition, you would have managed appendicitis patients.
A. Yes.
Q. Would you have managed many of them over the years?
A. I would say I would have had a good experience of managing post-op appendicectomy children, yes.
Q. There is, of course, no typical case perhaps, every case is different, but a child coming into hospital with mild appendicitis, if that's the context, what would you anticipate as a general rule being the normal recovery pathway for such a child?
A. Well, usually after theatre -- again it would depend on how severe the appendix was, whether it was just maybe mildly inflamed or if it had been maybe perforated or gangrenous, then usually if the appendix was very bad the child would usually have taken a longer period to



recover. But in a mildly inflamed appendix, then they would usually recover quite quickly. The children would normally progress on to normal oral rehydration in the morning, as tolerated, and then progress to a light diet by 12, 15 hours' time afterwards, and then IV fluids would be discontinued.
THE CHAIRMAN: When you say "in the morning", let's --
A. If they've been to theatre maybe the night before. My experience was on night duty.
THE CHAIRMAN: Right. So a girl or boy like Raychel who's operated on at about say midnight, 1 o'clock, and is back on the ward at 2 o'clock, on normal progress, you would expect them to be on a light diet by 12 to 15 hours afterwards, which is mid-afternoon --
A. Mm-hm, yes.
THE CHAIRMAN: -- on the Friday.
A. Yes.
THE CHAIRMAN: And that would then lead to, what, the IV fluids being discontinued late afternoon, teatime, something like that?
A. Yes.
THE CHAIRMAN: Would you agree with Mrs McGrath, who thought that you would then expect a girl or a boy like that to be in hospital overnight --
A. Yes.

THE CHAIRMAN: -- but going home the following morning?
A. Again, it would be dependent on the child's condition, but usually maybe the next day or even another day after that. Maybe two to three days.
THE CHAIRMAN: Thank you.
MR WOLFE: We will, of course, look at that issue in greater detail as we move into examining the minutiae of Raychel's care. But just to counterpose what you've just said about a straightforward case, what in your experience would have been the opposite of that? What kinds of difficulties would you have seen in a not straightforward appendix case?
A. Well, if a child initially presented in severe pain with maybe a high temperature and appeared to be toxic, maybe their appendix had burst and there was maybe infection going on, usually the doctors would have attended the child on the ward and maybe commenced them initially on IV fluids and possibly IV antibiotics before they had gone down to theatre. And then they would have gone to theatre and usually the recovery time would probably have been a lot longer, they would have been slower to take oral fluids, they were maybe more at risk of developing the like of a paralytic ileus post surgery, where they wouldn't be able to tolerate any oral intake at all and would be vomiting quite a bit.



Q. So a worst-case scenario might see a child detained in hospital for --
A. Five to seven days.
Q. Let me ask you some questions, Mrs Noble, about your understanding of some of the conditions and treatments that we all know are relevant to Raychel's case. You've told us in your witness statements that prior to dealing with Raychel's case you had no knowledge of the deaths of the other children with which this inquiry is concerned.
A. That's correct.
Q. Moreover, I think you've told us that you had not had access or had not read any of the literature pertaining to the area of hyponatraemia and fluid management in children.
A. No. Like Nurse McGrath, my training was basic in our student nurse days. When I came to Ward 6, there was no formal induction about fluid management, whatever. We were instructed on how to use a pump and pumps and instructed on how to document and how to check the prescription and ensure that the prescription was checked by another nurse and the importance of timing. All those points were stressed. I knew what hyponatraemia was in that it was a low sodium, but I had never encountered anybody with the condition or



experienced anybody with the symptoms that Raychel had.
THE CHAIRMAN: Did you know what the dangers of low sodium could be? I'm sure things have changed since 2001, but did you know pre-June 2001 that hyponatraemia was low sodium and then what did you know beyond that, what could go wrong with low sodium?
A. I didn't understand fully at that time.
MR WOLFE: Let me come back to that point in just a moment. You had heard of hyponatraemia?
A. I had known of the term hyponatraemia, but I hadn't heard of how the condition would progress and how it was managed.
Q. It's fair to say that if I was to characterise your knowledge of hyponatraemia, it was basic?
A. Yes.
Q. And you would have equated it with low sodium?
A. Yes.
Q. Is it fair to say that you wouldn't have had a sophisticated knowledge of how to address hyponatraemia?
A. That's right.
Q. When you gave evidence to the coroner as part of Raychel's inquest, you are recorded as having told the coroner that you had been a nurse for 14 years and had never heard of hyponatraemia.



A. I meant at that time that I hadn't heard tell of the condition of hyponatraemia. I knew what hyponatraemia was in that it was a low sodium. But I hadn't experienced dealing with anybody with hyponatraemia.
Q. Could I just have brought up on the screen 012-043-211? Do you recognise your signature on that page?
A. Yes.
Q. That is your deposition to the coroner. I needn't show you the full document, but the larger part of the deposition, which runs for a couple of pages, is in essence your typed statement, which had been prepared in advance and then at the inquest, counsel have an opportunity to ask you questions. They are then written into the deposition and you have an opportunity to sign the deposition if you're in agreement with it.
A. Yes, that's right.
Q. Does that accord with your memory?
A. Yes.
Q. The coroner has -- presumably that's his handwriting?
A. It is, it's Mr Leckey's.
Q. "I have been a nurse for 14 years. I have never heard of hyponatraemia. When Raychel vomited coffee grounds we were not alarmed at that or the amount ..."
And I needn't go on. What you have told the inquiry this morning is that you had heard of hyponatraemia.

A. I was aware of the term "hyponatraemia", but I was not aware of what would happen with hyponatraemia because I had never nursed anybody with a low sodium as Raychel had.
Q. Yes. Has the coroner recorded you incorrectly?
A. I took it at that time that he was meaning had I nursed anybody with hyponatraemia, and I hadn't heard of the condition hyponatraemia. But I knew what hyponatraemia was in that it was a low sodium.
Q. Yes, but the answer that is recorded is not that you had never nursed a hyponatraemic patient, it is a more extreme position. You'd never heard of the term at all.
A. Well, I had heard of it, but I obviously interpreted his questioning to be, "Had you nursed anybody with it?", but I maybe interpreted it wrong.
THE CHAIRMAN: So your position is, Mrs Noble, that the full context of that answer is slightly different from the way it reads on the page?
A. Yes.
THE CHAIRMAN: Okay.
MR WOLFE: Could I ask you to turn up for me, please, Mrs Noble's second witness statement, WS049/2, at page 13? You can see that the inquiry asked you questions around the answer you gave to the coroner at the bottom of that page, page 14. So what is



recorded in the deposition is set out and you are asked:
"Please confirm whether your evidence has been accurately recorded."
And you say "no". And if you can go over the page for me, please. We ask:
"If it has not been accurately recorded, please state the respects in which it hasn't been accurately recorded."
You say:
"This has been misquoted as what I actually said was I had not knowingly encountered hyponatraemia as a post-operative complication."
Do you see that?
A. Yes.
Q. Just to be clear, Mrs Noble, what did you tell the coroner?
A. I told him that I hadn't heard of hyponatraemia.
Q. Whereas in fact, what you should have told him was --
A. That I had not knowingly encountered hyponatraemia.
Q. Yes. So you didn't accurately state your knowledge to the coroner?
A. Again, I thought that -- well, he was asking me something different. I thought that he was asking me about my experience with hyponatraemia, and I had not encountered anybody with the condition hyponatraemia,



but I was aware of what it actually was in that it was a low sodium.
THE CHAIRMAN: Mrs Noble, if it's any consolation, one of the experts to the inquiry has told us some months ago that it's still hugely unrecognised and not regarded as serious even now, as it should be, and our knowledge is greater than it was 10 years ago.
But can I ask you, when you said a few minutes ago that you knew hyponatraemia was low sodium, but you didn't understand fully what would happen as a result of low sodium, to what extent did you understand that a child's life would be jeopardised by low sodium?
A. I didn't fully comprehend how -- the impact of such a low sodium on a child because I had never experienced a child with such a low sodium in the years that I had been nursing.
THE CHAIRMAN: I just want to press you on this a bit: when you say "I didn't fully comprehend", did you understand at all that a child with low sodium would be in danger of dying?
A. I didn't understand at that time, no.
THE CHAIRMAN: Thank you.
MR WOLFE: Were you aware at that time, Mrs Noble, that conditions such as vomiting and diarrhoea in significant quantities or in excessive amounts could create problems



for a child?
A. Yes.
Q. And --
A. More so diarrhoea and vomiting, not so much vomiting on its own.
Q. Would you have appreciated that vomiting and diarrhoea or vomiting or diarrhoea in severity could cause electrolyte problems or lead to fluid imbalances?
A. Yes, I was aware of that.
Q. Could I ask you to look at your witness statement a couple of pages back? If we could start at page 12.
At question 12, the inquiry sets out that quotation that we've already looked at, albeit -- sorry, the quotation arises out of your first witness statement, where you say that you'd not knowingly encountered hyponatraemia and you went on to say that you were aware of the difference between Hartmann's solution and Solution No. 18.
A. Yes.
Q. And then certain questions were asked arising out of that. At (a) you were asked:
"In June 2001, were you aware of the factors that could cause an electrolyte imbalance in a paediatric patient following surgery?"
To which you answered "no", Mrs Noble.

A. Well, in my experience a lot of the surgical children who have come back from theatre and had been on Solution No. 18 hadn't experienced any electrolyte imbalance. Their electrolytes had remained stable throughout their stay.
Q. But wouldn't the correct answer to that question have been that if a child was severely vomiting, there would be a risk factor there in terms of electrolyte imbalance?
A. Yes, there possibly could have been, but as I say in my experience, especially in relation to Raychel, having had normal electrolytes prior to going to theatre, I would have assumed that she would have remained stable throughout and she had Solution No. 18 in progress throughout her vomiting and the Solution No. 18 was the solution that was used on the ward and that would have kept her electrolytes normally.
THE CHAIRMAN: That's what you thought at the time?
A. Yes, that what's I thought at the time.
THE CHAIRMAN: But it's not what you think now?
A. Definitely not.
MR WOLFE: We'll come to Raychel's specific situation, of course, in due time -- and indeed you can certainly bring in your experience of dealing with other patients -- but in that question you're simply being



asked about the state of your knowledge. And isn't it the case, notwithstanding the answer there, Mrs Noble, that you knew that vomiting to excess, whether it was after surgery or whether it was at any other time, could cause an electrolyte imbalance?
A. It could do, yes. But again, I probably related these questions to Raychel.
THE CHAIRMAN: Well, I just want to get this clear. What you said a few moments ago, which I understand, is that it's particularly the combination of vomiting and diarrhoea.
A. Yes.
THE CHAIRMAN: You regard that as more dangerous because, to put it bluntly, there's more passing out of the child's body and therefore there's a greater -- well, the electrolyte imbalance might be effected quicker --
A. Yes.
THE CHAIRMAN: -- or more seriously. Did you understand that there was a risk to the electrolyte balance in a child by repeated vomiting?
A. At that time, probably not as much as what I do now.
THE CHAIRMAN: Right. Well, would it be unfair for me to interpret that as your understanding being, in June 2001, that if a child vomits repeatedly after an operation, that's obviously not what you want, but you



wouldn't be concerned that that would lead to an electrolyte imbalance, which might threaten a child's life?
A. Not while fluids were running, not while Solution No. 18 was running.
THE CHAIRMAN: And the difficulty which you now know is that Solution No. 18 does not rectify any developing imbalance.
A. Yes, that's correct.
THE CHAIRMAN: Whereas another solution, Hartmann's, can.
A. Yes.
MR WOLFE: At the bottom of that page, Mrs Noble, you are asked the question:
"At that time, 2001, what was your practice in terms of managing and caring for children suffering from post-operative vomiting?"
And if we could go over the page and reveal your answer. What you have said is:
"Usually fluid replacement, anti-emetics and doctors would have been requested to review patients. They would have been informed of any deterioration."
A. Yes.
Q. So if I could unpack that with you, you're introducing there a concept called fluid replacement in your answer. So --



A. Being replaced with the IV fluids.
Q. So what you meant by that was a patient suffering vomiting in that context would have replacement with IV fluids?
A. Yes, but not as in replacement losses. There's a difference now since the fluid management has been reviewed since Raychel's death and excessive losses on top of the maintenance fluids are now given separately.
Q. Yes. Let me see if I can clarify. I think you're giving slightly mixed or confused messages there. At that time in 2001, were you familiar with maintenance fluids?
A. Yes.
Q. And were you aware that they were assessed to take account, if you like, of a child or a patient's normal daily maintenance needs, based on their weight?
A. Yes.
Q. And maintenance fluids were, if you like, for the patient proceeding normally, not suffering from gastric losses such as you would get from diarrhoea or vomiting?
A. Yes.
Q. Did you understand that?
A. Yes.
Q. And by contrast, replacement fluids, the concept you have used in answer to that question, did you

understand replacement fluids to be something different?
A. I interpreted that -- it was the fluids that were replacing what she should have been taking because she was fasting and wasn't taking anything. But it probably was the same as maintenance fluids, that they would be on maintenance fluids and receive anti-emetics.
Q. So when you use the term "replacement fluids" in this context, what you in fact mean is the maintenance fluids that the child or the patient is getting anyway?
A. Yes.
Q. We will of course look at this in more detail when we come to look at Raychel's actual treatment.
THE CHAIRMAN: The difficulty, Mrs Noble, you might be aware of this, is that that question (e), which you are being asked -- can we bring up page 12 along with page 13? The question you are being asked is about managing a child who's suffering from post-operative vomiting.
The answer you gave to Mr Wolfe about maintenance fluids, in a very crude way, that's for children who are progressing normally. This question is about a child who's not progressing normally, who has got post-operative vomiting, and a child with post-operative vomiting will not have the imbalance which is the result of the vomiting made good by a maintenance fluid, sure she won't.



A. But a lot of children back then would have vomited post-operatively and it wouldn't have been normal practice for them to be on replacement fluids. They would have just continued on their maintenance IV fluids and just regularly tried to orally rehydrate themselves after a period of resting their tummy.
THE CHAIRMAN: Right. And generally -- well, can I take it that generally that worked?
A. Yes, generally that worked.
THE CHAIRMAN: Okay.
MR WOLFE: Yes, but Mrs Noble, the difference here is the context for the question. The context for the question is a child suffering from post-operative vomiting. Let's assume that child was on a maintenance fluid, he or she is vomiting post-operatively. What was your understanding at that time of how such a patient should have been managed?
A. That the maintenance fluids should continue and that the child should receive something to prevent the sickness.
Q. Right.
THE CHAIRMAN: If the anti-emetic works so that the vomiting stops, then your experience was that the child would recover?
A. Yes.
THE CHAIRMAN: It's not that unusual for a child to vomit



sometimes after surgery?
A. Quite a lot of the time, to be honest with you.
THE CHAIRMAN: So what you do, if you can get the vomiting stopped, then on Ward 6 where you didn't have Hartmann's, you only had Solution No. 18, and children didn't die all the time --
A. No, they didn't.
THE CHAIRMAN: -- children who had surgery who vomited, you stopped the vomiting, you call in the doctor to review how the child is progressing, you keep the Solution No. 18 going and the children recover?
A. Yes.
THE CHAIRMAN: And what's different about Raychel's case is --
A. Raychel did not recover. And I had actually nursed a lot of children who had actually been sicker than Raychel.
THE CHAIRMAN: In the sense of vomiting more?
A. In the sense of vomiting, who had vomited a lot more than Raychel and who had recovered uneventfully having had the same fluid regime in that their replacement fluids were continued. They had anti-emetics and may have required even a second dose of anti-emetics because the vomiting could have continued despite having one dose of anti-emetic given.



MR WOLFE: I hear that answer. We'll maybe come back to it.
Just in terms of the answer that's highlighted in front of us, if I could just tidy this up finally. Where you use the term "replacement fluids", in fact what you are telling us is that you really meant to convey that maintenance fluids would continue.
A. Yes.
Q. Could I move from the situation of, if you like, mild post-operative vomiting that is ultimately managed by the administration of an anti-emetic? Did you have experience of dealing with children with prolonged vomiting?
A. Yes. And they would have just continued on their maintenance intravenous fluid therapy.
Q. So you had no experience of doctors coming in and changing the fluid or supplementing the fluid by, for example, introducing replacement fluids such as normal saline?
A. Not initially. Usually, the doctors would have had to replace fluids as a result of gastric -- other gastric losses. Because whenever a child had maybe a paralytic ileus and they would maybe have an excess of bilious fluid removed from their stomach, from a nasogastric tube, that fluid was normally collected over a four-hour period of time and replaced every 4 hours with normal

saline.
Q. If you could stick with the question and if you need to introduce other conditions to make your point, then please do so.
A. Okay.
Q. But in a case where you have simply vomiting over a prolonged period of time such as 10 or 12 hours, the vomiting is repeated and the volume of the vomiting is perhaps variable, have you, in your experience at that time, seen a situation where the doctors are coming in to look at what replacement fluids should be instituted?
A. Not that I can recall at that time.
THE CHAIRMAN: In other words, would a doctor take the patient or the child off Solution No. 18 and move the child on to Hartmann's or something else?
MR WOLFE: The approach can vary, as the experts will tell you, but you can maintain Solution No. 18 and supplement it with normal saline; have you seen that before?
A. I have seen, after Raychel -- especially after Raychel's passing -- then definitely a lot of the fluids were replaced with normal saline afterwards, despite being on the Hartmann's solution and 3 per cent dextrose if their vomiting was found to be excessive.
MR WOLFE: I'm conscious of the clock, sir, but if I could maybe just tidy up this area and then we can break.



When a child vomits, their body is relieving itself of gastric fluid; isn't that right?
A. Mm-hm.
Q. And gastric fluid, such as is found in vomit and diarrhoea, is sodium-rich; did you understand that at the time?
A. I don't remember actually considering it, but I would have been -- it would have been in the background, yes.
Q. You would have known it if you'd thought about it?
A. Yes, yes.
Q. And if such important fluids are leaving the body, depending on the degree of the gastric losses, there is a need, on occasions, to replace with electrolyte-rich fluids; did you understand that at that time?
A. Well, my understanding was that Solution No. 18 was the fluid that was used on the ward and it had been used throughout my experience and nobody had come to any disadvantage having received that fluid. I thought that it was appropriate and adequate that she continued on the same regime that every other child had.
MR WOLFE: That might be a suitable point.
THE CHAIRMAN: We've run a bit past 1.15. Can we say 2.10? Thank you.
(1.23 pm)
(The Short Adjournment)



(2.10 pm)
MR WOLFE: Good afternoon, Mrs Noble. I'm still with that area of seeking to understand how you understood certain of the key concepts and conditions which were relevant to Raychel's care and treatment.
You may be aware, in preparation for today, that the inquiry has sought the assistance of a Professor Hanratty, who has examined the education of nurses in this jurisdiction, and I want to put to you her analysis of what nurses are taught in this jurisdiction with regard to these issues. If I could ask for 303-048-599 to be put up on the screen, please.
Professor Mary Hanratty, in this section of her report, is examining pre-registration nurse education levels and specifically focusing on something called a certificate of nurse education. Her analysis of the curriculum guidance tells her that:
"All students from the 1973 syllabus through to the present day are required to have tuition in the importance of the body's ability to maintain fluid balance in health and the disease processes that would cause disturbance of it. This would include knowledge of fluid constituents, to include sodium, the role of the kidneys and the endocrine systems. The students would receive information on the effect of disease



processes such as gastroenteritis and the maintenance of normal fluid balance."
Mrs Noble, what qualification did you achieve in your training?
A. I was a registered general nurse.
Q. So it was training as opposed to ...
A. Yes.
Q. And although this is focusing on a particular type of certificate, which may not be directly applicable to you, in terms of your training for the purpose of being a registered general nurse, did the kind of concepts that are referred to there form part of your education?
A. Yes.
Q. And indeed, I need not necessarily bring it up on the screen, you may have considered in preparation for today a report or a series of reports provided by Ms Sally Ramsay, who is the inquiry's nursing expert.
THE CHAIRMAN: Have you seen those?
A. Yes.
MR WOLFE: We needn't bring it up on the screen, but for reference purposes it is at 224-004-013. What Ms Ramsay says is that:
"At a minimum I would expect a registered nurse to be aware that fluid loss from vomiting, if not replaced intravenously, can result in dehydration and electrolyte

imbalance."

Do you follow that?

A. Yes. But my impression was Raychel was not becoming dehydrated as her fluids were in process and that her electrolytes should have been maintained throughout with the Solution No. 18.

Q. Yes, we'll come to the specific case of Raychel presently, but what I'm endeavouring to do at the moment is just to establish the baseline, what was your knowledge at that time. And so we've established, through Professor Hanratty, concepts that you had received education and training in and Ms Ramsay says that, at a minimum, she would expect nurses to understand or be aware that fluid loss from vomiting can result in dehydration and electrolyte imbalance, and that's something you're telling us that you would have appreciated --

A. Yes.

Q. -- in 2001.

A. Yes.

THE CHAIRMAN: Do I understand that what you were saying before lunch, in summary, is that you thought the risk was greater if there was vomiting and diarrhoea at the same time?

A. Yes.



THE CHAIRMAN: And that if there was an imbalance because of vomiting, that would be made up by getting the vomiting to stop and the child continuing on Solution No. 18?

A. Yes.

THE CHAIRMAN: And the problem with that is that Solution No. 18 is a maintenance fluid, not a replacement fluid.

A. Yes.

THE CHAIRMAN: So Solution No. 18 won't typically make up for what has been lost.

A. But that was the practice at that time.

MR WOLFE: Just on that point of the distinction between Solution No. 18 and, say, Hartmann's, which was a fluid that might have been used for replacement purposes, you tell us in your inquiry statements that you appreciated the differences between Hartmann's and Solution No. 18; is that right?

A. Yes. My impression was that Solution No. 18 had more glucose in it and that the main worry was that children maybe going to theatre would have been fasting for a period of time and that their blood glucose levels would go down and if they were only receiving something with, say, a sodium and other electrolyte content, that they may have been at risk of going hypoglycaemic.

Q. I'll just bring your answer up on the screen and we can look at it. WS049/2 at page 13. If we draw attention



to (h) and (i) at the top of the page and you are asked:

"What was your understanding of the differences between Hartmann's solution and Solution No. 18?"

And just reiterating what you said a moment ago:

"Solution No. 18 contained dextrose, Hartmann's did not."

And then the second question, the question at (i):

"What was your understanding in 2001 of the appropriate fluid to use in order to replace gastric losses?"

And you say:

"Solution No. 18."

In terms of your knowledge of the differences between Hartmann's and Solution No. 18, you've highlighted one quality of Solution No. 18, which Hartmann's didn't have. Did you appreciate the differences in sodium levels between those two fluids at that time?

A. I just knew that Solution No. 18 was a fifth of normal saline.

Q. Did you know that Hartmann's was close to normal blood plasma in its physiology?

A. Yes.

Q. You did appreciate that?

A. Uh-huh. But Solution No. 18 was what was used on the



ward at that time.

Q. Yes.

THE CHAIRMAN: Had you ever known that to be queried?

A. No.

THE CHAIRMAN: Can you remember, was it always used on the ward from when you arrived there?

A. Yes.

THE CHAIRMAN: And Hartmann's was available in the hospital, but not on Ward 6; is that right?

A. Hartmann's was available on Ward 6, but there would have been maybe one or two bags of Hartmann's solution. It wouldn't have been widely -- I don't remember it being used at all, to be honest with you.

THE CHAIRMAN: I was going to ask you, do you remember it being used, but you don't.

A. No.

THE CHAIRMAN: Okay.

MR WOLFE: Ultimately, Mrs Noble, in terms of who is responsible for prescribing the type of fluid to be used with any particular patient, that's not a nursing call; is that correct?

A. No.

Q. It's a call for the relevant doctor to make.

A. Yes.

Q. You were asked in your inquiry witness statement about

your understanding of hypotonic fluids, that term was used in a question that was posed to you, and if I could ask you to look at how you addressed that question.

If we could have WS049/2 up on the screen, please, and if we could move on to page 14. At the bottom of the page, paragraphs 17 and 18, you were asked:

"What did you regard as the appropriate nursing approach to a child who was still experiencing episodes of vomiting more than 12 hours after surgery and who was in receipt of hypotonic intravenous fluids?"

And your answer was:

"In 2001 I was not aware of the term 'hypotonic'."

A. I wasn't aware of that particular term, but I did know that Solution No. 18 was a fifth normal --

Q. Yes.

A. -- but I wasn't aware of the term of hypotonic solution.

Q. Yes, but the question, with respect, Mrs Noble, wasn't to do with your understanding of the term. You would know that a hypotonic solution is Solution No. 18. You would know that now.

A. Yes, yes.

Q. So knowing that now, you could have straightforwardly answered the question.

A. Well, a child experiencing episodes of vomiting for more than 12 hours should be on a fluid that had more sodium



in it than Solution No. 18.

Q. Yes. And is that your current knowledge?

A. Yes.

Q. Or is it your then knowledge?

A. My current knowledge.

Q. Your then knowledge, in other words your 2001 knowledge, was that if she was on Solution No. 18 while vomiting, she was safe.

A. Yes.

Q. That's what you're telling the inquiry?

A. Yes.

Q. We go on at question 18 to ask:

"In 2001 what did you understand were the possible dangers for a child who was experiencing prolonged vomiting after surgery and who was in receipt of hypotonic intravenous fluids?"

And you say you were aware of:

"Dehydration, aspiration, paralytic ileus and peritonitis."

A. Yes.

Q. You don't list there risk of electrolyte imbalance.

A. No.

Q. So if I can summarise your position before we move on, Mrs Noble. I think what you've told us is that your knowledge and experience would have equipped you to



realise that a child losing gastric fluids through vomiting and diarrhoea would be at risk of an electrolyte imbalance. That was something you knew at that time.

A. Yes. With the paediatric patients and, on a few occasions children who had bad gastroenteritis, the paediatricians would have been very aware of their electrolyte imbalances and would have done more frequent electrolyte profiles on the children.

Q. Your answers to the chairman suggest that the concerns would be greater if there was vomiting in combination with diarrhoea.

A. Yes.

Q. But equally, would you accept that if the vomiting was sufficiently severe in the absence of diarrhoea, you would have concerns?

A. I would have had concerns -- if the fluids hadn't been in progress, I would have had more concerns.

THE CHAIRMAN: I think the question is: what is the concern for? Because I don't think your concern was that this is a child who is at risk. In fact, I think unless I misunderstand your statements, it never occurred to you that Raychel's life was at risk.

A. No, it didn't. I thought she was just --

THE CHAIRMAN: And that's because you didn't really know



anything like what you now know about hyponatraemia or what the effect of a steadily decreasing sodium balance is.

A. That's correct.

THE CHAIRMAN: So to the extent that you had a concern about vomiting and would have had a greater concern about vomiting and diarrhoea, your concern was "this child isn't well, I have to do something", rather than "this child isn't well and this child's life might be at risk"?

A. That's right.

THE CHAIRMAN: Is that fair?

A. Yes.

THE CHAIRMAN: If I'm wrong, correct me.

A. That's fair enough.

THE CHAIRMAN: The concern which you had and the concern which leads to a doctor being brought in, that is a concern that Raychel's not progressing as a child does after the removal of an appendix, which may be mildly inflamed, but that's the extent of the concern, isn't it?

A. Yes.

MR WOLFE: I'm not quite sure I follow. Let me see if I can sort it out in this way. If a child has severe vomiting, you would be concerned; is that fair?

A. Yes.
Q. You would have been concerned. That concern occurs not because you necessarily fear a child's life is in danger, but your concern arises because perhaps the child is uncomfortable, isn't very well and is perhaps in danger of getting distressed. So you don't necessarily have to go to a doctor because you fear life is being threatened, you go to a doctor where you have a concern and, as a nurse, you need assistance.
A. Yes.
Q. And it's the doctor who can take active steps such as by prescribing the appropriate drugs or medication or fluids?
A. And ordering the appropriate bloods.
Q. Yes. Again, summarising your position on the basis of your knowledge in 2001, while you might have concerns about a child who is vomiting because the child is on Solution No. 18, you're not worried that the child's going to come to great danger because you think Solution No. 18 is protecting the child from dehydration.
A. I didn't anticipate any problem with that fluid and as Raychel had been a fit and healthy child up until that and there was a short history -- she hadn't had maybe a period of prolonged vomiting at home prior to coming in.



Q. Yes, but in terms of the fluid -- and let me just test this with you -- you've accepted earlier in your answers that when a child is vomiting, they're releasing or removing from their body sodium-rich fluids; yes?
A. Yes.
Q. And you would accept that the sodium which is contained in vomit is important for the body's proper balance and function.
A. Yes.
Q. And you understood that at the time.
A. Yes.
Q. And yet you seem to have taken solace in the fact that the fluid given to Raychel -- but let's be more general than that at this stage -- you seem to be taking solace in the fact that the patient is receiving a low-sodium fluid.
A. That was my experience in 14 years working with surgical patients. No other child seemed to come to any harm having been on that solution.
Q. Could I put up on the screen, just so that you can look at the criticism, 224-006-001? This is an addendum to the report of Ms Sally Ramsay, the nursing expert, after she's examined the, if you like, second round of statements produced by the nurses. At section 3 at the bottom of the page she's reflecting on the fact that



many of your colleague nurses and including yourself seemed, based on what you're saying about 2001, to have taken solace or comfort in the fact that Solution No. 18 was the infusion being used with Raychel --
A. Yes.
Q. -- in a context where the child is vomiting.
A. Yes.
Q. And you can read what she says:
"It appears that the nurses were aware that dehydration and electrolyte imbalance can occur with diarrhoea and vomiting."
Isn't that right?
A. Yes.
Q. "But did not relate this to children who vomited post-operatively. There was the assumption that when an infusion is in place, the child is getting adequate hydration, regardless of their intake and output."
Then over the page:
"In my view, this lack of understanding is surprising for a group of registered children's nurses."
Do you see that?
A. Yes.
Q. Ms Ramsay will obviously give evidence to the inquiry, but what she's saying there is that she finds it difficult to understand how nurses as experienced as



yourself could have fallen into this state of misunderstanding whereby you assumed that a child was safe on a low-sodium fluid, notwithstanding her output. In other words, her gastric losses.
A. Well, that was my knowledge at that time.
Q. Was that really your understanding?
A. Yes, it was.
Q. If we could move on then and examine your role at the time of Raychel's admission to Altnagelvin Hospital. We know that she arrived at the hospital in the early evening of 7 June 2001.
A. Yes.
Q. And on that evening, you commenced a night shift at or about 7.45 pm; is that correct?
A. That's correct.
Q. And just so that we can put all of this in context, you were to nurse or be one of the nurses caring for Raychel through the 7th and into 8 June.
A. That's right.
Q. And then you went home and went about your business and then came back on duty on the night shift of 8 June into the early hours of 9 June; isn't that correct?
A. That's correct.
Q. The ward where Raychel was admitted into was Ward 6. That's the paediatric ward in the hospital; isn't that

correct?
A. Yes.
Q. I think we have a plan of the ward, which we can put up on the screen in order to orientate ourselves. First of all, if we could have 316-016b-001. If you could just take a moment to look at that, it may be familiar to you. You can see on the right-hand side of the screen something labelled "treatment room".
A. Yes.
Q. And if you like, moving down the screen, you'll see a line or an arrow pointed to room I?
A. Yes.
Q. And that is the room into which Raychel was admitted and where she stayed during her care in the hospital; isn't that correct?
A. That's correct.
Q. I'm not sure if we have a zoom-in facility, but opposite room I is a little alcove, which is the nursing station; is that right?
A. That's right.
Q. What was the function of the nursing station?
A. Well, a lot of the time, room I was used so that we could closely observe patients, either coming back from theatre or who required close observation over a period of time.



Q. Is that essentially the reception area for the ward or is it something different?
A. It's basically where the nurses would have a computer, the doctors would be able to see to their notes at that desk, and if a child was being admitted they would present to the reception area and a nurse would then take them to the room allocated to them.
Q. So in terms of its relationship with the room that Raychel was admitted to, it couldn't have been closer.
A. No.
Q. It was the closest facility to her room.
A. That's right.
Q. And if we could zoom out again, please. It doesn't particularly concern you, Mrs Noble, but we'll pick up another couple of features of this plan. We have the sister's office on the other side of the premises. How far in, if you like, walking terms is that from Raychel's room I? Would it take you a few minutes to get there?
A. I don't recall sister's office being in that place in 2001.
Q. Right.
A. Sister's office would have been just in behind where the nurses' station was.
Q. Right.



A. Where it says --
Q. Sorry, I cut across you.
A. Where it says "office medicine store". That usually would have been where sister would have been.
Q. Right. So your memory, just to be clear, is that that is where a sister would have done her managerial or administrative work --
A. Mm-hm, yes.
Q. -- in 2001?
A. Yes, in 2001, yes.
Q. And again, if we could zoom out, please. This may have relevance for other witnesses, but there are toilet facilities on this floor towards the top of the screen. So you have a treatment room and a toilet facility.
A. Yes.
Q. Was that the same in 2001?
A. Yes. There was a toilet at the end of the ward and a bathroom.
Q. And there were toilets beside the treatment room on the other side of it, closer to room I --
A. That's correct.
Q. You can just see it beside the words "zone 4".
A. Yes.
Q. In terms of the treatment room to which Raychel was bought after her seizure -- and I'm anticipating your



evidence a little -- but you carried her to the treatment room; is that correct?
A. I did, that's correct.
Q. Is that the treatment room we just saw?
A. Yes.
Q. In terms of your role on the evening of 7 June, were you the nurse in charge?
A. Yes.
Q. And again, you would be the nurse in charge of 8 June as well on the night shift?
A. Yes.
Q. How were you or why were you given that responsibility? Was that because of your grade, grade E?
A. Because of my grade and because of the fact that I had been working for a long time on night duty.
Q. Yes. So you were in charge, in management terms, of Ward 6 for those nights?
A. Yes.
Q. On the night of 7 June when Raychel was admitted, what nursing resources did you have to hand?
A. I think I had two other staff nurses, Nurse Bryce and Nurse Patterson.
Q. Yes.
A. And I think there was a nursing auxiliary on as well.
Q. Was there a Nurse Hewitt on duty?

A. I think she was in the infant area of Ward 6.
Q. So in terms of those nurses who, if you like, most to do with Raychel that night, that would have been yourself, Nurse Patterson and Nurse Bryce; is that correct?
A. Yes.
Q. In terms of organising nursing care around Raychel or indeed around any particular patient that night, how was that done?
A. Well, we worked as a team, and if there was anybody who was particularly ill, a nurse would have been assigned to look after them, to give close observations, and the other nurses -- as the nurse in charge, I would have done the medicines and the other nurses would have carried out observations and attended to anything that was required by the patients.
Q. Nurse Patterson has told us that she was the named nurse, she was the one who had formulated the episodic care plan, which we'll look at in a moment, and therefore, if you like, by default became the named nurse.
A. Yes. The named nurse --
Q. I was going to ask you: what was the function or role of the named nurse at that time?
A. The named nurse usually took an area whereby she would be responsible for those patients in that area. But at



night-time, through maybe admissions coming into the other ends, the nurses would have to come and fill in and help out, so we worked as a team, and obviously whenever there was break relief, you know, whenever one nurse was going on her break, the other nurses took up the care of the patients in all areas.
Q. Yes. This isn't a criticism, don't take it as a criticism, but when nurses aren't dedicated to particular children in the sense of being focused on a small group of children and thereby having to work in a team, is there a danger that care can be fragmented, become fragmented?
A. Well, at that time I felt we worked very effectively as a team. We communicated regularly and if the nurses had any concerns, they made me aware of them and together we would have decided the best plan of action to look after them.
Q. You used the word "communicated", there, you communicated very well.
A. Yes.
Q. In order for you to know what's happening with any particular patient, there has to be good communication between you and your nursing colleagues.
A. That's correct.
Q. I suppose that was achieved in a number of ways. There



was an episodic care plan; isn't that right?
A. Yes.
Q. And that was available so that every nurse would know what the plan was for that particular patient.
A. Yes.
Q. And there was an opportunity to write notes in the chart; isn't that right?
A. That's correct.
Q. Are you familiar with the concept of family-centred care?
A. Well, I would appreciate that where the family can provide care so that the children are comfortable while again communicating with the nursing staff to make the patient's stay more comfortable in hospital. That would be my understanding of family-centred care, that the parents would participate as much as they could.
Q. Yes. Well, family-centred care as a particular nursing concept involves ensuring that the parents of a child are given their place in the care regime.
A. Yes.
Q. Is that your understanding?
A. Yes.
Q. And was that practised at the time in Altnagelvin?
A. Yes, I would say so.
Q. If we could put up the care plan. The care plan was



developed by Staff Nurse Patterson; is that correct?
A. That's correct.
Q. I want to draw your attention to a number of particular areas of the care plan at 020-027-057. At the bottom of the page you can see a reference to the parents. Perhaps you can help us understand how this care plan is structured. Can I ask, is the left-hand side of the line, if you like, the potential problem or the potential challenge for the nurse, and then on the right-hand side are, if you like, the potential nursing solutions?
A. Yes.
Q. If we could zoom into that again, please, it would be helpful. So the problem, if you like, is one of "parental anxiety", the challenge is to "minimise anxiety and promote parental presence". Then on the right-hand side are some potential solutions in order, if you like, to minimise anxiety.
A. Yes.
Q. "Promote open visiting, keep parents informed of investigations, keep updated on child's progress and treatment, encourage talks with medical and nursing staff, provide positive reassurance when needed."
I draw attention to this, Mrs Noble, because there is a concern articulated by the parents -- and we'll go

to particular examples of this in due course. The concern expressed by the parents is that nurses weren't listening to their concerns about their child. I'll ask you to comment upon that when we go to particular examples. But the plan, if you like, on paper was designed to ensure that nurses did listen to parents; isn't that right?

A. That's correct.

Q. If we go over the page, please, there's I think another reference at 058. Again, the top third of the page, if you could highlight that, please. Again, we're continuing with the minimising anxiety and promote parental presence. On the right-hand column, the action, if you like, is:

"To encourage parents to voice their opinions, encourage parents to continue giving care, record information given to parents."

Is it also the case, Mrs Noble, that when parents are expressing opinions or expressing concern or anxiety, that that should be recorded as a matter of good practice in the nursing notes?

A. Yes.

Q. Another aspect of the episodic care plan drawn up by Nurse Patterson focused on the importance of fluid balance in terms of Raychel's care; isn't that right?



A. Yes, that's right.

Q. You're familiar with the episodic care plan, are you?

A. Yes, albeit it's not in use any more.

Q. Yes. Just before we maybe go into looking at how fluid balance was dealt with within the episodic care plan, this is a plan that was held on the ward's computer; is that correct?

A. That's correct.

Q. If we highlight the top half of this plan, we can illustrate the point. One can see on the left-hand side two entries. One is at 0500 hours by Staff Nurse Patterson, and then the next entry down is at 1700 hours by Staff Nurse Michaela McAuley. What appears to happen is that towards the end of the shift, the nurse with responsibility for evaluating the care makes an entry under the various sub-headings within the plan; isn't that correct?

A. That's correct, yes.

Q. If you like, the entries are being made retrospectively in the case of Daphne Patterson at 0500 hours, which is perhaps two or three hours before the end of the shift?

A. Yes.

Q. And in the case of Michaela McAuley, who started work on the day shift on 8 June, she's compiling her entry at 1700 hours, which is about three hours before your night



shift comes on for the second time in terms of Raychel's care; isn't that right?

A. That's correct.

Q. In terms of using this episodic care plan as a communications tool, it isn't a document that is available to doctors if they're calling to examine a child or prescribe medication; is that right?

A. That's correct.

Q. Its use, perhaps, is best illustrated by the need to hand on information to the, if you like, the next shift of nurses, so in your case coming on the night shift on 8 June, which was Raychel's second day in hospital. You were taking over from Sister Millar, Staff Nurse McAuley and her colleagues, so you would have been interested to see what is recorded in the episodic care plan by McAuley.

A. Yes.

Q. Now, I said that we were going to look at how the plan dealt with the issue of fluid balance. If we could turn to 020-027-059, it's the next page along. At the bottom of the page we can see the plan if IV fluids were going to be in situ.

A. Yes.

Q. So it was, can I suggest, anticipated at the time of admitting Raychel that she was going to be on IV fluids.



In fact, it may well have been known at that point that she was on preoperative IV fluids.

A. Yes.

Q. So the task here is:

"To maintain adequate hydration."

And there it is in front of me, Daphne Patterson recording that Raychel's been commenced on No. 18 solution running at 80 ml per hour, and on the right-hand side of the page are the various steps that were expected of the nursing team who were going to be responsible for Raychel's care; isn't that right?

A. That's correct.

Q. And one of the -- let's look at them all. Her prescribed fluids were to be checked, the rate and flow was to be set as prescribed. The infusion rate was to be inspected hourly and oral fluids were to be encouraged. Does that suggest that oral fluids were to be encouraged after surgery?

A. Yes.

THE CHAIRMAN: On the right-hand side of the screen at the moment, Mrs Noble, are those four entries starting with "check prescribed fluids" and ending in "encourage oral fluids, record", are they pro forma entries or would they each have been specifically put into the plan by Staff Nurse Patterson?

A. They're pro forma.
THE CHAIRMAN: Right. So on the page that's in front of us then, is the bit that isn't pro forma the bit on the left hand said which says, "Commenced on No. 18 Solution running at 80 ml per hour"?
A. That's correct.
THE CHAIRMAN: And we know that's not pro forma because not every child has it running at 80 ml per hour.
A. That's correct.
THE CHAIRMAN: But every child in Ward 6 has Solution No. 18?
A. Yes. Pretty much so, unless ...
THE CHAIRMAN: So although this comes out looking like a designed care plan, it is in effect a pro forma which sets out for Staff Nurse Patterson and for the rest of you working as a team what has to be done for Raychel?
A. Yes, it's individualised.
MR WOLFE: If I can build on that a little. What Staff Nurse Patterson appears to have done is lifted down a plan off the computer shelf, if you like, and it's a plan on the problem of abdominal pain, she tells us, which was given in accordance to the Roper, Logan & Tierney model of nursing.
A. Yes.
Q. So the chairman has surmised it right. There are preset



plans, which are adapted for use with particular patients, depending on their particular problem.
A. That's correct.
Q. Just focusing as we were on the issue of fluids, one can see at the bottom of that page that "encourage oral fluids" is an action to be developed, and you've told me that that was relevant in the post-operative phase and the word "record" is included.
A. That's correct.
Q. That suggests that any time Raychel was given oral fluids, a record was supposed to be made.
A. That's correct.
Q. Equally, if we could turn four pages on to 063 in the same document, and if we could highlight the bottom half from the line down. The issue here is to "reduce risk and ensure an uneventful recovery". You have a series of observations that have to be done in the post-operative period; isn't that correct?
A. That's correct.
Q. You can see that the observations are initially quarter hourly and then, as the patient moves away, if you like, from the end of the anaesthesia, the observations are getting further apart in time; isn't that right?
A. That's correct.
Q. And the third last entry is:



"Observe/record urinary output."
Taken with the entry I've referred you to earlier, which dealt with IV fluids and oral fluids, this entry relating to urinary output and the need to record it and observe it, these are all pieces of information that were relevant to the whole issue of fluid balance; isn't that correct?
A. That's correct.
Q. Would you agree with me that these pieces of data ought to have been collected and recorded in relation to Raychel throughout her stay in hospital?
A. Yes.
Q. In other words, every time she went to the toilet, that ought to have been recorded.
A. Yes.
Q. Every time she took oral fluids, that should have been recorded.
A. Yes.
Q. Moreover, we can broaden this out and say that every time she vomited, that ought to have been recorded.
A. Yes.
Q. And for the purposes of carrying out those actions, a particular piece of stationery or document was available to nurses, and that's called the fluid balance chart. Perhaps if we can turn an example of that up



now.
If we go to 020-020-039, we can see how that document is set out. Reading across the top of the page, we see "input", and that relates to intravenous input; isn't that right?
A. Yes.
Q. We'll probably be coming back and forward to this document and a similar document, but we can see on this one, at 2000 hours, "No. 18" is entered. That's the fluid that was ultimately prescribed for Raychel.
A. I would say not at that time. Her fluid --
Q. No, no, I didn't mean to suggest that, but that --
A. That's where it's written, yes.
Q. Because we can see that at 22.15, fluid seems to have started at that time.
A. Yes.
Q. And reading across -- we'll come back because there are some points to be made in relation to this document in due course. Under "oral", it's recorded that she's fasting. So essentially, she's nil by mouth.
A. That's correct.
Q. And then as we go across to "output", there are various types of output that ought to be monitored; isn't that correct?
A. That's correct.

Q. "Aspirate", "vomit", "urine", "stools", et cetera.
A. That's correct.
Q. What would you and your fellow nurses have understood in terms of the importance or the relevance of this document for a child on intravenous fluids?
A. Any losses or anything on that chart that was required to be entered, I would have put it in. Any oral intake, any episodes that she had been to the toilet, if she had vomited, if she had passed any bowel motions, I would have entered that on that sheet.
Q. But why was that important?
A. So that we could see that she's not maybe losing more than she's getting in, so there's a balance.
Q. And would you agree that any failure to record the data that ought to have been recorded would be an omission of nursing care, it would be poor practice?
A. It would.
Q. The chairman raised a question with you in relation to the set-up of this episodic care plan and from where it was derived. The episodic care plan does not have any issue in it in relation to post-operative nausea or vomiting.
A. No.
Q. And you have earlier told us that, in the circumstances of an appendicectomy in children, post-operative



vomiting is a fairly common scenario.
A. It is in my experience, yes.
Q. Should you, in terms of leading the nurses on duty that night, have arranged to have the care plan focused on an issue such as post-operative vomiting?
A. Well, each nurse is responsible for -- the named nurse would have been responsible for ensuring the care plan for her patient. On that particular night she hadn't vomited and there was a facility to put in nausea and vomiting as well as a post-operative care plan. So that would have been added in during the day when her vomiting started.
Q. So let me examine that with you. At the point in time when the plan was being formulated, Raychel had yet to go to theatre; isn't that correct?
A. Yes.
Q. And hadn't vomited preoperatively?
A. That's correct.
Q. And indeed, as we'll see in a few moments, Raychel's initial post-operative recovery was uneventful in the sense that there was no vomiting or nausea to report until 8 o'clock in the morning.
A. That's correct.
Q. So if I understand your answer correctly, a nurse wouldn't necessarily anticipate post-operative vomiting



and put it in the plan even though post-operative vomiting might be common. You would wait until the actual event and then amend the plan?
A. Yes, that's correct.
Q. In that sense, you appear to be describing a plan which should be, if you like, a living document, it should move and develop with developments in the patient's care?
A. That's how it should work, yes. You identify a problem as it arises and incorporate it into the care plan.
Q. One finds in this episodic care plan that post-operative vomiting, while mentioned, and certain developments around it are mentioned -- and we'll perhaps look at that presently -- but it's not identified as a particular care issue and a plan isn't developed around that as a care issue.
A. No, not at that time.
Q. Well, in terms of what you've just said to us, should the nurses on 8 June have been using the episodic care plan in the way you've just described, in other words developing a plan around a new issue, ie the vomiting, and setting that plan out in writing?
A. Yes.
Q. Is that the kind of practice you would have anticipated should have happened?



A. Yes.
Q. Now that we have this document up on the screen, it'll save me coming back to it if I ask you this question now.
We can see on this document that Raychel is on a rate of 80 ml per hour; isn't that right?
A. Yes.
Q. If one looks at the column marked "1", it's got two columns with it: amount and total; do you see that?
A. Yes.
Q. One can see in the column marked "total" that the amounts are going up at, if you like, 80 and 80 and 80; do you see that?
A. Yes.
Q. Why is the table marked in that way?
A. Because 80 ml of fluid would have gone in in that hour and the 150 would have been the amount of fluid that was in the burette that was always used to administer fluids for children on Ward 6. It was a safety net so we could check that maybe the machine had been giving the correct amount of fluids.
Q. Are you not supposed to, as a nurse, come along to the infusion machine every hour or so --
A. Yes.
Q. -- and look at the amount given in the period since you

were last there?
A. Yes.
Q. In the nature of things, Mrs Noble, you couldn't conceivably do that on the hour every hour, could you?
A. I did my very best on that night in particular and on most nights when I was mostly looking after the IV fluids when other nurses were on their break. It was something that I always anticipated on the hour just before the hour, that I would go round and do all the IV fluids.
Q. I'm sure you did, and it's not a criticism of whether you attended every hour or so. The point is this: it appears on one view that the entry in the total column has been written on the basis of what Ms Ramsay has said was the expected volume infused, rather than actually recording what had been given in the period of time since you were last there; do you follow the point?
A. Yes, I do.
Q. In other words, these entries couldn't conceivably be right in the sense that you could not have arrived at that child's bed or infusion giving set on the hour every hour and see that 80 millilitres have gone by; would you agree with that?
A. Yes. In the pumps there's a facility to keep the vein open whereby the fluid does not infuse after the amount



that is supposed to have gone in in that hour has gone through. It just basically keeps the vein open until a nurse can forward the fluids by another hour.
Q. Is that what was done?
A. Yes.
Q. So it was set for 80 ml?
A. Yes.
Q. And then 80 ml runs in and then it stops?
A. The machine alarms to alert you that 80 ml has gone in.
Q. Right.
A. So you know that 80 ml has been infused over the period of an hour?
Q. Right. And then it's started again?
A. It's started again, yes.
Q. And that was what was done throughout the 24 or 36 hours, roughly, in Raychel's case?
A. Yes.
Q. You don't say much in your witness statements, Mrs Noble, about Raychel's condition when she came to Ward 6. Did you have any dealings with her initially?
A. No, I did not admit her.
Q. Yes.
A. The only dealings that I would were that Staff Nurse Patterson contacted me and communicated that the doctor had prescribed a different fluid to what was



normally used and she made me aware that Raychel was going to be going to theatre.
Q. So before Raychel went to theatre, did you have any dealings with Raychel at all?
A. No.
Q. Were you aware or were you made aware by Nurse Patterson or Nurse Bryce as to Raychel's condition upon admission?
A. I don't recall being made aware of her condition as such, just the fact that she was going to theatre. The doctors had decided -- necessary to take her to theatre.
Q. Mr Makar was the surgeon on duty that night.
A. That's correct.
Q. It would appear that you had some dealings with him, which we'll turn to and examine in a moment. Did Mr Makar discuss with you his plan for surgery?
A. I don't recall. I don't recall a discussion between himself and myself about taking her to theatre. I was made aware by Staff Nurse Patterson that Raychel was going to theatre.
Q. In terms of communication between surgeon and nurse, what is the convention, if there is a convention, in terms of the surgeon exchanging information with the nurse, who, after all, is likely to have the most direct and ongoing contact with the parents?
A. Well, he would have communicated his intentions to



Staff Nurse Patterson, who was dealing with the admission, and preparing her for theatre.
Q. In terms of decision-making about whether a child should be brought to theatre, in Altnagelvin at that time was there any practice that you were aware of that would have necessitated a surgeon such as Mr Makar checking with his consultant about the appropriateness of theatre for a particular patient?
A. I wasn't aware about him checking with his consultant, but I know that he would have consulted with his registrar, the surgical registrar, and made him aware of the child's admission, condition, and the decision to take her to theatre.
Q. You say you know in this case or you say you know as a general --
A. As a general --
Q. -- policy --
A. And in that case.
Q. We'll come to the specifics of the case in a moment. But in terms of the generality of the policy, let's examine that. Could you explain what the policy was as you understood it?
A. As I understood it, the senior house officer would have communicated with his registrar the necessity for theatre and they would have agreed a time slot and

whether the surgical registrar needed to be at the operation, and from then on it was their decision as to who needed to know.

Q. And are you aware of the reasons why such a procedure was in place?

A. To ensure effective communication. That would have been why, so that ...

Q. But what does that mean? We have a surgeon in the hospital, let's call him Mr Makar, who ostensibly is competent to carry out surgery. Why does he need to communicate with his registrar within the terms of this policy? What's your understanding?

A. My understanding was, just as if I was a junior nurse, I would have communicated what was happening with my patients to somebody senior above me.

Q. Is it your understanding that the registrar is required to approve the decision or simply be consulted on it?

A. Well, consulted definitely.

Q. And in Raychel's specific case, do you know whether this procedure was activated by Mr Makar?

A. I wasn't party to any communication between Mr Makar and his registrar.

Q. The answer is you simply don't know?

A. No.

Q. It wasn't brought to your attention?



A. It wasn't, no.

Q. For the avoidance of any doubt, there is evidence before the inquiry that a Mr Zawislak, who apparently was a registrar at that time, was contacted by Mr Makar to discuss Raychel's need for an appendicectomy, and Mr Makar says there was such a discussion. Are you aware of that?

A. I am aware since, yes, that that discussion did take place. But I was not party to that discussion.

Q. You say you're now aware of it.

A. Yes, I'm now aware of it, yes.

THE CHAIRMAN: You don't need to know about that discussion, do you?

A. No.

THE CHAIRMAN: That's for the surgeons --

A. That's for the surgeons to sort out.

MR WOLFE: Well, if anything emerges from the discussion, it may be something that nurses need to know. Let me put this to you or suggest this to you: it's Mr Makar's evidence to the inquiry that in discussion with his registrar, a plan was developed, and maybe if we could put it up on the screen, it might be useful. WS022/2, page 17.

Roughly halfway down the page, if we could highlight that. This is Mr Makar's evidence to the inquiry. He



said that he discussed with the on-call surgery registrar, Mr Zawislak, around 10 pm, and re-contacted him before he went to start the operation:

"The plan was to proceed for appendicectomy if the theatre sent for the patient before 11 pm and to consider postponing the operation to the morning if there was any delay."

If I could go down to (ii):

"We concluded that if there was a delay in theatre sending for Raychel before 11 pm to postpone the operation to the morning, bearing in mind the risk for complications of appendicitis versus operating after midnight."

So that's his account to the inquiry. If that was the plan, that surgery had to take place before 11 o'clock and if it didn't take place it would be postponed until the next morning, is that something that you, as the nurse managing the ward, or your colleague, Nurse Patterson, would have expected to be told?

A. Yes. If they weren't going to take Raychel to theatre after a certain time and we're going to delay theatre, then we would have been told about it.

Q. Because you would need to know that in terms of how you were going to manage the child and the information you'd need to give to the parents.



A. Yes.

Q. And you're telling the inquiry that you weren't advised of this plan --

A. No.

Q. -- at that time?

A. At that time I wasn't advised of the plan.

Q. In terms of what you know now, you say that you are now aware that Mr Makar did contact his registrar; is that what you're saying?

A. Yes.

Q. Who made you aware of that?

A. I think I read Mr Makar's statement.

Q. Yes. So you're aware that Mr Makar's evidence is that he contacted Mr Zawislak?

A. Yes.

Q. But has it ever been confirmed for you outside of his statement --

A. No.

Q. -- that this contact with his registrar took place?

A. I don't recall.

Q. Can I put it another way? Is it fair to say or fair to suggest to you that the first time you became aware of a contact between Mr Makar and his registrar was when you read Mr Makar's statement for the inquiry?

A. I'm not sure whether I had heard it previously when it

was discussed so that we could, you know, put the chain of events together on a debrief after Raychel had passed.

THE CHAIRMAN: Well, if you were putting the chain of events together and Mr Makar was saying that, you would expect Mr Zawislak to be spoken to, wouldn't you, to see if that was also his recollection?

A. Yes.

THE CHAIRMAN: And you know that Mr Zawislak has said that -- I don't know if you have followed his evidence to the inquiry, but he says that the first time he knew that he was supposed to have been involved in any way on any level was when he saw Mr Makar's recent statement.

A. I wasn't aware of that.

THE CHAIRMAN: So there's actually an issue between Mr Makar and Mr Zawislak about whether Mr Makar's correct at all and to the extent that there may have been any communication. Mr Zawislak is suggesting that if Mr Makar did ring, then a purpose for that would be to say, look, he was going to go to theatre so that Mr Zawislak would know that Mr Makar was booked up or was going to be busy for the next while, that he might therefore need to be available if any other child needed treatment or that Mr Zawislak might, on the worst case scenario, need to call on him to help.



A. Yes, that would be my understanding.

THE CHAIRMAN: That's different from him seeking Mr Zawislak's consent or agreement to going ahead.

MR STITT: Mr Chairman, if I may interrupt, coming from the doctor's perspective, who I'm representing.

THE CHAIRMAN: Yes.

MR STITT: It's absolutely clear that this witness, first of all, was not privy to any discussion.

THE CHAIRMAN: Yes.

MR STITT: It's not as though she's standing in the corner of some room and overhears something. She doesn't see somebody leaving and it is obvious a discussion has taken place.

THE CHAIRMAN: I agree.

MR STITT: She hasn't even been involved in the operating end of things; she's in charge of Ward 6. She has said in addition, if there was such plan, and she has no knowledge of such plan, she would only be expected to hear of it if there was a change in plan. So with the greatest of respect --

THE CHAIRMAN: It's not worth pursuing with this witness?

MR STITT: We've heard from Mr Makar and Mr Zawislak already, but with the greatest respect, I cannot see -- speaking from a doctor's perspective -- how that issue can in any way be enlightened by this witness.



THE CHAIRMAN: Thank you.

MR WOLFE: Just to be clear on it -- the transcript's moved, so I'll clarify the position through you, Mr Chairman -- I thought I'd heard the witness say that she would expect to be told of the plan.

A. Of any change in plan.

MR STITT: In other words, if she wasn't going to theatre that night.

THE CHAIRMAN: In other words, if the plan to operate on Raychel was deferred until the morning because the operation couldn't start on time for some reason, but that's all you'd have been expected to have been told about it?

A. Yes.

THE CHAIRMAN: Very well. That clarifies it.

MR WOLFE: As you've suggested earlier, you did have a conversation with Mr Makar with regard to the particular issue of fluids --

A. Yes, that's correct.

Q. -- and intravenous fluids for Raychel.

A. That's correct.

Q. Could you tell us, Mrs Noble, how that issue was drawn to your attention?

A. Staff Nurse Patterson told me that Mr Makar had initially prescribed Hartmann's solution for Raychel,



and as she and I both were aware that Solution No. 18 was always used on the children's ward. I told Mr Makar that that was what was commonly used and would he be happy enough to change it to Solution No. 18, and he agreed to do so.

Q. And had you any particular concern that Hartmann's had been prescribed?

A. No. Sometimes a lot of the doctors would have maybe used fluids that were commonly used on an adult surgical ward, but on the children's ward Solution No. 18 was the solution that was used preoperatively.

Q. Yes. I think you would accept -- and you've accepted in your statement -- that doctors are the people who prescribe fluids for children, for patients in general.

A. Yes.

Q. And so can you explain why you saw it as part of your role to, if you like, politely perhaps, challenge the doctor's decision on this fluid?

A. Because previous to that, if a child had been on other fluids, we would have been asked by our nursing seniors why that particular fluid had been used and why we hadn't highlighted it to the doctors that Solution No. 18 was always used on the paediatric ward.

THE CHAIRMAN: How long had that been going on for?

A. In the years that I had been there.

THE CHAIRMAN: So if a surgeon or an anaesthetist prescribed Hartmann's and the nurses then gave the Hartmann's, your nursing seniors would -- let me just check your term -- they would have asked you how that fluid had been used and why you hadn't highlighted the Solution No. 18 to the doctors?
A. Yes.
THE CHAIRMAN: Why were they so concerned? I don't understand why there's such a concern about the use of Solution No. 18 instead of Hartmann's to the extent that you feel obliged to speak to Mr Makar because, if you don't, you in turn are going to be questioned about it by one of your nursing seniors.
A. Well, that was the practice at that time.
THE CHAIRMAN: It sounds as if there was a particularly strong line being taken about Solution No. 18 on Ward 6.
A. Well, I made him aware of what the practice was at that time on the ward and had he insisted on Hartmann's solution being put up with the knowledge of her preoperative electrolytes, then I would have put it up, but I would have documented in her care plan that Hartmann's solution was put up, despite Mr Makar being made aware that Solution No. 18 is commonly used preoperatively for children.
THE CHAIRMAN: So on one interpretation, I could understand



that to mean that unless there's a good reason for it, Solution No. 18 will be used and if it's not used, the specific reason for using Hartmann's rather than Solution No. 18 will be recorded in the nursing records?
A. Yes.
THE CHAIRMAN: Do you remember senior nurses taking up this issue before?
A. I do remember it, maybe on a few occasions, children maybe coming back from theatre, on a very few occasions, on a different fluid, and in the office in the morning then it would have been said by either the senior nurse or sister, "That fluid will have to be changed to Solution No. 18. Why did that child come back on that particular fluid?".
THE CHAIRMAN: What do you understand was the particular identified advantage of Solution No. 18 as opposed to Hartmann's?
A. Because if children were fasting for a prolonged period of time, they were more likely to drop their blood sugar level and that there was glucose in the Solution No. 18 that wasn't present in Hartmann's solution and they weren't at risk of going hypoglycaemic.
THE CHAIRMAN: So the fear of a child going hypoglycaemic was so strong that senior nurses would in effect pick up with you that you hadn't challenged the doctors about



why they are using Hartmann's rather than Solution No. 18?
A. Yes. It was the practice at that time.
THE CHAIRMAN: Okay. Thank you.
MR WOLFE: You've alluded to nursing seniors as, if you like, conveying this message to you. Who in particular are we talking about? Are we talking about the nursing director?
A. No. Mostly the ward sisters or whoever was in charge that morning that I would have been handing over what had happened during the night.
Q. So if I can understand it in this way: you as the nurse in charge of this ward on the ground feel that you must articulate a policy that is being handed down to you by nursing seniors --
A. Yes.
Q. -- and seek to, if you like, advance or police this policy with regard to the prescribers --
A. Yes.
Q. -- in other words the doctors?
A. Yes.
Q. And if the doctors aren't prepared to bow to this policy, you will record that fact in the notes?
A. I would have done, yes.
Q. You say, if I could maybe put it up on the screen, in



your second statement, 049/2, page 5 -- it may not be the right place. Allow me a moment, sir. At the top of the page, maybe if we can go on a page so we get the full question in context, please.
THE CHAIRMAN: Do you want 4 and 5 together?
MR WOLFE: Yes, that would be helpful.
Orientating ourselves again at question 4 on the left-hand side:
"Staff Nurse Patterson informed me that Mr Makar had prescribed IV Hartmann's solution for Raychel. As this was not in keeping with common practice on the ward, I informed Mr Makar who then changed the prescription to Solution No. 18."
That derives from your first statement, you'll recall, Mrs Noble.
A. Yes.
Q. Then I get into asking you some questions arising out of that, and in particular you're asked for details of what you meant by the phrase "common practice on the ward", and you say:
"When I arrived on ward 10 [which was then the paediatrics ward] in May 1990, Solution No. 18 was prescribed for pre and post-surgical and medical patients and it was the practice of both medical and surgical doctors to prescribe Solution No. 18 and was

commonly used as the first solution of choice."

So when you say to the chairman that that was the policy from --

A. Yes.

Q. -- you started, that's what you're talking about?

A. Yes.

Q. That's what you were told when you arrived as a grade D nurse 11 years before you treated Raychel and it was a policy you were expected to abide by?

A. Yes.

Q. The thinking behind it you have articulated as being the need to keep children on a fluid which contained glucose, which could cater for a situation where there might be a drop in blood sugar.

A. Yes.

Q. And that practice, which was still in place 11 years later, seems to deny the prescriber or at least put pressure on the prescriber to deviate from his or her intended prescription; is that fair?

A. Well, I just made them aware of what was common practice on the ward. Had they insisted on a different fluid, it would have been put up.

THE CHAIRMAN: Okay.

MR WOLFE: Mr Makar, in his evidence to the inquiry, has said that, during his discussion with you, he was



informed that Ward 6 only kept No. 18 Solution bags of 1 litre and not the smaller size of 500 ml; is that right?

A. Sorry, could you repeat the question?

Q. Yes. Mr Makar, in his evidence to the inquiry, explained that he was informed that Ward 6 only kept the larger bags of Solution No. 18, the 1 litre bags, and not the 500 ml bags.

A. That's correct.

Q. When he was prescribing for Raychel, his prescription was intended to cover only the preoperative period; do you understand that?

A. Yes, yes.

Q. And insofar as you are aware, is that your understanding of what he was doing?

A. In my experience, the children who were prescribed Solution No. 18 prior to going to theatre went to theatre with their fluids disconnected. They then received Hartmann's solution intraoperatively. The Hartmann's solution was discontinued prior to returning to the ward and then the preoperative fluids, if there hadn't been any change decided by either the anaesthetist or surgeon, they went back up on the preoperative fluids at that rate, at the rate prescribed.

Q. Yes. I'm conscious that that's the practice and it's



a practice we will scrutinise in a moment. But I'm asking you to place yourself back in 2001. Mr Makar has written a prescription of Hartmann's, you've spoken to him, arising out of that discussion he's changed his prescription to Solution No. 18. In terms of the prescription he was writing, that was for preoperative fluids only according to him.

A. Well, I didn't see them as preoperative fluids and he didn't communicate that they were preoperative fluids.

Q. Maybe if we could just -- and you can comment on it. Let me expose you to Mr Makar's thinking on this. If I could turn up WS022/2, page 10. If we could have page 10 and 11 together, please.

The question at the bottom of page 10 is what I would like you to focus on. Mr Makar is asked:

"Did you as the surgeon who carried out the operation have any responsibility with regard to Raychel's post-operative fluid management?"

And he answers:

"It would not have been the normal and safe practice for me to write the post-operative fluid blindly in advance without knowing what the patient was going to get during the recovery period or before the patient got discharged from the recovery area. As the surgeon who carried out the operation, I have written the



post-operative antibiotic prophylaxis."

And he goes on in the next paragraph to say that he's one member of a surgical team. He says that:

"I would normally look after the emergency surgical assessment and admissions from A&E while the JHO looked after the inpatients in the wards. However, I was available for JHO advice when needed."

It was his understanding that:

"The anaesthetic doctor would write the recovery post-operative fluids, which would normally cover the period post surgery until the morning."

So Mr Makar is, on his account, writing a prescription for preoperative fluids only, whereas you tell us that the practice was that the preoperative prescription would be taken and used for post-operative purposes as well.

A. Not unless there was anything specifically changed while the child was in theatre.

Q. Right.

THE CHAIRMAN: So the preoperative fluid wouldn't automatically become the post-operative fluid?

A. On very few occasions, it would have been changed.

THE CHAIRMAN: We know in Raychel's case that the anaesthetist was going to give Hartmann's post-operatively.

A. Mm-hm.
THE CHAIRMAN: And was then told in the same way as you told Mr Makar beforehand that we don't use Hartmann's, and the anaesthetist was then told, "We don't use Hartmann's", so Hartmann's again wasn't used. So twice within a few hours, doctors who intend to prescribe Hartmann's are dissuaded from prescribing Hartmann's on the basis that that's not the practice in Altnagelvin.
A. Yes.
THE CHAIRMAN: Okay.
MR WOLFE: Well, it is the case, Mrs Noble, that there was no written protocol to record these post-operative fluid arrangements; isn't that correct?
A. That's correct.
Q. Mr Makar on his account clearly didn't know that his prescription would be taken off the shelf and used in the different context of the post-operative period; isn't that right?
A. Yes.
Q. Just to be clear and for the avoidance of doubt, should he have known that you were going to use his prescription in that way?
A. My understanding is that the anaesthetist and the surgeon, it would have been part of their plan to discuss what fluids she would have been on and what



antibiotics she should have been on coming back to the ward and, if there were to be any changes, that that would be communicated to the recovery nurse, who in turn would let us know what their plan was.
Q. If a prescription had been written preoperatively by an anaesthetist, say suggesting that Hartmann's ought to be used --
THE CHAIRMAN: Sorry, post-operatively.
MR WOLFE: I beg your pardon. If the anaesthetist had written a prescription post-operatively for Hartmann's, how would that have been received by the nurses on the ward?
A. I would have questioned it and asked why.
THE CHAIRMAN: Same again?
A. Same again. I would have asked why. And if they had insisted upon it, I would have put up the fluids at their insistence.
THE CHAIRMAN: And would have made the entry that --
A. And would have made the entry that I had made them aware what was common practice.
MR WOLFE: Could I have up on the screen a letter which Dr Nesbitt wrote after Raychel's death? 021-057-137, please. Dr Nesbitt is writing to Paul Bateson, clinical director, surgical directorate. At this stage in the chronology, he's trying to implement a system whereby



Hartmann's solution would be the default fluid. I think he's copying this letter in to Therese, he's stroked out the word "Paul" and put in "Therese" and you can see at the end of the page that "Therese Brown" is one of the recipients of the letter. And if I could just focus on the middle paragraph which says:
"The problem in the children's ward seemed to be that even if Hartmann's was prescribed, it was changed to number 18 by default. I therefore asked Sister Millar to change this policy so that for surgical children the default solution became Hartmann's."
Does that first sentence, Mrs Noble, reflect what was going on at that time in the children's ward?
A. In light of what we know, yes. In light of what we know now, then yes.
THE CHAIRMAN: But it's in light of what you've outlined to us.
A. Yes.
THE CHAIRMAN: Because if we take Raychel as a specific example of this practice, twice -- in the evening and then the following morning in the early hours of the morning -- Hartmann's was prescribed or was to be prescribed, and it was changed to No. 18, not quite by default, but by intervention by you initially and then by a combination of Dr Jamison and Mrs McGrath after the



operation.
A. Yes.
THE CHAIRMAN: And just to be fair to you on this point, Dr Nesbitt isn't saying ... He's not criticising that, he's not saying that you did anything wrong. He, in effect, is saying that, in this letter, that was the practice.
A. Yes.
THE CHAIRMAN: He's not saying, "I don't know how this came about", "Search me how this happened, but it should never have happened", he's saying that this is what was happening.
A. Yes.
MR WOLFE: Is this an appropriate time for the stenographer?
THE CHAIRMAN: We'll take a short break.
Mrs Noble, I think it's been a long day for you already. I can tell you now it's quite clear, I'm afraid, we're not going to finish your evidence today, but if we take a ten-minute break, we'll go on for a while longer, but we will stop by 5 o'clock. Can you make yourself available to come back tomorrow morning?
A. Yes.
THE CHAIRMAN: We won't go on after 5 o'clock, but we'll take a ten-minute break now.
(3.55 pm)

(A short break)

(4.15 pm)

MR WOLFE: Mrs Noble, if we take up again with the pre-/post-op fluids issue I was exploring with you just before the break. We examined what Mr Makar said to the inquiry in his statement about, if you like, the danger, as he saw it, of prescribing blind. In other words, he thought he was prescribing for the pre-op period and, as it transpires, his prescription was used for the post-op period.

Another factor that he raised with the inquiry during his oral evidence was in respect of the, if you like, the dangers associated with, as he assumed, leaving a pre-used bag of Solution No. 18, disconnected from the patient, she's away at surgery, and then reconnected when she comes back. As I say, that was his assumption. But in actual fact, was that the reality, that you disconnected the child from the Solution No. 18 infusion and reconnected on to the same bag?

A. Yes. At that time, yes.

Q. Were any particular measures taken to maintain the sterility of the connection?

A. Yes.

Q. How was that done?

A. Basically, a sterile needle was screwed up with a screw



cap and we screwed a sterile needle into the insertion point of the fluids, and that kept it clean.

Q. We're now into the sort of post-operative stage of this and while Raychel was at theatre, as I understand from your evidence, you were on your break.

A. Yes.

Q. And when you came back from your break, Raychel was back in the ward and connected back on to Solution No. 18; is that correct?

A. That's correct.

Q. And that had been done by Staff Nurse Patterson.

A. That's correct.

Q. Clearly, there is no prescription properly so-called in respect of the post-operative period; would you accept that?

A. Yes.

Q. And indeed, no doctor came to the ward to assess Raychel's post-operative condition before she was reconnected to Solution No. 18; is that correct?

A. Not as far as I'm aware.

Q. The inquiry has had the benefit of looking at the various perspectives that are available in relation to understandings of the post-operative fluid arrangements, and you've articulated, I think as plainly as you can, the nursing understanding. If I can be afforded the



opportunity to summarise my understanding of your position. That is that nurses would reconnect the preoperative fluids post-operatively unless a prescription emerged from theatre --

A. That's correct.

Q. -- whereas I've articulated for you, hopefully clearly, Mr Makar's understanding. Perhaps if I could look at a number of the other understandings that the inquiry has been given.

Mr Gilliland, who was the consultant surgeon under whose care Raychel was admitted, has told the inquiry that it was his understanding that the prescription of intravenous fluids post-operatively would initially be a continuation of the intraoperative fluids, and then responsibility would pass to the pre-registration house officer on the surgical side.

A. On very few occasions was there ever a prescription sent from theatre for the patient. The preoperative Solution No. 18 would almost always have been put up unless specified from theatre.

Q. It's almost pointless repeating this to you, but Dr Zawislak has given evidence of a similar understanding that the intraoperative fluids would continue until they had run down and then they would be reviewed. But again, that's not --



A. This Hartmann's solution was always disconnected when the child returned from theatre.

Q. Dr Gund, who was the primary anaesthetist who cared for Raychel at the operation, was given to understand, according to his evidence to the inquiry, that a doctor would be summoned by the nurses when Raychel got back on to the ward to assess her fluid needs. Again, in practice did that ever happen?

A. No.

Q. I wonder have you had the opportunity to look at Dr Simon Haynes' report for the inquiry? Dr Haynes is an anaesthetist, an anaesthetist who has commented on various of the issues in Raychel's case on behalf of the inquiry. Have you had an opportunity to read his report?

A. I didn't read it fully. I read parts of it.

Q. What he has said, Mrs Noble, is that nurses are very unlikely to have understood all of the issues that go with prescribing particular fluids, and yet fluids were being administered preoperatively [sic] on the basis of what he called a custom and practice on the ward, the custom and practice that you've talked about in terms of this policy being applied to children from when you started employment in 1990.

THE CHAIRMAN: Sorry, Mr Wolfe, the transcript has you

saying:

"... and yet fluids were being administered preoperatively on the basis of what he called the custom and practice ..."

Do you mean post-operatively?

MR WOLFE: I do mean post-operatively.

THE CHAIRMAN: If we just correct that. Okay. Maybe you just put it again so we don't lose Mrs Noble between our pre and post-ops. You can do it from the screen.

MR WOLFE: Let me put the question maybe a bit more succinctly: there was a custom and practice in place, was there not, that involved simply applying the preoperative prescription post-operatively?

A. Yes.

THE CHAIRMAN: Can I ask you: you knew about this, right, and the nursing sisters knew about it; is it your belief that the surgeons and the paediatricians who were on the ward knew about it?

A. I can't speak for them, I can only speak for what I know.

THE CHAIRMAN: Because the description that you've given in effect is, in a way, challenged by Mr Gilliland, by Mr Makar, and at least on one interpretation perhaps by the anaesthetist. So it's clear that there is not a single view from Altnagelvin about what the practice



was about what happened when a child came out of surgery and went back on to the ward. Can I assume, Mrs Noble, that in June 2001 your understanding of the position was that everybody knows this is the custom and practice and "everybody" would go beyond the nurses to include the doctors?

A. Well, all the nurses knew what was common practice on the ward and the doctors would have come and gone. We had been there -- I had been there for years and that was the practice that I knew.

THE CHAIRMAN: Right.

MR WOLFE: If we talked about -- and it may be an unhelpful term, Mrs Noble, but bear with me. If we talked about ownership of this policy or practice, who owned it? Was it a nursing policy? Was it a surgical policy? What was your understanding?

A. My understanding was that the doctors prescribed the fluids, dependent on the electrolytes taken, and because Solution No. 18 was usually the fluid of choice on the ward for both paediatric and surgical children, that we made them aware, because they might have come from somewhere else and been used to prescribing Hartmann's solution for maybe older patients and thought that it was appropriate for children, but because Solution No. 18 was used for both paediatric and



surgical children to prevent hypoglycaemia, we always made them aware of that. But if a doctor had insisted on a different fluid, it would always have been put up.

Q. Yes. If I can just tease that out a bit: you say doctors prescribe based on electrolytes.

A. Yes.

Q. Doctors here, this particular doctor was prescribing, as we know, Hartmann's.

A. Yes.

Q. You, I don't say forcibly or necessarily overly persuasively, had a quick word with him and he changed his mind.

A. I did, I made him aware.

Q. That rather suggests that in terms of ownership of this policy it was not something that belonged necessarily to the surgeons as group, it seems to have been a policy which you as a nurse and your fellow nurses knew about and you articulated that policy to a surgeon, who didn't know about it.

A. I would say it was more a practice than a policy.

Q. Well, then we take it into the, if you like, the post-operative phase, and we have surgeons who are saying to this inquiry that whatever about preoperative fluids, it was either a continuation of the intraoperative fluids or, perhaps in addition to that,



a doctor, such as an anaesthetist, writing a fresh prescription. But that doesn't seem to have been your understanding of how things worked.

A. Well, all I know is that that was the practice that we did at that time, but as I say ... I'm trying to put this succinctly. If the doctors weren't aware of it, we made them aware of what was common practice and if they had wanted something, another fluid, as an alternative, we would have always put it up.

THE CHAIRMAN: In other words, they had the last word?

A. They had the last word, exactly.

MR WOLFE: I think the chairman, in his last series of questions, invited you to consider whether this policy or practice, as you would call it, was widely known. In Raychel's case, and presumably perhaps many other children, they would have arrived at the next morning and a ward round would have taken place.

A. Yes.

Q. And presumably one of the features of the ward round is that post-operative fluids should be reviewed.

A. Yes.

Q. And if they're being reviewed properly, presumably the fact that preoperative fluids are continuing to run post-operatively at the same rate in the absence of a new prescription ought to have been obvious.

A. Yes.
Q. And in your experience, would consultant surgeons and registrars have participated in ward rounds?
A. Mostly registrars. The consultants were not there often on the ward.
Q. Yes. I have some questions to ask you about the ward round in due course. So in terms of senior personnel within the surgical team, the registrar at least would have had the opportunity to see what fluids were being infused post-operatively.
A. Yes, and on that morning they would have had to have written up a daily prescription for that day because the fluid balance sheet only lasts for 24 hours.
Q. We'll look at that in a moment. Were you ever challenged about the use of this practice?
A. Not that I can recall.
Q. Or criticised for using it?
A. No.
Q. In terms of how nursing was organised within Altnagelvin at that time, was there, sitting at the top of the pyramid, a nursing director?
A. Yes.
Q. And in 2001, who was that?
A. I can't recall.
Q. Can you remember any of the nursing directors through



your time in the 1990s?
A. I'm sorry, I can't.
Q. Okay.
THE CHAIRMAN: Sorry, is there a nursing director now?
A. There's a chief executive now.
THE CHAIRMAN: A nursing chief executive?
A. Yes.
THE CHAIRMAN: Who is that?
A. That's Elaine Way.
THE CHAIRMAN: Is that the same job but a new title? Instead of what was formerly a nursing director, it's now called the nursing chief executive?
A. I'm not entirely sure.
THE CHAIRMAN: Okay, thank you.
MR WOLFE: Perhaps you could afford us your understanding of this. In terms of the --
MR STITT: Sorry to interrupt my friend. Just by way of clarification, Elaine Way is the chief executive of Altnagelvin, not the nursing chief executive. One of her responsibilities, of course, would be nursing, but there is a nursing director and I can just get the details of that.
THE CHAIRMAN: If you could help us with the nursing director now and in June 2001, please, Mr Stitt. Thank you.



MR STITT: Yes, I'll do that.
THE CHAIRMAN: I'm happy for it tomorrow morning. I don't need it now.
MR WOLFE: Obviously we'll deal with these kind of issues in the governance section of the inquiry, but to what extent would the nursing director or senior nursing managers of that kind of ilk have been aware of the practices on the wards such as the one we're discussing?
A. I wouldn't have been party to liaising with the nursing directors; it would usually have been the ward sisters and senior nurses, possibly, that would have been doing that. I wouldn't have any direct communication with them.
Q. Very well.
In terms of the safety of this practice of simply taking the pre-op prescription and using it post-op, if there wasn't a prescription from theatre, what is your view now, looking back, on whether that was an appropriate practice?
A. It obviously wasn't a good practice.
Q. Why do you say it wasn't a good practice?
A. Because since Raychel's passing, the fluids have been looked at and have been changed, the management of them has been changed, the documentation as to who orders fluid management for the first 12 hours has been -- is



clear for everybody to see, so there's clarity now.
THE CHAIRMAN: Are you still working nights?
A. No.
THE CHAIRMAN: When did you stop?
A. About three years ago.
THE CHAIRMAN: Right. And as of three years ago, the post-operative fluids for the next 12 hours were prescribed by the anaesthetist?
A. That's correct.
MR STITT: Mr Chairman, may I just come in from a general perspective, dealing with the policy in relation to the fallback of Solution No. 18? Nurse Noble has been asked how this came about and has been pressed quite fairly to give as much information as she can come up with. But I think it's probably only fair to my clients, the Trust, that attention is drawn to the witness statement of Mr Nesbitt, who was the clinical director for anaesthesia and critical care. That's a document which is WS035, and possibly, if I may, could this be called up on to the screen, with your permission, sir?
THE CHAIRMAN: Of course. Which statement and which page?
MR STITT: WS035/1, page 9. When one goes to the main paragraph and goes about eight lines down, halfway across:
"I remember specifically that the situation in both

Craigavon and the Ulster Hospitals was exactly the same. Colleagues in both these hospitals expressed concerns that the very same conditions existed and that they would take steps to see that changes were made as soon as possible. Craigavon Hospital said specifically that anaesthetists had been trying to prescribe Hartmann's solution as the post-operative fluid, but that as in Altnagelvin, the default solution meant that it was changed to No. 18 on the ward."

So it seems that Craigavon, the Ulster and Altnagelvin had the same sort of practice at that time.

THE CHAIRMAN: I think there are two elements to the practice, Mr Stitt, and they're both major elements. One is whether one uses Hartmann's or Solution No. 18, but the second element of the practice, and it's not quite clear from this, is whether the rate of post-operative fluid is the same as the rate of preoperative fluid. And this is what we're being told by Mrs Noble. She's not alone on the nursing side on this. When Dr Nesbitt refers to "an equivalent situation existing in other hospitals", he's only referring to Hartmann's on the one hand against Solution No. 18 on the other, isn't he?

MR STITT: Yes. And if in fact the questioning is to do with the failure to reassess weight after an



operation -- I know that was mentioned earlier -- that is a different point and it's not relevant to my interjection.

THE CHAIRMAN: As I understand it, Dr Nesbitt's point is that it wasn't just in Altnagelvin that anaesthetists in effect weren't being -- they almost weren't being allowed to prescribe Hartmann's.

MR STITT: The default situation in the Ulster and Altnagelvin and Craigavon when it came to paediatrics was Solution No. 18.

THE CHAIRMAN: Maybe you'll clarify this for me, what does that mean, "the default position"? Does that mean even if the anaesthetist prescribes Hartmann's, when the child got to the ward, it was changed to No. 18?

MR STITT: That's my understanding.

THE CHAIRMAN: So in effect the prescription from the anaesthetist was changed?

MR STITT: I'm not in a position to say that on any given occasion it was changed unilaterally. The evidence from this witness is this would be a matter which would be brought up by the nursing staff and that they would liaise with the medical staff and that, through persuasion, for want of a better term, the prescription would be default the 18 and not the intraoperative Hartmann's.



THE CHAIRMAN: We'll certainly explore this later, Mr Stitt. I'm not entirely happy about the use of the term "default solution" as an appropriate description of the type of exchange that we are talking about now and that we've been looking at in Raychel's case and in Altnagelvin generally at the time. I think one might say that the default position is that if the doctor prescribes a post-operative fluid and doesn't prescribe a particular type of post-operative fluid, then by default it's Solution No. 18. But I can't think that's what anaesthetists were doing.

MR STITT: Well, if one looks at the last sentence of that paragraph:

"Craigavon Hospital said specifically that anaesthetists had been trying to prescribe Hartmann's solution as the post-operative fluid, but that as in Altnagelvin, the default solution meant that it was changed to 18 on the ward."

It does seem to me that there was some sort of difference of opinion between the anaesthetists, who are primarily responsible for the intraoperative care, and those -- not recovery -- on the ward afterwards who took a different view.

THE CHAIRMAN: Yes, and it's also because Dr Nesbitt wasn't going into this level of detail in the statement, it



might also be for instance -- when was it changed to Solution No. 18? Was it changed at the ward round the following day, by which stage the anaesthetists have moved out and the surgical team have moved in, in which case the surgical team has the right to decide what solution to prescribe, or is it when a child like Raychel actually appears back on Ward 6?

MR STITT: It would appear in this case, just dealing with Raychel's case, that Raychel left the operating theatre with no fluid and was reattached to Solution No. 18.

THE CHAIRMAN: Yes. Okay.

MR STITT: I can't speak, obviously, for all the other cases.

THE CHAIRMAN: It's clearly an issue we're going to explore. I accept what you're doing effectively is reminding me that on Dr Nesbitt's statement, Altnagelvin isn't on its own, but on that element of Hartmann's against Solution No. 18 I suspect -- we'll see how this develops -- that Altnagelvin might be on its own if the practice was to re-prescribe or reactivate the preoperative rate of fluid as a post-operative rate. That seems to me an additional element and a very significant additional element.

MR STITT: That's noted and that is definitely a different element. There will, of course, be evidence, I

anticipate -- and it's a matter of record anyway -- that the Solution No. 18 had been used for a specific purpose -- it's been alluded to by the nurse -- namely it has a dextrose component, which is important to guard against hypoglycaemia.

THE CHAIRMAN: Thank you.

MR WOLFE: I just want to finish this issue about the procedure. That's what we're looking at, we're looking at the procedure by which nurses are administering post-operative fluids as they were preoperatively. The experts have looked at this on behalf of the inquiry. Let me put the following points to you.

Ms Ramsay has looked at it from a nursing perspective and has said that really there ought to have been a prescription in place prior to you, the nurse, applying these fluids in the post-operative period; would you agree with her?

A. In my experience, when I would have gone to theatre to collect patients, I would have asked, "Fluids?", and it would have been communicated, "The fluids as before theatre", by the recovery nurse if I had asked.

THE CHAIRMAN: So you didn't actually bring Raychel back from theatre --

A. No, I didn't.

THE CHAIRMAN: -- but on occasions pre-June 2001, when you



had gone to theatre and you asked to take a child down, the information given to you was: resume the preoperative fluid?

A. Yes.

THE CHAIRMAN: And that information would have come from who?

A. The recovery nurse.

THE CHAIRMAN: Right. And your point, I presume, Mrs Noble, is the nurses weren't making this up as they go along.

A. Yes.

THE CHAIRMAN: If that's what you were being told by the recovery nurse and that's what you were doing on the ward, that's because, in essence, that's what the various doctors were saying should be done.

A. There was no other prescription other than the prescription preoperatively that -- the fluid balance sheet usually accompanied the patient to theatre and if there were to be any changes on that by the anaesthetist, then it would have been communicated to us.

THE CHAIRMAN: Thank you.

MR WOLFE: The second point is this, Mrs Noble: based on the evidence of Dr Gund, the anaesthetist, he gave the inquiry the benefit of his understanding, which was that he assumed that Raychel would be assessed for her



post-operative needs on the ward. So the criticism that flows from that from Mr Haynes' perspective, Dr Haynes' perspective, is this, that the fluids that Raychel got post-operatively were not based on an assessment of her needs in the post-operative environment, but were based on a custom and practice or, as has been discussed, a default position that Solution No. 18 was going to be what she got, come what may.

A. Yes.

Q. What do you say to that?

A. Well, that was what the practice was in our ward at that time, yes.

Q. Her needs in the post-operative situation were not, so far as you understand, assessed?

A. No.

Q. And of course, her needs in the post-operative environment might be much different to what they are in the preoperative environment.

A. Yes. I suppose depending on fluid lost in theatre.

THE CHAIRMAN: There's a whole range of things that can change.

A. Yes. Uh-huh.

MR WOLFE: Indeed, that brings me neatly to the issue of rate of fluid. We know that Mr Makar prescribed 80 ml per hour and that is the rate that stayed in place



post-operatively, as we discussed.

From a nursing perspective, I'm conscious that it was Staff Nurse Patterson and Staff Nurse Bryce who erected the preoperative fluids and they went through a checking procedure and completed the clerical aspect of that on the prescription.

A. Yes.

Q. There is a formula for calculating maintenance fluids for children known as Holliday-Segar; are you familiar with that formula?

A. I wasn't aware of it at that time.

Q. Bear with me and I'll put these points and if you can answer them, so be it; if you can't, just say so. Applying Holliday-Segar strictly, the maintenance rate, in other words the speed of flow of the fluid to the patient should have been at or about 65 to 67 ml per hour --

A. Yes.

Q. -- and yet she got 80 ml per hour. Mr Makar has explained why he allowed that little excess in the preoperative period. In terms of nursing and your nursing colleagues, would you expect them to be checking the appropriateness of the rate prescribed to their patient?

A. It was their job to prescribe the rate, so yes.

Q. Yes, the rate --
THE CHAIRMAN: Sorry. Just be careful with what you're agreeing with because I'm not sure that you are. I think what Mr Wolfe was asking you is: would you expect the nurses to check whether the rate at which the fluid was being given was the correct rate?
A. Not at that time. Not at that time. We didn't check the rates according to children's body weight. We didn't use that formula within our nursing experience.
THE CHAIRMAN: So you --
A. We just relied on what the doctor prescribed.
THE CHAIRMAN: Well, would I be safe in adding: unless it looked all wrong to you, in which case you'd query with the doctor?
A. Yes.
THE CHAIRMAN: If it seemed to be about what you would expect, then you would accept what the doctor had calculated and give it to the patient?
A. That's correct.
THE CHAIRMAN: Okay.
MR WOLFE: Well, one can see that in the preoperative period a difference between 80 and 65 isn't that large and may not be an obvious error. And just let me be clear, would you expect nurses to spot obvious errors when it comes to ...



THE CHAIRMAN: It depends how obvious, doesn't it?
A. If there was a big difference in what you would have expected a child of that age and build usually to receive, then yes, we would have questioned it. Had they maybe prescribed 100 plus ml an hour, then certainly we would have said, "Are you sure that that's the correct rate for that child?".
MR WOLFE: In the post-operative period, as we know, fluids were maintained at 80 ml per hour, whereas a number of the experts who have expressed views to the inquiry would say that, post-operatively, the rate of fluid should be reduced because of the potential for fluid retention, which is a common occurrence if a child is in pain or shock or after surgery. In your experience at Altnagelvin, were post-operative fluids reduced in rate?
A. Not commonly.
THE CHAIRMAN: You had better do it before and after June 2001 because on the evidence that you've been giving, the post-operative rate before June 2001 was the same as the preoperative rate.
A. Yes.
THE CHAIRMAN: So until June 2001, you didn't expect the rate to be changed.
A. No.
THE CHAIRMAN: Since June 2001, when lessons were learnt and



the prescriptions for at least the initial 12 hours were done by the anaesthetists, have you noticed that the rates are less post-operatively than they were preoperatively?
A. I haven't noticed a great difference, to be honest with you.
THE CHAIRMAN: Right.
MR WOLFE: Just to be clear, Mr Foster, who is the surgeon retained by the inquiry as a expert, thinks that Raychel ought to have received a further reduction on her preoperative fluids of something in the order of 20 per cent. So if she should have been getting 65 ml per hour, by his estimation, preoperatively, that should have been reduced again in the post-operative period. Moreover, Mr Orr, who's the surgeon who's been retained, presumably on behalf of the Altnagelvin Hospital Trust, as it was then, through the Directorate of Legal Services, has said that:
"The common practice is to reduce the volume of maintenance fluid post-operatively on the first day post-operatively because of the risk of inappropriate secretion of antidiuretic hormone."
Just again, and for clarity, what was your experience in 2001, first of all in terms of a general principle, whether fluids should be or ought to have



been reduced?
A. I was not aware that they should have been reduced post-operatively at that time.
Q. That was never discussed with you?
A. That was never discussed, no.
Q. You weren't informed or you didn't know that there were certain risks associated with fluid retention after surgery?
A. No.
Q. And secondly -- and I think you've made this point emphatically already -- it was not the practice at Altnagelvin at that time to reduce fluids post-operatively.
A. That's correct.
Q. And so it is the case that, with all of these practices at that time pertaining at Altnagelvin, Raychel Ferguson was maintained on Solution No. 18 right through the rest of her stay in hospital until the fluids were stopped some time after her seizure --
A. Yes.
Q. -- on the early morning of 9 June 2001?
A. Yes.
Q. And so the fluids having started at a rate of 80 ml an hour at 10.15 on 7 June were interrupted for theatre for three hours and then recommenced at 2 am on the

early morning of 8 June and continued at that fluid rate all the way through?
A. Yes.
Q. And so far as you are aware, Mrs Noble, nobody stopped you or you didn't stop to think about the appropriateness of that fluid?
A. No.
Q. No doctor approached you to speak about the appropriateness of the fluid; is that right?
A. No, and previous to Raychel's admission, every other child who had come in as an appendicectomy had received the same treatment, had been put up on the same IV fluids, who had received the same rate, both pre and post-operatively, who had recovered -- even despite having post-operative nausea and vomiting -- had recovered uneventfully.
Q. Of course every case is different, isn't it, Mrs Noble?
A. Yes, but in my experience up until that point --
Q. In due course, we'll look at the severity or otherwise of Raychel's condition when you next encountered her on the night of 8 June. But before we get to that, let me just ...
THE CHAIRMAN: If you have something to finish up with --
MR WOLFE: I was going to open up the handover.
THE CHAIRMAN: Let's not. It's almost 5 o'clock and it's



not fair to ask you to sit longer because, as you know, I'm afraid I have to ask you to come back tomorrow morning. Is 10 o'clock okay?
A. That's fine, thank you.
THE CHAIRMAN: We'll resume tomorrow morning at 10 o'clock.
MR STITT: You asked me for some information about the nursing director, sir. At the relevant time, 2001, Miss Irene Duddy. The nursing director as of today is Mr Alan Corry-Finn.
THE CHAIRMAN: Thank you very much.
MR CAMPBELL: Regarding the schedule for tomorrow, in view of the overrunning of this witness, I wonder is it envisaged that we should stand down one of tomorrow's witnesses or shall we try and get through them all?
THE CHAIRMAN: There's some time to go with Mrs Noble, isn't there?
MR WOLFE: I envisage finishing this witness around lunchtime and I think, realistically, if we're sitting until 5 again, I would anticipate Ms Patterson perhaps being a slightly shorter witness than Ms Bryce. I'd like to think we'd get through one or other of them in the afternoon.
THE CHAIRMAN: Frankly, it doesn't matter to me which one of them gives evidence tomorrow.
MR CAMPBELL: They may have travelled together, so it may



not assist their arrangements.
THE CHAIRMAN: Okay.
MR CAMPBELL: If they choose to separate their travel arrangements, one of them can remain and one of them can depart; is that correct?
THE CHAIRMAN: That's realistic, isn't it? That makes sense. If you can let Mr Wolfe know before you leave tonight, Mr Campbell, so we can all know who's going to give evidence tomorrow. Thank you very much.
(5.01 pm)
(The hearing adjourned until 10.00 am the following day)



I N D E X