

15 November 2022

Baby E

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Tuesday, 15 November 2022

(10.30 am)

(Delay in proceedings)

(10.45 am)

(In the absence of the jury)

Housekeeping

MR JUSTICE GOSS: Mr Myers.

MR MYERS: May it please you, my Lord, first of all we're grateful to the court for the additional time this morning. Thank you.

There are two matters that we wish to raise with your Lordship. We could either do that straightaway now or we can deal with it after the evidence has been called this morning if the court wishes to press straight on. Neither of them require any decision imminently, just whatever is more convenient for your Lordship. They're relatively brief matters and I've informed your Lordship of them.

MR JUSTICE GOSS: Yes, I've seen what they are. Obviously you have seen them as well, Mr Johnson.

MR JOHNSON: Yes, my Lord.

MR JUSTICE GOSS: Perhaps we can deal with them later today rather than keeping the jury waiting.

MR MYERS: That's what I thought.

MR JUSTICE GOSS: Thank you very much.

As far as today is concerned, I understand -- obviously I received a communication about witnesses.

Is it going to be a relatively normal day?

MR JOHNSON: We don't believe so, my Lord. We think we'll be through the evidence before the normal close of business. Quite how quickly is difficult to be sure about, but our instinct is that we're going to come up a bit short, I'm afraid.

MR JUSTICE GOSS: It doesn't matter. The reason I'm raising it is that one of the jurors has had a fall and it'll be obvious when they come in, I'm told, because she has a black eye and some nosebleeds. She's been told that if at any point she is not able to continue, she should indicate by raising a hand and I will confirm that. But it might be some measure of reassurance to her. She says she's perfectly fit to continue apart from the embarrassment of the injury. So I'm just mentioning it.

MR JOHNSON: Yes. Just to reassure the court, we are looking ahead, both to the immediate, medium and long-term and doing our best to choreograph things to minimise the amount of time during a normal court day that we can't occupy, but from time to time, because of the fairly unusual circumstances of all the witnesses in this case, I'm afraid we simply can't...

MR JUSTICE GOSS: I know it's very difficult and I've mentioned it more than once to the jury and they understand, I am sure, the difficulties. The actual conduct of a trial requires an awful lot of things and people to come together at exactly the same time.

MR JOHNSON: Yes. We did contemplate dealing with the [Baby F] sequence of events, but the chronology there is so important.

MR JUSTICE GOSS: No, no, it'll create much more confusion and difficulty. It's better to keep things in relation to each individual child. Thank you very much indeed.

Jury, please.

MR DRIVER: May I hand up a paginated bundle of statements to be read during the course of today?

MR JUSTICE GOSS: Thank you very much, Mr Driver.

(Handed)

(In the presence of the jury)

MR JUSTICE GOSS: Good morning, members of the jury. I'm sorry we're a bit delayed starting. I don't know whether you had any travel difficulties starting, but there have been travel difficulties and that's why we're a bit late starting.

I know that one of you had a misfortune overnight and had a fall. You've been told, if at any point you want to break, please just indicate, would you? I have been told by counsel, that's added another couple of minutes' delay in me finding out what the programme for today is, that it's probably not going to be a completely full day in any event, but if at any time you want a break or anything, please just indicate. If you raise a hand we'll see you and we'll just have a break. All right? Thank you very much.

Mr Driver.

MR DRIVER: Thank you, my Lord.

Due to some logistical challenges, we're not going to be able to present the evidence in strictly chronological order today. But in an effort to maintain some sense of chronology, before calling the next witness may I read the relevant parts of a statement of a midwife by the name of Susan Brooks.

MR JUSTICE GOSS: Yes.

MR DRIVER: That's at page 1 of the reading bundle.

MR JUSTICE GOSS: This was a name that was mentioned yesterday, Susan, the midwife.

MR DRIVER: That's her.

MR JUSTICE GOSS: Right. You'll remember this is agreed evidence that's being read to you. As far as these logistical difficulties being referred to, I don't like there being mysteries if they can be avoided. It's just that some witnesses who were scheduled to be here today -- is it more than one witness?

MR DRIVER: One that was scheduled cannot be here and the witness we would have like to have called first is stuck in traffic.

MR JUSTICE GOSS: Such are the difficulties. Nothing for you to speculate about because if there are mysteries, people tend to speculate about mysteries. That's the reason. So what Mr Driver is going to do is to read these statements. Listen carefully and remember it's evidence in the case just as much as if the witness were here giving the evidence.

Witness statement of SUSAN BROOKS (read)

MR DRIVER: I wonder if I can invite Mr Murphy to put on screen the nursing notes that Mr Astbury sent him earlier this morning during the course of the reading of this statement, because the maker of this statement is the author of those notes.

Her statement is dated 2 April 2019. It reads as follows:

"I qualified from Chester University in 2008 as a registered midwife with a diploma in midwifery. Prior to this date I had been a student between 2005 and 2008 at Chester, and I have worked there since this time.

"In 2015 I was on my rotation to the antenatal and post-natal ward, which is ward 32, and at this point I was a band 6 midwife. I have been asked to provide an account detailing my involvement on 3 August 2015 with a patient named [Mother of Babies E & F].

"Prior to my interview, I have accessed the relevant medical records for this patient. These notes have assisted with my recollection of events during that time.

"There would have been two midwives working the night shift, which commenced on 3 August 2015, and I would have been the shift leader. I would have started my shift at 20.00 hours and this would have ended at 8.30 hours the following morning. [Mother of Babies E & F] was one of the patients I was allocated to look after during this night shift.

"My responsibilities in my working role include ensuring that the patients are post-natally well, both physically and providing any emotional support that is needed.

"On 3 August 2015, in my patient care notes, I have written..."

And I'm now going to read from her statement which reflects the contents of those patient care notes that you can see on screen, members of the jury.

So the notes read:

"Care since 2000 hours. [Mother of Babies E & F] was post-natally well. I had given her some medication and she asked me to let her know if there was any contact overnight from neonatal unit as one of the twins had deteriorated slightly at that time.

"Then at 23.30, I have recorded in my notes that I had a call from the neonatal unit to ask if [Mother of Babies E & F] could go down in 30 minutes as [Baby E] had a bleed and required intubating and that he was very poorly.

"At 23.50 I have recorded that [Mother of Babies E & F] was obviously very distressed and wanted to go to the NNU straightaway. So I asked Stephanie to ring to see if that was okay whilst I continued providing support to [Mother of Babies E & F]."

MR JUSTICE GOSS: Just pausing there, that Stephanie was a midwife colleague.

MR DRIVER: Yes?

MR JUSTICE GOSS: That part hasn't been read from the statement, but just so you know who Stephanie is.

MR DRIVER: I'm grateful, my Lord:

"[She] asked her colleague Stephanie to ring to see if it was okay for [Mother of Babies E & F] to go down immediately whilst I continued providing support to [Mother of Babies E & F]. I felt that she needed to go down straightaway and be with her baby. She was crying and was desperately upset. I thought this 30-minute wait was unreasonable and I made the decision to take [Mother of Babies E & F] to the NNU as it didn't sit comfortably with me.

"I have recorded that at midnight I took [Mother of Babies E & F] down to the neonatal unit and I do remember doing this and that her husband, [Father of Babies E & F], was on his way to the hospital. I think that I spoke to [Father of Babies E & F] during a phone call as [Mother of Babies E & F] was so upset, but I can't recall any more detail in relation to the content of that call.

"The neonatal unit is only a five-minute walk from the labour unit and presumably [Mother of Babies E & F] and I would have taken the lift and I would have used my pass to gain access to the NNU. When we arrived at the neonatal unit, they made us wait

in the corridor and [Mother of Babies E & F] sat on a chair opposite nursery 1 where the twins were.

"A female nurse approached us and told us we had to wait and I just remember trying to get [Mother of Babies E & F] through those minutes before she was allowed to see [Baby E]. After spending around 10 minutes with [Mother of Babies E & F], she was allowed into the nursery and I handed over her care to my NNU colleagues. I then returned to the labour ward where I continued to care for my other patients.

"I have been read a small extract from a statement provided by [Mother of Babies E & F], whereby [Mother of Babies E & F] describes being upset following her visit to the NNU and her telling me what had happened when she returned to my ward. I cannot recall any specific conversation taking place and I have not been provided with any details by [the relevant police officer] as to any event which took place while [Mother of Babies E & F] was in the NNU.

"My only reference to this entry is in my notes documented at 20.00 hours when [Mother of Babies E & F] has asked to be notified of any contact overnight from the NNU due to the deterioration of one of the twins."

That concludes the relevant parts of that midwife's notes and statement.

MR JUSTICE GOSS: Yes, thank you.

MR DRIVER: My Lord, may I call Dr Christopher Wood to give evidence, please.

DR CHRISTOPHER WOOD (affirmed)

Examination-in-chief by MR DRIVER

MR DRIVER: Could you state your full name, please?

WOOD: Dr Christopher Mark Wood.

MR DRIVER: Thank you. May Dr Wood sit down to give evidence?

MR JUSTICE GOSS: Yes, certainly.

MR DRIVER: Dr Wood, could you tell us in general terms the nature of your current profession?

WOOD: Yes. I'm a general practitioner on the Wirral.

DRIVER: Thank you. We understand, and could you confirm, that as of 2015, in the summer of 2015, you were on a trainee placement at the Countess of Chester Hospital? Is that right?

WOOD: Yes.

DRIVER: And for how long were you training at that hospital?

WOOD: Four months.

DRIVER: And what sort of training were you undertaking?

WOOD: I was in my second year of my general practitioner training.

DRIVER: Where within the Countess of Chester were you placed?

WOOD: It was a split between the paediatrics and neonates units.

DRIVER: And can you remember the months of the year that you were at Chester?

WOOD: Between April and ending on 5 August, I believe.

DRIVER: Thank you. Your time between those two units, was it shared equally or was it not possible to analyse it in that way?

WOOD: It was roughly equal. Probably a little bit more paediatrics.

DRIVER: You have previously made a witness statement in relation to events concerning twins by the [surname of Babies E & F].

WOOD: Yes.

DRIVER: And could you confirm that prior to making that witness statement, you were afforded and took the opportunity to remind yourself of entries in the clinical notes pertaining to those two twin boys?

WOOD: Yes, that's correct.

DRIVER: Is it right that you were present at their birth --

WOOD: Yes, that's correct.

DRIVER: -- as part of the medical team in attendance at what was a caesarean section delivery?

WOOD: Yes.

DRIVER: And was your contribution in that regard focused primarily on the twin boy [Baby F]?

WOOD: Yes, that's correct.

DRIVER: After assisting as called upon at and immediately after the delivery, did you have little or nothing to do with the twins for a few days?

WOOD: Correct, yes.

DRIVER: But can you confirm that you were on duty on the 3rd going into 4 August 2015?

WOOD: Yes, I can.

DRIVER: And what were you doing primarily on that evening of 3 August?

WOOD: I was the on-call SHO, the more junior of the two doctors on the units. I will have been primarily on the paediatric unit. It was an area I felt more comfortable with with my background training, but will have been called to the neonates unit should the need arise.

DRIVER: Thank you. You intimated that you were the more junior of the two doctors on duty that night. Can you recall who your immediately senior colleague was that evening?

WOOD: I understand it was Dr Harkness, the registrar.

DRIVER: And was Dr Harkness somebody who you'd worked with previously during the course of your trainee placement at Chester?

WOOD: Yes, that's correct.

DRIVER: I will invite Mr Murphy to put the carousel on to the screen, please. Thank you.

Could we go, please, to tile 150?

Before we look at any clinical notes or any records to which you may have contributed, Dr Wood, do you recall when approximately and in what circumstances you first involved yourself with the baby [Baby E] during this shift that you've been describing to us?

WOOD: My apologies, I can't remember the exact time. It was in the early hours or potentially just before midnight.

DRIVER: But the general circumstances?

WOOD: I understand from the medical records, it was a crash call, so an emergency call to the neonates unit.

DRIVER: So a crash call for you to attend to the neonates unit.

From memory, where were you when you received that call?

WOOD: I believe I was in the doctors' room on the paediatrics unit. I was writing up notes from the previous case I'd just seen.

DRIVER: And that case was a patient on the paediatrics unit or the neonatal unit?

WOOD: It will have probably been the paediatrics unit or it could have been in A&E, where I would also be called to throughout the night.

DRIVER: From memory, are you able to say whether you'd undertaken any duties on the neonatal unit during that shift prior to you responding to the crash call you have just alluded to?

WOOD: I don't recall being there.

DRIVER: Is that as in you weren't there or you don't have a working memory?

WOOD: I believe from reading the notes, I couldn't recognise my handwriting in any of the records I'd seen, but I can't remember, I'm afraid, any more than that.

DRIVER: Thank you. You will see on screen, Dr Wood, and I'm going to deal with these entries as per our visual presentation here, that we are now focusing upon events on or around 23.45 hours on Monday, 3 August. You'll see there, there's reference to Dr Harkness making retrospective -- making clinical notes retrospectively about events at around this time.

The next tile, please, Mr Murphy, 151. It bears your name and if we click behind that and we go to the original document beneath. Do you recognise the signature thereon?

WOOD: I do, that's my signature, yes.

DRIVER: It's your signature. And do you recognise the type of document that you've signed there?

WOOD: It would be a prescription chart for the baby.

DRIVER: Does it inform us what had been prescribed for the baby at this point?

WOOD: It does. It indicates an infusion of morphine sulphate, mixed with 10% glucose, a sugar solution.

DRIVER: Mr Murphy, if we could go back to the preceding tile, please, or preceding document behind tile 150. Here is a note from Dr Harkness. If we could scroll down there, we can see the words, "Morphine bolus given", and if you read above, Dr Wood, you can see it's in the context of the baby being intubated as an emergency.

WOOD: Yes.

DRIVER: The attempt to pass a size 3 ET tube into the baby, followed by a successful attempt to pass a size 2.5 tube, and the baby being put on a ventilator.

Having looked at that note and the morphine prescription to which you're a signatory, can you give us the context of the introduction of morphine to the baby at this point in time?

WOOD: I don't specifically recall making those notes, but certainly it would usually be in that situation where if a registrar was intubating, I would have very little experience of intubating at that stage in my career, especially a baby. My experience up to that point and beyond is in adult medicine. So the most useful thing I could be doing at that point would be the tasks that don't require his expertise. So in all likelihood, I would imagine I will have been asked to do the prescription as a formality in order to allow him to administer that medication to the baby. I'm not exactly sure on the context, I'm afraid.

DRIVER: Are you able to assist as to the purpose of the use of morphine with a neonate at the point of the introduction of an ET tube or not?

WOOD: Not with any degree of certainty, I'm afraid.

I probably will have known at the time, but not now.

DRIVER: That's understood, thank you.

MR JUSTICE GOSS: No need to worry because the jury have heard about it in relation to other babies.

MR DRIVER: I'm grateful.

Do you recall, leaving the notes aside, receiving a crash call?

WOOD: I do recall receiving a crash call.

DRIVER: And you recall your response?

WOOD: I do, yes.

DRIVER: Was your response to immediately attend --

WOOD: It was, yes.

DRIVER: -- at nursery 1 in the NNU? And what did you find upon arrival?

WOOD: From my recollection, I recall getting there as quickly as I could. I recall there being a number of people already around the baby. And I recall that resuscitation attempts had already begun by the time of my arrival. I believe, again being quite junior there, probably the best thing I could do would be to do the other jobs and allow the more experienced members of the team to do the more specialist parts of the resuscitation. So I believe I switched my attention to scribing, to recording the events, to keeping a note of timings of when medication was administered and when various parts of the resuscitation process were underway, which can serve the role of making sure that things aren't missed and things happen expediently.

DRIVER: Thank you. I'm sure we recognise that scribing in these circumstances is an important role, but is it one that is typically undertaken by the most junior doctor present at the scene of an emergency?

WOOD: In the context of neonates, yes. It may differ in adult medicine.

DRIVER: Thank you. Could we go then, please, to Dr Wood's notes, which are behind tile 164. If we scroll to the bottom, I'm sure you recognise your handwriting, do you?

WOOD: Yes, I do.

DRIVER: Thank you. If we go to the staff present. There is a list, according to you, of the people present at points during resuscitation.

WOOD: Yes.

DRIVER: [Dr C] being the consultant?

WOOD: Yes.

DRIVER: Dr Harkness, the registrar?

WOOD: Correct.

DRIVER: Yourself. And the jury will recognise the other names as being nurses from the NNU, whether or not you remember them from this distance of time.

Does that note indicate that everyone there was present upon your arrival or that they were present at some point during the process?

WOOD: Present at some point.

DRIVER: Thank you. Let's scroll back up then to Dr Wood's first entry. Firstly, Dr Wood, your original notes, would they have been made on the document that's been reproduced as a PDF here or would they have been made on whatever was at hand in the heat of the moment?

WOOD: Whatever was at hand. It may have been notes with other patient information on it, for instance the handover sheet that I have in my pocket.

DRIVER: Thank you. Therefore, does it follow that the time 01.35 on 4/8 was the time of the making of these notes that have been reproduced for our benefit?

WOOD: I believe so, yes.

DRIVER: Do the timeline there and the body of this document reflect your contemporaneous record of the time of the key events?

WOOD: Yes, that's correct.

DRIVER: Thank you. We'll just invite you to assist us if we struggle with your handwriting.

Does this record that at 00.37 CPR and ventilation had commenced?

WOOD: Yes.

DRIVER: Did your colleague inform you that at 00.39, through use of the stethoscope, a good air entry could be found, could be heard?

WOOD: Correct.

DRIVER: Then have you recorded the times of the introduction of medication used as part of the resuscitative process --

WOOD: Yes.

DRIVER: -- at 39 and 42 minutes past?

At 00.43, the baby was auscultated again, good air entry, but does that say "weak heart sounds"?

WOOD: Correct, yes.

DRIVER: The second and third introduction of adrenaline in the minutes thereafter. At 50 minutes past, upon listening again, does that say "weak heart sounds"?

WOOD: It does, yes.

DRIVER: Help me with the next entry, the second one at 00.50?

WOOD: It looks to be:

"[Zero] negative blood [0 negative blood] infused. 20ml per kilogram."

DRIVER: Thank you. So that was the introduction of blood to assist the baby?

WOOD: I believe so, yes.

DRIVER: Thank you. Further noting of the introduction of the fourth dose of adrenaline, second of bicarb, some dextrose at 00.57. Second adrenaline on the hour.

Help with us with the next at 01.01?

WOOD: "Auscultated, good air entry, heart rate of less than 90 to 100 beats per minute. Chest compressions stopped. Ventilations continued."

DRIVER: Mr Murphy, take us down the page, please. Next entry at 01.09?

WOOD: Yes.

DRIVER: Help us, please.

WOOD: "Auscultated, good air entry, heart rate 70 to 80."

DRIVER: Next?

WOOD: 01.10. It looks to be:

"[Query] arterial gas taken."

And a saline bolus of 10ml per kg.

DRIVER: Assist the jury as to the meaning of "arterial gas taken" in this context, please.

WOOD: During a resuscitation attempt, measuring the components within arterial blood sample can give an indication as to how well things are potentially progressing. It can look at the gases, it can look at the acidity levels, for instance, within the blood.

DRIVER: Thank you. So blood taken there and analysed subsequently or immediately?

WOOD: Immediately whilst the rest of the process is ongoing.

I believe there's an analyser on the unit for that purpose.

DRIVER: Thank you. And then at 01.15, was it noted that the heart rate, sadly, was failing or falling, does it say?

WOOD: Falling, I believe, yes.

DRIVER: Yes. Compressions were recommenced?

WOOD: Yes.

DRIVER: And then at 01.23, it was deemed, was it, that the process was, tragically, futile --

WOOD: Yes.

DRIVER: -- and discontinued? Thank you.

Could we go, please, to tile 158, Mr Murphy?

Firstly, we'll begin with, for context, an entry made by Dr Harkness. Click there to the underlying document.

To orientate ourselves, a Dr Harkness entry at 01.45 on 4 August 2015. If we go to near the bottom of the page, please, we can see under "plan" there three entries and then the fourth is the one I'm drawing your attention to where it says:

"Bloods sent for coagulation..."

And does that say "cross match"?

WOOD: Yes, it does.

DRIVER: Then if we go to tile 189, please. Dr Wood's entry, which he can tell us about.

If we go to 189. Do you recognise this sort of document from your time at Chester?

WOOD: I believe so.

DRIVER: We can see in the rectangle, it says:

"Order, doctor."

Is that you?

WOOD: It is, yes.

DRIVER: Are you able to assist our understanding with the content of this document or not, Dr Wood? Say if you can't.

WOOD: It looks to be a clotting sample. It looks to indicate a delayed clotting on that sample.

DRIVER: Delayed being?

WOOD: Blood that would be slower to clot than usual.

DRIVER: Thank you. And does this report -- let's just... The timing -- the date and time at the top are obviously administrative dates and times because it's way into the future, it's 2017. We can see its relation to [Baby E], twin number 1. We have his date of birth.

The specimen number in the rectangle now. Collected on 4 August, received on that same date at 01.07. And then there are some readings below.

The relevant clinical details being "GI bleed."

Do you have any recollection about this?

WOOD: I'm sorry, I don't.

MR DRIVER: We'll deal with it with somebody else then.

Thank you, Dr Wood, could you answer any questions that are asked?

Cross-examination by MR MYERS

MR MYERS: Dr Wood, at the time that you were involved in this care for [Baby E], you were on a split neonatal/paediatric placement; is that correct?

WOOD: That's correct, yes.

MYERS: Just so we have the picture, you were at the Countess of Chester for a period of 4 months doing a placement during your GP training; is that right?

WOOD: That's correct, yes.

MYERS: Perhaps inevitably, because of that, you have very limited experience with neonates, didn't you?

WOOD: Correct, yes.

MYERS: And again it follows from your position that you were the most junior doctor present at the time of the resuscitation?

WOOD: Yes, that's correct.

MYERS: Was this in fact your last shift at the hospital before moving on from your placement?

WOOD: I believe the following night shift was my last.

MYERS: Right. Then you moved on very soon after 5 August?

WOOD: Correct, yes.

MYERS: Thank you. You were certainly able to form the view, weren't you, that neonatal medicine, in the simplest terms, is very different from adult medicine, isn't it?

WOOD: It has significant differences, yes.

MYERS: Significant differences. And would you agree that one of those differences that you can speak to is that if you lose a significant quantity of blood from a person the size of [Baby E], that may pose problems that are different from an adult losing a substantial quantity of blood?

WOOD: I would imagine so, yes.

MYERS: I only say that -- I've got the benefit of the statement that you wrote, Dr Wood, and what you said in that, and you give the example, for instance, that in an adult you may have time to consider how to seal a gastric bleed.

WOOD: Correct, yes.

MYERS: There may be a very tight or a tighter timescale with a baby, a little baby, mightn't there?

WOOD: Yes.

MYERS: If we could just put up on the screens, please, slide 140, still dealing with this, the treatment necessary.

If we scroll down the page, please. Thank you.

Can you see there, Dr Wood, at the bottom it's a note by Dr Harkness and one of the last items says:

"Discuss with surgeons with X-rays."

WOOD: Yes.

MYERS: And that's under the "plan" section, isn't it?

WOOD: It is, yes.

MYERS: So that indicates something that was part of the plan, part of what to do?

WOOD: Yes.

MYERS: Were you aware in fact whether or not there were surgeons at the Countess of Chester Hospital who were capable of performing a gastric operation on a baby as small as [Baby E]?

WOOD: I'm not aware of that. I would imagine most of this would probably be Alder Hey.

MYERS: Yes. Surgery like that is a specialist area with very small children, do you agree --

WOOD: I do.

MYERS: -- from what you know? And when you say Alder Hey, that's because that's a specialist hospital for surgery on children, small children?

WOOD: That's correct, yes.

MYERS: I think you told us that you were actually present at the time of the birth of [Baby E] and [Baby F]; is that correct?

WOOD: It is, yes.

MYERS: And although you were there as part of the placement and your training, it's right, isn't it, it was expected that it could be potentially a difficult birth?

WOOD: Yes, potentially, yes.

MYERS: Potentially. Because you were dealing with premature twins, which can create challenges, can it not?

WOOD: It can.

MYERS: And you were aware that there were a number of potential complications with the two twins?

WOOD: Yes.

MYERS: We've heard a little bit of that and we'll hear more a little bit later on, but I just wanted to confirm that.

I just want to ask you a little bit about the way that the doctors are organised on the unit that you were doing your placement on, or the units. Not a great deal, just a little, please, Dr Wood, if you could help us.

WOOD: Okay.

MYERS: The doctors who worked in the neonatal unit were also shared with the maternity and with the paediatric units, weren't they?

WOOD: I recall, yes, the neonates and the paediatric unit were shared.

MYERS: The neonatal and the paediatric. So in effect, their duties were split across those two wards; is that correct?

WOOD: They were, although they would be assigned a specific unit normally for each working day.

MYERS: But the doctors' office, was that based on the paediatric unit?

WOOD: It was, yes.

MYERS: And did handovers when doctors come on shift take place on the paediatric unit?

WOOD: Yes.

MYERS: On the night that you've been telling us about in particular, on 3 August and into 4 August, can I just confirm,

were you the only senior house officer covering both paediatrics and the neonatal unit?

WOOD: Yes.

MYERS: Was Dr Harkness, so far as you can recall, the only registrar covering paediatrics and the neonatal unit?

WOOD: I understand so, yes.

MYERS: So whatever took place, it was down to the two of you, in the first instance, to provide medical assistance or assessment?

WOOD: In terms of doctor staff, yes.

MYERS: In terms of doctor staff, yes, across the two units. Do you recall whether at some point on that evening, and I'm going to suggest any time around 9 or 10 in the evening, you received or were informed about an aspirate, a bile-stained aspiration on the neonatal unit? Not a bleed, a bile-stained aspiration.

WOOD: I don't recall, no.

MYERS: All right. And again, so we can follow, when you say do not recall, sometimes people mean something definitely didn't happen or they mean I just don't know, I can't recall, which is it?

WOOD: I don't remember either way, sorry.

MYERS: All right.

Would it happen sometimes that you might receive a phone call just updating you with things that are taking place on the neonatal unit?

WOOD: From a registrar to a more junior doctor, probably not.

It may occur from myself to notify the registrar of what I was doing.

MYERS: So you may make a phone call to the registrar?

WOOD: Yes. I wouldn't expect my senior to keep me in the loop, if you like.

MYERS: No, all right. Do you recall -- we know that Dr Harkness was certainly in the unit by 10.10 because we've seen the note from him dated then in the evening.

WOOD: Yes.

MYERS: Do you have any recollection when it was that he did go to the neonatal unit or not?

WOOD: Um...

MYERS: Before that time I mean.

WOOD: I recall that I was on the paediatrics unit. I believe I was there by myself. And I believe my understanding was that Dr Harkness will have therefore been on the neonatal unit.

MYERS: Right. Thank you. I'm going to urge you not to guess, but do you have any idea of what sort of time it would be from that he was on the neonatal unit?

WOOD: Sorry, I don't.

MYERS: But in any event, at some point during that evening he was there from your recollection?

WOOD: Yes.

MYERS: So we can be quite clear, do you have any idea how long before 10.10 in the evening when we see the note that would be or do you simply not know, do you not recall?

WOOD: I don't know, sorry.

MR MYERS: Thank you, Dr Wood.

Re-examination by MR DRIVER

MR DRIVER: You were asked about whether you received or were informed about a bile-stained aspirate on the NNU.

Separately, you were asked about any recollection about receiving a phone call.

WOOD: Yes.

DRIVER: In your capacity as a GP trainee, placed at the Countess of Chester Hospital for a few months in 2015, had you received any data or information about a neonate patient, what would you have done with that information?

WOOD: Sorry, can I ask about the context of receiving the data?

DRIVER: Well, you were asked whether you recall receiving a phone call.

WOOD: Yes.

DRIVER: And you were asked about whether you remember receiving information about a bile-stained aspirate.

WOOD: Yes.

DRIVER: If, by telephone, you received a report sharing with you any information about a neonatal patient, what would you have done with that information?

WOOD: If the report was from a nurse expressing concern, for instance, then that would require me to see the patient.

If the information was from my registrar informing me about this as perhaps a matter of courtesy, I wouldn't necessarily need to do anything about that information unless he asked me to.

DRIVER: And if it were the former, and you received information from a nurse that required you to see the patient, on seeing the patient what would you do?

WOOD: Upon seeing the patient and making my assessment, I would record this in the medical notes and, if needed, would seek further advice from my registrar.

MR DRIVER: Thank you.

My Lord, I have no further re-examination of Dr Wood. Does the court have any questions for him?

MR JUSTICE GOSS: No, I don't, thank you very much.

Thank you, Dr Wood, for coming and giving your evidence. That completes your evidence. I haven't got my list.

MR DRIVER: He's not expected --

MR JUSTICE GOSS: You won't be returning to give evidence.

Thank you very much for making yourself available this morning. You're free to go. Don't talk to anyone about your evidence or this case until it's finished.

Thank you.

(The witness withdrew)

MR DRIVER: My Lord, I received an indication that what I cryptically referred to as logistical problems may have eased, in that the next witness may have just arrived, but if so she

would have only done so a minute or two ago. In any event, the courtroom will need to be reconfigured for her to give evidence.

MR JUSTICE GOSS: We'll have our break. We'll have our 10-minute break now so that time is not lost. Thank you very much.

MR MYERS: My Lord, this might be a moment to raise one matter just before the jury go, which may mean we take a little longer than 10 minutes.

MR JUSTICE GOSS: Fifteen minutes. Thank you, Mr Myers.

(In the absence of the jury)

MR MYERS: My Lord, it occurred to me, and I'm grateful to Mr Maher for reminding me, that the second of the two matters that I made reference to relates to the position of witnesses who are due to give evidence again and any additional warnings that either the prosecution or the court may need to give to them in light of material that's available and that can be read. Perhaps I can deal with that point first --

MR JUSTICE GOSS: Yes, certainly.

MR MYERS: -- because it would apply to [Nurse B] and a large number of witnesses who are still to give evidence.

The concern comes from Ms Letby, and we respectfully share it on her behalf, and put it before your Lordship that she understands indirectly that staff at the Countess of Chester Hospital have, perhaps naturally, been following reports and the news feeds that accompany this case in the media.

Irrespective of what her understanding is, the matter having been raised, it seems to us a matter that is one that the court should properly consider. We don't refer so much to the conventional news reports or news stories that one encounters in the media, but the position now is there are a number of outlets, one in particular, that reports the case in very great detail, with a time given and then sometimes almost a line by line report of what is taken. And we're aware also of at least one website on YouTube which provides a verbatim summary, a very detailed one, of what has happened in the court to the extent of even repeating the content of texts that have been read out as they're gone through in the evidence.

There's an unusual situation in this case, which is that many of the witnesses who give evidence are then going to return to give evidence and the concern, therefore, which we raise is the prospect of them taking an interest in material that goes into some detail, well beyond conventional news reports, and really,

therefore, bypassing the warning given by the court not to talk to other witnesses about their evidence, because it's not very difficult to see a great deal of detail of the evidence. And from that, the anxiety is that it may even affect the way a witness gives evidence. I'm not going to make any suggestions at this point as to where that may or may not have happened. We don't say it hasn't happened, but I'm not going to try and float conjecture at this point as to that. But certainly some accounts have changed as they've travelled along. That may be natural, it may be due to any number of reasons.

What we would be grateful for in the first instance, my Lord, is that the prosecution take steps to warn witnesses who are going to be giving evidence not to read news feeds or listen to any type of audio news feed or summary, verbatim-style summary, of these proceedings. And by news feeds or verbatim summaries, we mean those pieces which seek to present the evidence almost verbatim, or as much of it as they can, rather than news summaries. We appreciate defining exactly what that is may be a little difficult. But it seems to us it's something that should be done.

In the same way, respectfully, we ask the court to consider adding a warning in that way to the warning that your Lordship has been giving to witnesses not to discuss their evidence with other witnesses, with anyone in fact, when they are due to return to give evidence or indeed when they've finished.

But it's important that witnesses are focused on this because if, perhaps quite naturally, they turn their attention to very detailed reporting of what has happened, they are simply receiving all the evidence that other witnesses have said, and that has the danger of having an effect upon the evidence they may give, however inadvertently.

So that's the problem that we identify, my Lord. We don't go beyond what we propose at this point as a proportionate remedy to it. But we are anxious that the witnesses, particularly those who will return to give evidence, are warned not to read news feeds or verbatim summaries or anything posing as a verbatim summary of these proceedings.

MR JUSTICE GOSS: May I just be clear? You want the prosecution to warn witnesses not to read news feeds or listen to audio news feeds or reports of the evidence?

Are you wanting me to do it as well?

MR MYERS: Yes. When a witness has finished.

MR JUSTICE GOSS: At the completion of a witness's evidence in relation to one child when we know that witness is coming back?

MR MYERS: Yes, yes, much as your Lordship does in any event when they've finished.

MR JUSTICE GOSS: I thought that's what you did want, but it wasn't entirely clear.

MR MYERS: That's what we would ask for as a matter of caution in the circumstances.

MR JUSTICE GOSS: All right. Mr Johnson?

MR JOHNSON: Well, this is a problem that we foresaw in our submissions in relation to Twitter.

MR JUSTICE GOSS: Exactly.

MR JOHNSON: So it's not coming as a surprise and I have experience of -- this is a method of reporting on cases which has been going at Liverpool Crown Court for quite some years now actually, so it's not a new problem.

I have never heard of the prosecution being invited to intervene with witnesses to warn them off. But then again, as my learned friend has just said, this case is unusual to the extent that we have repeat witnesses coming back again and again and again.

MR JUSTICE GOSS: That's the feature.

MR JOHNSON: It is.

MR JUSTICE GOSS: It is a particular aspect of the way that the evidence is being adduced in this case. Perhaps I can short circuit this: whatever the prosecution do or do not do by way of warning to witnesses, I am of the view that each witness who is going to return to give evidence should be given, in addition to the general direction not to conduct any research or communicate with anyone about anything to do with this case, that I should tell them not to follow live news feeds or read news feeds until they have completed all their evidence in its entirety. I don't think I can do any more than that.

MR JOHNSON: No, I don't believe that the court can. It's difficult to know what the sanction would be if a witness...

MR JUSTICE GOSS: Well, it will be no more than the usual sanction that evidence can be adduced which might lead to the inference that they have broken the sanction and then the

credibility and reliability of that witness is or may be destroyed in the eyes of the jury.

MR JOHNSON: Yes.

MR JUSTICE GOSS: Mr Myers, anything you wish to add to that?

MR MYERS: No, we're grateful, my Lord. We leave the matters as far as the prosecution are concerned with the prosecution, but we raise that because it seems prudent in the unusual circumstances of this case for witnesses to be warned if the prosecution are able to do that. We are certainly grateful to your Lordship for the warning --

MR JUSTICE GOSS: It's right that the prosecution obviously have a duty in relation to the conduct of the case and one of the duties is to ensure that justice is done. In other words, that the trial proceeds fairly. It's no more than obvious common sense that if a witness does change their evidence by reason of having read a report then it is, as I've said, destructive of their credibility. So it's in the interests of everyone, the defendant and the prosecution, that people are warned, and if the prosecution want to warn them, so be it, but I will warn them as well.

MR MYERS: I'm grateful, my Lord, thank you.

MR JUSTICE GOSS: So that will be done.

Whilst the jury is out, and we'll have a short break before the jury is brought back in again, can I deal with the other matter? Is that contentious, these notes, or not?

MR MYERS: I don't want to trespass upon what Mr Johnson or Mr Driver, whoever deals with it, says, but it seems to be as much a matter of form as detail in the circumstances of this request. I'll just elaborate upon that.

The two witnesses to be read, Simon Wood, who's a doctor, and Laura Netherton, who we understand is a nurse, both have relied upon notes in compiling their statements which perhaps isn't surprising. We have identified the reference to the notes for your Lordship.

Our own expert has asked to have sight of those notes because they base their statements upon them and they are relevant to aspects relating to the maternity and the condition of the twins and they are matters that he wishes to consider. The detail of that has been set out in an email to the prosecution.

The prosecution require the matter to be raised in court and I leave it to them to explain why --

MR JUSTICE GOSS: This is obviously going to take a bit longer than a few minutes then, isn't it?

MR MYERS: I'm not sure if it will or it won't depending on the response. I can put our position very simply and it's this: there is a requirement for this material in its particularity and also we observe, more fundamentally, when a witness uses notes to compile a statement and has made reference to that, we would respectfully observe the defence must be entitled to see them, much as may happen if a police officer uses something as simple as a notebook or with financial material.

We are not asking for anything the witness hasn't used and we don't ask just out of rank curiosity, but because our own expert wishes to consider particulars relating to those children and the effect of that upon them, their gestation and their condition. So the prosecution having required the matter to be raised if we wish to pursue it, we do so.

MR JUSTICE GOSS: All right.

MR JOHNSON: I don't want to get involved in an argument about it because I think this is an issue of style rather than substance and I think the concern that's been expressed to me is that we maintain the very clear audit trail that we have for all material that is being disclosed. That's why from time to time we ask for a degree of formality about requests, that they're made in writing, preferably in advance. We recognise that from time to time that's not possible, but, as always, these requests are ones that will be considered on their merits, it's just a question of timing.

So I don't think that there's really anything between us probably.

MR JUSTICE GOSS: All right. We've all heard what's been said in writing and it'll be considered.

MR MYERS: We will do that. I should say, there have been a number of requests already, all in writing, and in fact this one is in electronic writing because it's in an email, but we'll put it into a more formal document, entitled "disclosure request" if required.

MR JUSTICE GOSS: All right. Thank you very much. The final matter, whilst we are in the absence of the jury, you will recall that on Thursday, a juror requested that we did not sit beyond 2.30 in the afternoon and I indicated that we would not

sit beyond 2.30 in the afternoon on Thursday. What I'm proposing is that we sit at 10.30 as usual, we do a 2-hour uninterrupted session until 12.30, break for an hour for lunch and sit from 1.30 to 2.30.

MR JOHNSON: Yes.

MR JUSTICE GOSS: I hope that won't cause difficulty. If anyone wishes to make a counterproposal, I will hear what it is. But that seemed to me to be the best use of time and an appropriate use of time. We'll come back to that and, if necessary, the other matter some time later.

MR DRIVER: The next witness is a special measures screens witness.

MR JUSTICE GOSS: Exactly, so we're going to have to rise.

I said we would in any event. Can we try and be ready for about five to, so 7 or 8 minutes? Is that long enough? If people need 10 minutes they can have 10 minutes.

(11.49 am)

(A short break)

(11.57 am)

(In the presence of the jury)

MR JUSTICE GOSS: A note from the jury, which I'll read out.

"Is there a reason why there is no swipe data and would it be possible to obtain this? Thank you."

MR MYERS: I (inaudible) can answer that.

MR DRIVER: I know my learned friend won't object if I answer in these terms: the swipe data records are incomplete. If not already done so, in due course we'll inform the jury, by way of an agreed fact, as to the parameters when swipe data has been retrieved and when we've been unable to retrieve it.

MR JUSTICE GOSS: All right. I hope that answers the very sensible query, if I may say so. You may rest assured that as much evidence as there is available in relation to swipe data will be before you in due course. All right? Thank you.

Yes, Mr Driver.

[NURSE B] (recalled)

Examination-in-chief by MR DRIVER

MR DRIVER: My Lord, [Nurse B] has already given evidence and is therefore already under oath. For formality, could you state your name for the recording, please?

NURSE B: Yes. [Nurse B].

[Redacted]

DRIVER: I'm very grateful. As I know that you anticipate, you've been invited to return today to provide evidence about your time on the day shift on 3 August 2015.

NURSE B: Mm-hm.

DRIVER: In order to assist you, as per your last visit to the witness box, we'll look at some of the nursing notes to which you contributed that day. Could I ask Mr Murphy, please, to take us to tile number 59, which you will see, and I'm sure you're now familiar...

When answering my questions, could you do your very best to keep your voice up? There's some difficulty hearing your evidence being reported to me.

MR JUSTICE GOSS: I'm not being critical, but you nod a lot.

You'll appreciate, you have to speak an answer.

NURSE B: Okay, sorry.

MR JUSTICE GOSS: And keep your voice up so that everyone can hear. Thank you very much.

NURSE B: Okay.

MR DRIVER: You'll see the screen records the fact that you were on duty that day shift, which we know begins at some time between 7.30 and 8 in the morning.

NURSE B: Yes.

DRIVER: And do you recall, and can you confirm, that you were the designated nurse for the infant patient, [Baby E] --

NURSE B: Yes, I was.

DRIVER: -- that day? Do you recall whether in addition you were the designated nurse for his twin brother or not or don't you recall either way?

NURSE B: Yes, I was also for [Baby F].

DRIVER: I'm grateful. We can see if we go to the next tile that you received the handover, that is the transfer of responsibility, from your colleague Melanie Taylor.

NURSE B: I don't remember it was Mel, but I would have received a handover at that time on that day.

DRIVER: And that handover that you received, could you confirm, would have involved the imparting of all relevant and necessary information from your predecessor Nurse Taylor to you about the twins?

NURSE B: Yes, she will have given me a full handover of care.

DRIVER: Rather like last time you were here, I'm going to ask you to look at your summarised nursing notes and then we'll look at the underlying detail if you would.

NURSE B: Sorry, could I just say this is new to me? Last time I was the shift leader in question, so this computer system is new to me today. I didn't have any notes last time.

DRIVER: You're quite right and I'm grateful. Could we go please, then, to tile 72.

MR JUSTICE GOSS: Just so that you understand then what this presentation is, this is essentially a representation of the sequence of events taken from the medical records, all the medical records, including nursing records, put into a sequence.

NURSE B: Okay.

MR JUSTICE GOSS: All right?

NURSE B: Thank you.

MR JUSTICE GOSS: You will see that in many of the documents to which your attention is drawn, there is reference to events beyond that which you're being asked about. So the same note comes in the sequence again and again and again in the sequence of events in relation to the relevant section. Do you understand that?

NURSE B: I do, thank you.

MR JUSTICE GOSS: Thank you. I thought it might just be helpful for the witness.

MR DRIVER: I'm very grateful.

Mr Murphy, if we could click on the tile. And if I could show you the original document or a PDF version of it, please, Mr Murphy, which I'm sure you recognise the format. I can see you're having some difficulty picking up --

NURSE B: It's blurry.

DRIVER: -- the blurry detail. If we could, please, Mr Murphy, move and zoom in, as it were, on this witness's entries, in which she summarises the events from 08.00 that morning.

That is a note made by MT, Melanie Taylor. This is a note bearing your initials; is that correct?

NURSE B: Yes.

DRIVER: Does that record your summary of some of the relevant communications you had with the family of the babies?

NURSE B: During the morning, yes. I've made that entry at 10.44 in the morning, so I will have been on shift for just over 3 hours. So up until that point that is what has happened, yes.

DRIVER: It reads, does it not:

"[Mother of Babies E & F] [the mother of the twins] was on the unit from 9 in the morning onwards."

NURSE B: Yes.

DRIVER: That you and the doctor, the registrar, Dr Ventress, updated mum as to any developments in relation to her sons?

NURSE B: Yes.

DRIVER: And you recorded that she, [Mother of Babies E & F], had long periods of skin-to-skin contact with [Baby E]?

NURSE B: Yes.

DRIVER: So these are the notes for [Baby E] that we're looking at.

Do you actually recall this?

NURSE B: I did, yes.

DRIVER: And do you remember whether at this point in time [Baby E]'s brother [Baby F] was well enough to have this important interaction, direct contact with his mum?

NURSE B: During this particular shift [Baby F] did not have a physical cuddle with mum, as far as I can remember.

She participated in what you call containment holding.

DRIVER: Thank you. So [Baby F] didn't, but [Baby E] did?

NURSE B: Yes.

DRIVER: What was the basis of the differing approaches in relation to the mum and contact with her sons?

NURSE B: So [Baby F] remained on a level of respiratory support, which was CPAP, and his observations were not as stable.

Whereas [Baby E] was not on any respiratory support, he was in a little bit of ambient oxygen into his incubator, so he was breathing for himself, but with a little bit of supplementary oxygen around him. His observations were stable.

DRIVER: And therefore?

NURSE B: And therefore he could have as many cuddles as he wanted with his mum that day.

DRIVER: Thank you.

MR JUSTICE GOSS: I think as she wanted.

NURSE B: Sorry, did I say...?

MR JUSTICE GOSS: As many cuddles as she wanted.

NURSE B: Both. Skin-to-skin is both for mum and baby.

MR DRIVER: We understand, thank you.

Mr Murphy, if we go to the next entry.

This records -- firstly, as we understand, part of the protocol is that at the start of the shift, you, the designated nurse coming on shift, would, and did in this case, check all the equipment to make sure everything was in order?

NURSE B: Yes.

DRIVER: And as you've already told us, at that point in time he, little [Baby E], was self-ventilating in 25% ambient oxygen?

NURSE B: Yes.

DRIVER: And that he was being nursed in an incubator that was being controlled at 65 degrees humidity.

NURSE B: 65% humidity. So the heat -- I haven't recorded the temperature of the incubator on the notes, but I will have done on the observation chart. The humidity is an additional factor for a baby of [Baby E]'s gestation.

DRIVER: And could you just, in a sentence or two, help the jury understand what the requirement for humidity is?

NURSE B: A baby that requires humidity is either less than 32 weeks' gestation born and/or less than 1.5 kilograms born, and it is to help them maintain their temperature and also to help their skin develop because their skin isn't fully developed at that gestation.

DRIVER: And [Baby E] met that criteria and therefore received that?

NURSE B: Yes.

DRIVER: Thank you.

MR JUSTICE GOSS: Both criteria in fact.

NURSE B: Yes. I can't remember his weight.

MR JUSTICE GOSS: His gestation was less than that and he was under 1.5kg.

NURSE B: Yes.

MR DRIVER: Your note continues to read:

"No signs of respiratory distress."

And that would have been on the basis of your regular observations?

NURSE B: Yes. So I've made this note entry at 10.50, so again this is my first summary of the day. I've done a top-to-toe assessment, as I always would, and during those 3 hours and 20 minutes I haven't seen any signs of respiratory distress.

DRIVER: I'm grateful. Moving to your next sentence:

"Heart rate and temperature stable."

NURSE B: Yes.

DRIVER: As per your evidence:

"Pink and well perfused."

NURSE B: Yes.

DRIVER: That's a comment on your observations of the baby.

NURSE B: So that's in relation to the circulatory system, so I've broken it down into different parts. So I've initially mentioned the respiratory system and "pink and well perfused". And the next bit, "Cap refill 1 second", that's all in relation to the circulatory system and that's normal.

DRIVER: So indeed it's one sentence and if we read that all together it should read:

"Pink and well perfused. Capillary refill at a rate of 1 second"?

NURSE B: Yes.

DRIVER: Which you just confirmed to us is normal. You recorded the fluids being provided and the route by which they've been provided.

NURSE B: Yes.

DRIVER: "Limb and pressures okay."

What's that indicative of?

NURSE B: So wherever the long line was sited, I've referenced -- so it will have been an arm or a leg, I've said that the site is okay, so you're looking for any sign that the fluid isn't going into the part that it should be doing.

So I've acknowledged that I've checked the whole of the limb, not just the site, is okay. And the pressures is in relation to the pump that the fluids are going through. If a pressure is too high or too low, that could be an indicator again that the baby wasn't receiving the correct amount of fluids, but I have said that that's normal.

DRIVER: I'm grateful. You next recorded that he, [Baby E], was on what you've described as:

"... a cautious feeding regime due to absent end-diastolic flow."

Can we break that into two parts? What do you mean by a cautious feeding regime?

NURSE B: So that is based on a guideline within the neonatal unit whereby babies that meet certain criteria, so in this case for [Baby E] it was gestation, and the fact that he had the absent end-diastolic flow, so instead of giving too much milk too quickly, you give the fluids that I've mentioned, the Babiven and the lipid, intravenously and then you wean on to the milk very, very gradually, and that is set by the medical team. You don't differ from that.

DRIVER: Thank you. Do you feel able to help the jury as to the reason, the absent end-diastolic flow, or would you prefer to defer that to somebody else?

NURSE B: To the best degree I can and then I'd say ask a consultant.

DRIVER: Thank you. In any event, because of the presence of that factor and other factors, protocol demanded that he was put on a cautious feeding regime?

NURSE B: Yes.

DRIVER: That's the upshot, is it?

NURSE B: Yes.

DRIVER: And do you thereafter describe the detail of that cautious feeding regime?

NURSE B: Sorry, just say the last bit again?

DRIVER: The next entry, is that setting out the feeding regime?

NURSE B: Yes, that's where we're up to within the regime, yes.

DRIVER: Thank you. The next entry:

"Handles well."

NURSE B: Oh yes. You've missed a part -- yes, "Handles well", yes. So what I mean by that is the tone of the baby is normal, they're not distressed, they're not having any deviations with their observations on handling, ie apnoeas, bradycardias, issues

with their breathing rates. So I've said that everything remains well when he's in his incubator or being handled.

DRIVER: Thank you. You're right, I did rather skate over the last entry so let's go back to that. The enteral feeds are currently 1ml/2-hourly; that's the cautious feeding regime that you'd alluded to?

NURSE B: Yes.

DRIVER: The next, I think, is actually a factual entry, isn't it?

"Minimal to 1ml partially digested milk obtained via NGT."

NURSE B: Yes.

DRIVER: Could you expand upon that for us?

NURSE B: That means when I've tested [Baby E]'s NG tube, what I have found is either 1ml or less of digested milk. So sometimes you can pull back on the tube and you can just get what you would call frank milk back, so what you would see in the baby's bottle or coming from the breast would be -- it's very hard to explain. What you'd just see is milk in a cup but then once it's mixed with the gastric juices, so it's started the digestion process, when you pull it back it comes back a bit lumpy, but that's a normal reaction and it meant that [Baby E] was digesting his milk at that time.

DRIVER: Is this a feature of your regime or the nursing regime of aspirating immediately prior to the next feed?

NURSE B: Every time you go to feed a baby, you aspirate the tube, yes.

DRIVER: So it enables you to be informed precisely how much fluid has been successfully provided to the baby?

NURSE B: So to check on how -- to check on whether the milk is being digested and also to determine, is there another factor that may be in the stomach that you do not know about, for instance bile.

DRIVER: And here you've described it simply as partially digested milk. Does the absence of any other adjectives or any other detail inform us that that was, as it says, just --

NURSE B: Yes, that's all that was there.

DRIVER: So that's your summary for the morning, as it were. If we could just look at the early evening addendum while we're dealing with the summary. This is an entry, ie you put this narrative in, at 17.24.

NURSE B: Yes.

DRIVER: Does it follow that this is a reflection on what you had observed between the morning entry that we've just looked at and this early evening entry?

NURSE B: Yes.

DRIVER: So the afternoon effectively?

NURSE B: Yes.

DRIVER: Let's look at them in turn:

"Repeat CRP."

Help us with that.

NURSE B: Less than 1, so when a baby is being treated on IV antibiotics they have one taken initially prior to the commencement of the antibiotics and they have one repeated 18 to 24 hours after the commencement of the antibiotics and a CRP of less than 10 in a neonate is a sign -- is a good sign.

DRIVER: Thank you. So that's the indicator, the CRP less than 1, and just to decode the abbreviation, "Intravenous antibiotics given as prescribed"?

NURSE B: Yes.

DRIVER: So this is not the first CRP reading, this is a repeat one?

NURSE B: This second one, yes.

DRIVER: The second one. And there is to be a further one, is there, in 36 hours' time, so it's anticipated?

NURSE B: No, that means the antibiotics will be reviewed at 36 hours. So you do the two CRPs 18 to 24 hours apart.

You give the treatment for 36 hours. Then you review the baby, the baby's blood culture, and at that time the antibiotics may or may not continue.

DRIVER: Thank you. You've just made mention of the review of the baby's blood culture. Does the next entry inform the reader that, as of the afternoon of 3 August, this baby's blood cultures were currently negative?

NURSE B: That's correct.

DRIVER: And negative indicates an absence of?

NURSE B: Bacteria.

DRIVER: Thank you. He remained self-ventilating in air. "CBG satisfactory"?

NURSE B: Yes, capillary blood gas satisfactory. So the components of the indicators for [Baby E]'s breathing are satisfactory.

DRIVER: Thank you. Could you remind yourself of the remainder of this sentence before I ask you about it because there's quite a lot of data in there.

NURSE B: Yes. So when you take a baby's blood gas on the sample, it also will measure a blood sugar and a lactate, so I've said that the respiratory part has been satisfactory but the blood sugar is 18.5 millimoles, which is too high. That's an abnormal find.

DRIVER: Yes. So does it read on that you informed the senior house officer, Dr Thomas --

NURSE B: Correct.

DRIVER: -- of this? And was it as a consequence of your discussions with Dr Thomas that insulin was recommenced?

NURSE B: That's correct.

DRIVER: We've got the time of the recommencement of it, the rate of it and this is your note that it was checked 1 hour later.

NURSE B: Correct.

DRIVER: With a plan to recheck a further hour later?

NURSE B: Correct, because it remains high but it has decreased, correct.

DRIVER: Thank you. The feeds were increased, could you decode that data for us, to 2ml?

NURSE B: In the previous entry I wrote that [Baby E] was having 1ml every 2 hours and he's now gone from that, so he has doubled in effect, he is now having 2ml/2-hourly.

DRIVER: Thank you. Was that part of the increasing, albeit cautious, feeding regime or does that entry somehow link with the reintroduction of insulin?

NURSE B: That isn't in relation to the insulin. That's in relation to the cautious feeding regime and [Baby E], at that time, tolerating his feeds.

DRIVER: Thank you. So the feeds were being incrementally increased, you having monitored his response --

NURSE B: Yes.

DRIVER: -- to the feeds to date?

NURSE B: Yes.

DRIVER: And the final part of this note, PKU.

NURSE B: I can't remember what PKU stands for, but the new terminology for it is neonatal blood screening, which is taken with consent from -- verbal consent from parents.

For every baby irrespective of gestation, whether they come through the neonatal unit or not, on day 5 or day 6 of life, and that's looking for some congenital abnormalities such as cystic fibrosis and lots of metabolic conditions.

DRIVER: So this records the taking of the blood for that purpose, the results would come subsequently, if at all?

NURSE B: Yes, that's correct.

MR JUSTICE GOSS: Sorry, that's taken from every baby? Full term, every baby has this screening process?

NURSE B: Yes.

MR JUSTICE GOSS: Blood is taken at about 5 days for this screening process in relation to that?

NURSE B: Yes, as long as the parents consent to it. It's normally done by the midwife out in the community for the well term baby.

MR DRIVER: Thank you. If we can look, Mr Murphy, at anything else that the witness may have put on our J2588.

I don't think that's any of your entries there, is it?

NURSE B: No.

DRIVER: So let's move briefly then to your notes that enabled you to arrive at the summaries we have just considered.

If we go, Mr Murphy, behind tile 62.

I'm sure you're very familiar with the format of this document. If we just look at the bottom of the page, so you can train your eye as to where your entries begin, we can see it's just over halfway across, where the MTs for Melanie Taylor turn into [initials of Nurse B] for your initials.

NURSE B: Yes.

DRIVER: And I think that's ten from the left or thereabouts. So let's look at the entries -- thank you, Mr Murphy, for placing the cursor, where your entries begin.

You have already taken us through your nursing notes, which summarised your recorded observations of the baby's heart rate. We can see them there, so you've taken that -- sometimes every half hour, is that, or every hour?

NURSE B: It's every hour. I've done this first at 8.30 because the likelihood, although I don't remember for fact, I will have started my observations first with [Baby F] as he was the higher dependency of the two on the day.

DRIVER: So beginning at 8.30 and then on the hour through the afternoon?

NURSE B: Correct.

DRIVER: And having now reminded yourself of the data, as recorded on this chart, does that reflect the summary, the satisfactory summary that you've already shared with the jury?

NURSE B: Yes.

DRIVER: Similarly with the respiratory rate?

NURSE B: Respiratory rate is normal.

DRIVER: Yes. Temperature?

NURSE B: Um... Yes, normal. Just the one second from the right is slightly decreased from what it has been, but still within normal parameters.

DRIVER: Did you use that data, together with all your other measures and observations, to arrive at the conclusions of stability that you've already shared with the jury?

NURSE B: Yes.

DRIVER: Next on J2685, which I hope is underneath, thank you, Mr Murphy.

So the obs we've just looked at took us to 5 pm and we know, of course, that your shift would have continued until about 8 pm; is that right?

NURSE B: Correct.

DRIVER: And it's a continuous set of observations. We can see the first two there at the bottom have [initials of Nurse B].

Just so we can orientate ourselves, it's very small, can you see the two columns of [initials of Nurse B]?

NURSE B: Yes, I can see.

DRIVER: They are your observations?

NURSE B: At 6 and 7 o'clock.

DRIVER: I'm grateful. So 6 and 7 o'clock. So if we could just firstly, please, look at the other data.

So the heart, the respiration and the temperature for the first two entries, that is to say when the baby was under your care. Does that continue the stable trends that we observed --

NURSE B: Yes.

DRIVER: -- on the other page? Thank you.

You made reference in your nursing notes to him handling well and how, unlike his brother, the circumstances permitted his mum to have as much contact with him as she was able to.

NURSE B: Yes.

DRIVER: And if we could go to tile 71, please. Do we see entries there that formalise the record of his mum, [Mother of Babies E & F], having contact with [Baby E]?

NURSE B: Yes. I also think there was an additional after that, which I haven't entered. From my memory I remember her coming back later on in the afternoon for further...

DRIVER: Thank you. We looked at that part of your note that recorded that he had raised or high blood sugar levels.

NURSE B: Yes.

DRIVER: Can you recall how you determined that and what you did to address that issue?

NURSE B: Yes. So I found the level when the blood gas was taken and the level was outside of parameters, so I asked the SHO to come and review [Baby E] and the guideline was followed and the action was taken, following that guideline, for insulin to be commenced.

DRIVER: Thank you. Is there a specific chart on to which you would record that?

NURSE B: The blood gas chart would record the blood gas value.

DRIVER: We'll look at that in due course, I hope.

If we could go, please, to tile 66. We'll see here a single entry in relation to -- you tell us. What is it here that's being provided to the baby?

NURSE B: Oxygen. I've signed for the day shift that oxygen has been provided for [Baby E].

DRIVER: If you go back to the carousel, please, Mr Murphy.

I don't think we need to click on each of these. But if we could look one by one, we can see during the course of that morning, oxygen, sodium chloride, caffeine, and you've recorded the provision of those medicines?

NURSE B: Yes. The sodium chloride isn't in this context a medicine by itself, it's what you call a flush either side of the caffeine being given. So you put a small amount of the sodium chloride into the line where the caffeine is going to, to begin with, to make sure the line is patent, the line is working correctly to receive the medicine. Then you give the medicine, then you give another flush of sodium chloride.

DRIVER: Thank you. You told us -- your notes told us, more accurately, that the baby was receiving and had been receiving antibiotics --

NURSE B: Yes.

DRIVER: -- for some time. I wonder whether we could just go to tile 74, please, and click behind that.

Can you describe to us the purpose of this document?

NURSE B: This is to say that I've taken the PKU sample, the newborn blood spot screening.

DRIVER: Right. So this is merely a longhand record of that, which you've already taken us to?

NURSE B: Yes.

DRIVER: Thank you. Let's return to the blood gases then, please, and if we go to tile 90. J2715, behind there.

We see your initials, do we, in the first three entries there?

NURSE B: Yes.

DRIVER: That's for an earlier point in time because that's dated 29 and 30 July?

NURSE B: Yes.

DRIVER: If we go down, I think there's a single entry against your initials.

NURSE B: Yes.

DRIVER: The hole punch obscures the date, which is 3 August, immediately above your entry, and then there's a single entry against your initials, timed at 14.38 that afternoon.

NURSE B: Yes.

DRIVER: Are you sufficiently familiar with the layout of this document to be able to identify what each of your entries relates to there?

NURSE B: Yes. So going from the left, that's the time that the sample has been taken. That's a C within a circle, which means the blood was taken as a capillary sample, which is from the baby's heel. And then the first five columns are about the respiratory and metabolic properties of the blood and they are within normal parameters.

"SV" in the next column stands for self-ventilating because the column heading is "type of", so what respiratory support the baby is receiving, so I've crossed out the 24 because that should have been in the next but one column and I've put that one in there to say that [Baby E] was receiving 24% ambient oxygen. Then further over, the glucose, 18.4, which is abnormal.

Lactate, 1.7, which is within normal parameters. And my signature.

DRIVER: Thank you. Just focusing on the glucose for a moment, correct me if I'm wrong, but there is -- from what you have just told us, is it right to say that that is, on your understanding, the only abnormal entry recorded by you along this row?

NURSE B: Correct.

DRIVER: And that was the glucose that caused you to speak to SHO Thomas and caused Dr Thomas to prescribe accordingly?

NURSE B: Yes.

DRIVER: Thank you. For the sake of completeness could we go to the fluid balance chart, please, behind tile 63? If we could seek out your initials. Is this a document which the nurses initialled at the bottom of the page?

NURSE B: It is, yes.

DRIVER: Take us there, Mr Murphy. Thank you.

We can see Melanie Taylor, MT, becomes [initials of Nurse B] in the morning to correspond to 8.30. Again, you have endorsed, as you did on the last document, probably for the same reasons, I imagine.

NURSE B: Yes. I've done them at the same time.

DRIVER: Thank you. Does this document the cautious feeding regime that you summarised and described earlier?

NURSE B: It tells you how much milk I have given. It doesn't specifically say anywhere that [Baby E] was on a cautious feeding regime, but it tells us how much milk I've given throughout the day.

DRIVER: And those milk levels themselves inform you, do they, that this was a cautious feeding regime or not?

NURSE B: No.

DRIVER: No? Thank you. Is there anything else recorded on this document other than the fluid provided to the baby?

Anything else of note?

NURSE B: When the NG tube was last changed, that there was an NG tube in situ.

DRIVER: Yes.

NURSE B: The blood sugars have also been recorded on there. The aspirates --

DRIVER: Let's look at the aspirates. So there was the entry that you've already summarised, the 1 millilitre of partially digested milk; yes?

NURSE B: Yes. 9 o'clock, 1ml of partially digested milk. And then --

DRIVER: 11 o'clock?

NURSE B: We can see in the circle there's an R, that means replaced.

DRIVER: Right.

NURSE B: Which means I've put that back again. [Baby E] had worked hard to digest that milk, so it went back into his tummy once I'd aspirated it. I didn't remove it fully.

DRIVER: Right.

NURSE B: That's normal practice.

DRIVER: Would that be in addition to the 1ml he was due to receive or as a substitution for?

NURSE B: In addition, so I've taken the 1ml out, I've put the 1ml back in upon the normal findings, and then I've given the new 1ml.

DRIVER: Right. So it's partially digested, so the job was half done, as it were, or partially done?

NURSE B: Yes.

DRIVER: So it was put back into the baby?

NURSE B: Yes, and then he's received that next feed of 1ml.

DRIVER: Thank you. Could we line this up to the times, Mr Murphy, if possible? So that was a 9 am event.

NURSE B: Yes.

DRIVER: At 11 am?

NURSE B: "Min asp, minimal aspirate."

Nothing significant.

DRIVER: Thank you. 13.00?

NURSE B: The same, minimal aspirate, nothing significant.

DRIVER: The digits below, do they correspond to the aspirates or are they something else entirely?

NURSE B: No, that's the urine.

DRIVER: So that's output, as it were?

NURSE B: Correct.

DRIVER: Because this is, after all, a balance sheet?

NURSE B: Yes.

DRIVER: And that level of urine output, is that normal or abnormal?

NURSE B: It's moderately high.

DRIVER: Thank you. Let's go back to the aspirate row and 15.00.

NURSE B: So I've just acknowledged the pH of 4, so I have just acknowledged that the tube is in the right place, and then that's "min", minimal aspirate again.

DRIVER: Thank you. 17.00?

NURSE B: 1ml replaced.

DRIVER: So is that a shorter, more brief shorthand for that which we saw at 9 am? I'm asking you to explain why it would have been replaced, really.

NURSE B: Because it was a normal finding, yes.

DRIVER: Thank you. 19.00?

NURSE B: Minimal aspirate.

DRIVER: Again, another normal finding?

NURSE B: Yes.

DRIVER: And that was the last feed that you gave [Baby E]?

NURSE B: Correct.

DRIVER: The entries below, are they output, as it were?

NURSE B: Yes. So again, that's the urine. The 50 is the amount, that [Baby E] had 50ml of urine at that nappy between 1 o'clock and 7 o'clock. And then the 6.3 relates to a calculation of how many millilitres that works out, the millilitres per kilo per hour and the "mec" is a shorthand version for meconium, so [Baby E] had had a poo.

DRIVER: His bowels had opened?

NURSE B: Yes.

DRIVER: Which is a good sign?

NURSE B: Yes.

DRIVER: Thank you. So taking all that data into account, in addition to your monitoring of the baby himself, his colour, his perfusion, how he handled, his interaction with his mum, all of those factors, on balance, what was your assessment of his condition during the shift that you looked after him?

NURSE B: [Baby E] was doing well on that shift, apart from the high blood sugars. The high blood sugars can indicate a worrying factor, it can be a stress response.

MR DRIVER: Thank you. Could you remain there and answer any questions that are asked of you?

Cross-examination by MR MYERS

MR MYERS: [Nurse B], I'm going to ask for your help both with some aspects of the shift that you were dealing with, as you have done, and then just some general aspects that we can see from [Baby E]'s records.

NURSE B: Yes.

MYERS: Because you were one of the nurses who cared for him and you're familiar with the records, I'd be grateful for your help with that. Thank you.

NURSE B: Okay.

MYERS: Just as a starting point, we've heard that you were satisfied that, apart from the high blood sugar -- and we'll come to that -- [Baby E] was doing well on or by the conclusion of the shift when you were looking after him?

NURSE B: Correct.

MYERS: All right. And would it be your view that he was, as far as you could see, again save for blood sugar, as stable as you might expect for a baby of that gestation?

NURSE B: Without the blood sugar, yes.

MYERS: Were you aware that however stable he was, there are a number or there were a number of potential risk factors associated with him?

NURSE B: Correct.

MYERS: I'm just going to go through a couple of those with you, if that's all right, so we keep them in mind.

First of all, he had been or he was premature, wasn't he?

NURSE B: Yes.

MYERS: We know the records indicate he's 29 weeks' gestation?

NURSE B: Yes.

MYERS: And you're probably familiar with this, but under the World Health Organisation guidelines, that makes him very premature, doesn't it?

NURSE B: I can't relate to that, I'm afraid.

MYERS: All right. But in any event, there are risks that come with being premature --

NURSE B: Yes.

MYERS: -- in itself, aren't there?

NURSE B: Yes.

MYERS: He was also low birth weight, wasn't he? He was 1.37 kilos or 1.327 kilos.

NURSE B: I'd have to see the centile to answer that question correctly.

MYERS: All right, we'll find some other way of dealing with that.

His weight anyway was 1.327 kilos.

NURSE B: Okay.

MYERS: Are you familiar with the World Health Organisation guidelines for the brackets of birth weight, what is very low, what is extremely low?

NURSE B: No, I'm not.

MYERS: Right. In addition to his prematurity, he had antenatal -- he was born with conditions which in themselves could increase risk, like the twin-to-twin transfer syndrome? Were you aware of that?

NURSE B: I would have been at the time, but I do not recollect.

MYERS: Okay. And reverse end-diastolic flow?

NURSE B: I do remember that.

MYERS: So it means that whilst, of course, a baby like [Baby E] or any baby, I suppose, can be stable, he could still be vulnerable to health complications, couldn't he?

NURSE B: Correct.

MYERS: We spent a little time looking at your entry for the shift that you did, the day shift on 3 August, [Nurse B].

NURSE B: Yes.

MYERS: And I just want to look at some of the clinical aspects of him a little more broadly now before we come back to that; is that all right?

NURSE B: Okay.

MYERS: In fact, I want to go back to your first shift with [Baby E], which is on 29 July, and it's an additional section, ladies and gentlemen, but Mr Murphy will put it up for us. It's J2563.

We'll move across the additional section in due course, ladies and gentlemen.

If you enlarge the entry, it's a little blurred as we look at it here, on the right-hand section.

If we look at this, again this is -- can you see where your addendum is, [Nurse B]?

NURSE B: Yes.

MYERS: 30 July 2015. Entered at 00.17.

NURSE B: Yes. The middle one.

MYERS: This is soon after [Baby E]'s birth, he was born on 29 July.

NURSE B: Yes.

MYERS: And it records:

"N CPAP commenced at 22.50 as oxygen requirement increased to 30% and required Neopuff twice for apnoea."

It puts down the pressures that followed and that he is now in air and Registrar Davis is aware.

NURSE B: Yes.

MYERS: I appreciate that's not long after he was born --

NURSE B: Yes.

MYERS: -- and things move on from that, but that's just on 30 July.

NURSE B: Yes.

MYERS: I'm going to ask to put up on the screens next, if we could, slide 31, which is something called an apnoea chart. You may be familiar with them, I'm not sure that we've seen one in this trial before.

Ladies and gentlemen, for those of you who are using iPads, I'm going to ask that if you can get that on the iPad because then I might ask to put a couple of other slides up on the screen just to look at as we go along.

MR JUSTICE GOSS: That last slide isn't on them.

MR MYERS: It isn't. Some of these aren't, although they will be eventually, but this one is.

MR JUSTICE GOSS: Not slide, document.

MR MYERS: Yes, document.

So this is slide 31 and it's 2693 in the J numbers.

Is this a chart designed specifically for staff to record, if they're able to at least, where there are breathing issues during the course of the child's stay at the Countess of Chester?

NURSE B: If they're having regular apnoeas, bradys, desats or seizures -- fit is a shortened word for seizures -- then yes, that's correct.

MYERS: All right. We're going to look at a couple of entries in a moment. If we start here, we've got, 1 August 2015, 18.20, apnoea -- there is no apnoea. Is apnoea where the breathing actually stops for a period of time?

NURSE B: Stops for a minimum of 20 seconds.

MYERS: Right. Brady is where it slows down?

NURSE B: The heart rate falls below 100.

MYERS: Right. Heart rate falls below 100 and then desat is where the oxygen saturation drops in the blood; is that correct?

NURSE B: Correct.

MYERS: Right. So we can see that on 1 August, at 18.20, the heart rate drops down to 79 and oxygen fell to 84%?

NURSE B: Yes.

MYERS: Is that what this means?

NURSE B: Yes, without an apnoea. The line means not associated with an apnoea.

MYERS: No, we can see there's no apnoeas identified there.

NURSE B: Yes.

MYERS: And then is that 45 seconds, as far as you can see there?

NURSE B: Yes.

MYERS: If we've got it on the iPads, that's helpful, because I am just going to ask to put up a nursing note on the screen and then we can see how it looks if I have got the right note. This is going to be an additional document, ladies and gentlemen. I'm going to ask Mr Murphy to put up 2578, if he would, on the screens and those with iPads can see the chart here.

If we could please enlarge, on the right-hand side, that entry, thank you. So we can see here, can't we, [Nurse B], for 1 August 2015, an entry at 19.38 by -- is that Bernadette Butterworth?

NURSE B: Yes.

MYERS: If we look down to the second paragraph. SVIA, is that self-ventilating in air?

NURSE B: Correct.

MYERS: "Had occasional self-correcting desat and has had x1 brady which needed gentle stimulation."

NURSE B: Correct.

MYERS: Thank you. I'm sorry we're moving between the two things, but I want us to be able to see how this goes with your assistance and Mr Murphy's.

If we go back on the main screen to the apnoea chart, which is at S31. Look at the next one.

2 August 2015. 6.20. It says:

"Desat 83."

So that's down to round about 83. It says 83 to 88%, doesn't it?

NURSE B: Yes.

MYERS: 2 minutes?

NURSE B: Yes.

MYERS: In the comments section, what is the purpose of the comments section when we see it on this form, please?

NURSE B: To potentially give a reason of why it's happening and how the nurse has responded, if they've needed to at all, in terms of physical help. Obviously, every time the monitor alarms, you go and observe, but you don't necessarily need to help as the baby will quite often self-correct.

MYERS: That's right. Depending on the situation, there may be various steps that you go through; is that correct?

NURSE B: That's correct.

MYERS: The first thing is to observe what's happening?

NURSE B: Yes.

MYERS: And sometimes it may be appropriate to wait for the baby to correct because they can self-correct?

NURSE B: Yes.

MYERS: Is the next step sometimes to give them a little gentle stimulation to get them working again (overspeaking) --

NURSE B: So gentle stimulation means, very, very cautiously, maybe just popping a hand over their abdomen, maybe just giving them a very, very gentle tickle on their fingers or their toes. That's what gentle stimulation means.

MYERS: Then the next step along, what would you do if gentle stimulation didn't work? You wait to see what happens.

If they don't correct, you provide gentle stimulation.

What would the next step be?

NURSE B: It depends on what's happening, it depends if the baby is apnoeic or it depends if the baby is having a desaturation without the apnoea.

MYERS: Yes. What would you do if it's a desaturation without the apnoea?

NURSE B: Then if the gentle stimulation doesn't improve everything, you would align the baby's chin in what you would call the neutral position, so you would follow our newborn life support algorithm, which is called NLS, so the first step would be to put the baby's airway in the neutral position. If that didn't improve then you might then give oxygen if it's without an apnoea -- if the baby was breathing, you wouldn't need to ventilate the baby.

MYERS: Right. Let's have a look here. We'll go to the notes actually, but we can see it looks like -- we won't try and guess the writing. Let's have a look, if we could, please, at the note on the screen, Mr Murphy, which is at 2581. We can keep the

charts on the iPads if we have them and have a look at 2581 when it comes on the screens.

It's the lower of the two notes, please, Mr Murphy.

2 August 2015 at 06.35 and this is [Nurse C] who's one of the nurses who works on the unit?

NURSE B: Correct.

MYERS: "Settled night. SVIA [self-ventilating in air]. A couple of fleeting desats earlier in the night with x1 episode at 6.20 of 2 minutes desaturation to 83 to 88% requiring facial oxygen for short period. Had hiccups."

So that would appear to be an occasion where it has been necessary to use oxygen to correct the saturation?

NURSE B: Correct.

MYERS: Thank you. We go back then to carry on to S31, which is the chart. We'll pop that up on the screen.

The next item recorded is again that day. 2 August, 17.45. Bradycardia and desaturation for about 30 seconds, down as self-correcting.

NURSE B: Yes.

MYERS: The next entry, 2 August 2015, later that day, 23.50, bradycardia and desaturation for 45 seconds; that's correct, isn't it?

NURSE B: Correct.

MYERS: And that was dealt with by gentle stimulation?

NURSE B: Yes. This is obviously as I'm reading from the charts, I wasn't available at this time, but from reading the charts that is correct.

MYERS: Yes, and they're charts you are familiar with?

NURSE B: Yes.

MYERS: You'll have used these on other occasions?

NURSE B: Many times.

MYERS: And finally, 3 August at 1 o'clock in the morning, bradycardia 70s, desaturation down to the 70s, for about 45 seconds and gentle stimulation applied on that occasion?

NURSE B: Yes.

MYERS: Let's just have a look at that one before we move on from this. That's at page 2586, Mr Murphy, and there is a slide for this, slide 43.

Just enlarge on the left-hand side, thank you.

So this is made at 2.04 in the morning on 3 August.

MT, is that Melanie Taylor?

NURSE B: Yes.

MYERS: So this is the nurse you said that you took over when you came on into your shift on the day?

NURSE B: I didn't remember it being her, but the notes are of that, yes.

MYERS: All right. And we can see here the description, three or four lines down in the top half of the screen:

"Self-ventilating in 24% oxygen. Respiratory 60 to 70. Minimal recession evident. Has had two brady/desats requiring gentle stimulation."

So that's where that comes from that we've seen in the chart.

NURSE B: Yes.

MR MYERS: Thank you. I'd like to ask you about the blood glucose next, [Nurse B], but my Lord, I see it's exactly 1 o'clock. I just wonder if this is a good time to stop?

MR JUSTICE GOSS: Right. We'll break off there then and resume at 2.05. Can you be ready, please, to be in court for 2.05? And don't speak to anyone about your evidence or anything to do with this case.

NURSE B: Okay.

MR JUSTICE GOSS: Thank you very much.

Can I just mention, whilst it's in my mind, Thursday, which is a day you'll recall when one of you has a commitment which means we cannot sit beyond 2.30 in the afternoon, what I'm planning to

do, and I've raised this with counsel and no one has dissented yet, is to sit at 10.30 as normal, do 2 hours in one session without a break until 12.30, take an hour for lunch until 1.30, and then do an hour in the afternoon. So it breaks the day up a bit without taking a break and maximises the time between 10.30 and 2.30? All right?

I'm just saying that you will be free from 2.30 onwards on Thursday. Thank you very much.

2.05, thank you.

(In the absence of the jury)

MR DRIVER: I just inform your Lordship that after [Nurse B] has been completed, there will be the reading of some short statements and that will be the totality of the evidence for today.

MR JUSTICE GOSS: Thank you very much.

You just wait there and the court will empty and you'll be taken out.

(1.02 pm)

(The short adjournment)

(2.03 pm)

(In the presence of the jury)

MR MYERS: [Nurse B], I'm going to ask you now a little bit about the blood sugar and the insulin. And when I do that, I'm going to ask if you can keep your voice up so we can all hear. Witnesses are sometimes told if you aim to the back wall here, it should get to everybody.

Can we look at the fluid chart that we looked at with [Nurse B] earlier. That was at slide 38.

If you pop behind that to the actual chart itself, please. I'm going to ask, with your assistance, [Nurse B], if we could just look at the bottom where there's the entry that says "blood sugar".

If we look about six lines up from the bottom, it's handwritten.

NURSE B: Yes.

MYERS: I wonder, could you just enlarge the bottom part of the chart, please, Mr Murphy?

As we look at that, could I ask you to confirm this, please, that the range for glucose normally is about 2.6 to 6. Would that be right? Within that range? Is that the way -- where you aim to have it?

NURSE B: It depends whether it's a term baby or a preterm baby.

There are different parameters for both.

MYERS: But with a preterm is it still around that region or is there much significant difference?

NURSE B: You want it to be above 2.6.

MYERS: Above 2.6?

NURSE B: Yes.

MYERS: So not below that. Then at what point do you say it becomes too high? I was suggesting 6 is the upper limit.

NURSE B: No, because then you wouldn't commence insulin. The upper limit, according to the guidelines, would be all the way to when insulin would be commenced, it would be a worrying factor but it's not the upper limit according to the guidelines.

MYERS: If we look here at the readings that you took we can see -- well, actually just before you come on, with Nurse Taylor, it looks like it's 13 at 7 o'clock in the morning. Can you see that?

NURSE B: Yes.

MYERS: That is high blood glucose, isn't it?

NURSE B: Yes.

MYERS: We can agree on that. 11 o'clock is the first one of the readings that you took and that's 12.8; is that correct?

NURSE B: Yes.

MYERS: Which again is high, isn't it?

NURSE B: Yes.

MYERS: And then it looks like maybe 2.30, it's just between 14.00 and 15.00, is that 18.4?

NURSE B: 18.4.

MYERS: That is markedly high, isn't it?

NURSE B: Yes.

MYERS: And in fact, as we carry along at 4 o'clock, at 13.5, that's high too, isn't it?

NURSE B: I can't remember the guideline off the top of my head, whether it's 12 or 14, which is the cut-off for insulin.

MYERS: Right.

NURSE B: But they are high.

MYERS: Yes, they are.

NURSE B: But the cut-off for insulin, from memory right now, I can't remember whether it's 12 or 14.

MYERS: I see. So it may get high up to a certain point, but then there's a particular point at which insulin would be prescribed?

NURSE B: Correct.

MYERS: All right then. So these -- to summarise it, if we look across all of them, they're all high, aren't they? All of those blood sugar readings are high?

NURSE B: They are at the higher end of what could be normal, yes.

MYERS: But by the time we have the 18.4, that is very high, certainly high enough for insulin?

NURSE B: Correct.

MYERS: Thank you. With that in mind, could we have a look, please, behind slide 94 at the IV chart, which actually records the insulin that was administered.

Pause a moment here now. We can see from the top left it refers to [Baby E]; is that right?

NURSE B: Yes.

MYERS: In fact, on this, I mentioned weight earlier. If we look just to the right of [Baby E]'s name we can see it says

"Allergies/sensitivities" and beneath that it says "Patient's weight"; can you see that?

NURSE B: Yes.

MYERS: So that's the birth weight 1.327 kilos, we mentioned it earlier, but that's what that is, isn't it?

NURSE B: It is.

MYERS: Thank you. Then this is the drug chart -- the drug this is recording is Actrapid; is that correct?

NURSE B: Correct.

MYERS: Is that a form of insulin?

NURSE B: It is.

MYERS: Thank you, Mr Murphy. We've covered that.

I'm going to look at the section that says "administration" to see when [Baby E] was given insulin.

When we do that, again your evidence, [Nurse B], is that insulin is given not just when the blood sugar is high but when it gets to a particular level, which is regarded so high insulin is required?

NURSE B: Correct.

MYERS: Thank you. Under "administration", the first line we come to is "date".

NURSE B: Yes.

MYERS: Perhaps you can help us with this. We can see it says:

"First dose: 31 July 2015."

NURSE B: Yes.

MYERS: Then it says:

"Change of rate or infusion: 1 August 2015."

NURSE B: Yes.

MYERS: Then again moving right of that:

"Change of rate or infusion: 2 August 2015."

NURSE B: Yes.

MYERS: And then we've got two for 3 August 2015, but we can see one of them appears to be crossed out there. Can you help us, because you were on duty that day, as to what the two entries relate to or why we have two?

NURSE B: So the first one, looking at it, without a calculator to hand, looks like the incorrect prescription.

MYERS: Right.

NURSE B: So then myself -- and I can't recognise the signature who has signed with me. We have gone to check the prescription. It might have already been changed or we've highlighted to the doctor that the prescription was incorrect and it's been -- we have not signed, we have not given that dose. We have signed on the correct dose.

MYERS: Right. So the first one, the one on the left as we look at it there, is one that you think probably was an incorrect dose, so you didn't proceed with that?

NURSE B: Correct.

MYERS: And then it has been rectified and it's the one on the right-hand side that is the dose that [Baby E] received?

NURSE B: Correct.

MYERS: Thank you. So if we pull out from that now so we can see the whole page, please.

That shows, doesn't it, that there's four separate occasions when he was given a prescription for insulin: 31 July, 1 August, 2 August and 3 August?

NURSE B: There are four prescriptions and there are three -- there's different rate changes within, yes.

MYERS: All right. We've got the dates for the four prescriptions; do you agree with that?

NURSE B: Yes.

MYERS: And perhaps just to finish the detail, for each date we have a time when the dose or the infusion started.

In fact, the first one, 31 July, does that indicate that it's one dose or was it an infusion on that day from what you can see?

NURSE B: Insulin in neonatal, so far as I have ever done, is a continual infusion, you don't administer one-offs.

MYERS: So the first one starts at 6.45 on 31 July; is that correct?

NURSE B: According to the prescription.

MYERS: All right then. Then there's a change of rate or infusion at 2 o'clock on 1 August?

NURSE B: Correct.

MYERS: Then the next one is at 2.10 in the morning on 2 August?

NURSE B: That is -- yes, yes.

MYERS: And then finally, the one that you dealt with, when Dr Thomas came over, is at 15.00, so 3 o'clock on 3 August?

NURSE B: Yes.

MYERS: Just so we've dealt with all of it, the chart includes the rate when it's been provided intravenously, doesn't it, the rate shows how many millilitres per hour [Baby E] should be receiving?

NURSE B: Yes.

MYERS: I'm not going to interpret everything under micrograms per kilogram per whatever that is for dose, but that also shows how much he should be receiving, does it, under dose?

NURSE B: Insulin is worked out in units, yes. That's how many units he was receiving within those millilitres per hour.

MYERS: And then the doctor who's prescribed it signs it off.

Is that what we have next to "doctor's signature" as we go across the four different prescriptions?

NURSE B: A doctor who has written the prescription, yes.

MYERS: And then the nurses who administer the medication, they sign it as well?

NURSE B: So that's myself and I don't recognise the signature.

We have put the medicine into the syringe, through the dilution process, and attached it to [Baby E], yes.

MYERS: And when you say that, when you say we had that, are you talking about 3 August in particular?

NURSE B: Only 3 August (overspeaking) --

MYERS: Yes. As we look across where it says "nurse signature", the routine is that the nurses involved in delivering the medication will sign off at that point, won't they, on each occasion?

NURSE B: Yes.

MYERS: And you signed off on the occasion that you did it?

NURSE B: Yes.

MYERS: Thank you. You have described your involvement with [Baby E] and blood sugar and insulin, but we can see from this that's a feature at intervals throughout his period on the unit, isn't it?

NURSE B: Sorry, just repeat the question again?

MYERS: [Baby E] receiving insulin for blood sugar is a feature of his time on the unit on the occasions that we can see?

NURSE B: Yes.

MYERS: I would like to ask you next, please, a little bit about the blood gas chart that we looked at. That's behind slide 90, please, Mr Murphy.

If we scroll down, please, to 3 August, the entries for 3 August. Just the bottom four or five lines.

We can tell which entry you completed because we have your initials on the right-hand side, is that correct, three lines up, "[initials of Nurse B]"?

NURSE B: 14.38, yes.

MYERS: Looking across there, you've explained the C means it's a capillary sample?

NURSE B: Yes.

MYERS: Which is what we've heard called a heel prick?

NURSE B: Yes.

MYERS: If we look at the pH, 7.293, in fact that's on the acidic side, isn't it, it has just come outside the target range?

NURSE B: The doctors, as far as I am always aware, through my training, have said anything above 7.25 is normal.

MYERS: All right. I was going to suggest 7.3 is the target range, but you say 7.25, do you say?

NURSE B: Yes, I do.

MYERS: Okay. Well, we can see it's 7.293.

6.94 for carbon dioxide is just a little towards the upper end of that or is that, do you say, bang where it should be? In fact a little on the low side, is it?

NURSE B: Definitely not low, no.

MYERS: Right. Where do you place that?

NURSE B: I would say higher end of normal.

MYERS: Higher end of normal, right. As we move across, where we've got the glucose, 18.4, does that dovetail with the reading that you'd put on the fluid chart for 18.4?

NURSE B: Yes, it does.

MYERS: And is it that which triggered the requirement for the dose of insulin?

NURSE B: Once the doctor had reviewed the baby and reviewed the guideline.

MYERS: I'm going to suggest, and please feel free to disagree if you'd like to, that when you look at the pH figure and when you look at the carbon dioxide figure, they indicate a slight sign of acidosis and slightly outside the normal parameters.

NURSE B: For the entry at 14.38?

MYERS: Yes. I'm suggesting they're slightly outside the normal parameters, actually, they are not bang on them, but feel free to agree or disagree.

NURSE B: I believe they are within parameters.

MYERS: All right.

NURSE B: The doctor makes the decision, I take the blood sample, the doctor then reviews the sample and makes the decision.

MYERS: And that goes for the glucose as well, does it?

NURSE B: Yes.

MR MYERS: All right. Thank you, [Nurse B].

Re-examination by MR DRIVER

MR DRIVER: Just one area of re-examination if I may. Could I ask Mr Murphy to put page J2693 back on the screen, please. The apnoea/brady chart.

You were taken to this document, [Nurse B], and you, on invitation, confirmed your familiarity with the document and the types of entries recorded upon it, although none of those entries are in fact your entries, are they?

NURSE B: They're not my entries, no.

DRIVER: Having looked at these entries, would you describe that collection of notes and the presentation that it represents for a baby of this gestational period in the first 4 or so days of life, would you regard -- sorry.

Having looked at them, would you care to revise or qualify your description of his degree of stability on 3 August?

NURSE B: Um... I haven't recorded any during my shift on 3 August.

DRIVER: These events recorded between 1 and 3 August, having taken them into account, do you care to revise or qualify your assessment of his well-being or otherwise during your shift?

NURSE B: Based purely on what I can see written here, that is not a worrying trend of information.

DRIVER: Moving topics and going back to glucose, blood glucose levels and insulin, you made the distinction between four deliveries of insulin as compared to four prescriptions; yes?

NURSE B: Could I have the chart back again, please?

DRIVER: Please.

NURSE B: Thank you.

DRIVER: So that's the blood gas chart behind tile 90, J2715.

NURSE B: Sorry, the prescription chart.

DRIVER: Tile 94, I'm informed. There we have five sets of notes, one of which has been crossed out for reasons that you've explained to us. Do they represent -- the other four, do they represent four doses of insulin or do they represent a single course of insulin infusion?

NURSE B: Shall I just speak through it?

MR JUSTICE GOSS: I think you should. This was the matter I was going to ask you about. Because you described them being administered through a driver.

NURSE B: Yes.

MR JUSTICE GOSS: So that's what --

NURSE B: Yes.

MR JUSTICE GOSS: They're not single boluses?

NURSE B: No.

MR JUSTICE GOSS: Take it from there. Talk us through it, please.

NURSE B: Okay. So the first dose is commenced on 31 July at 6.45 am at that set rate. And according to the prescription chart, that dose remains unchanged until 1 August at 2 pm. So that infusion has remained there continually and then, at this time, the dose of insulin has been reduced. So it's still the same, what looks like infusion, but the actual overall amount of insulin going to [Baby E] was reduced.

MR JUSTICE GOSS: So can you just explain? There's a bag of medication, is there, that's being infused with the insulin in it?

NURSE B: It's a syringe.

MR JUSTICE GOSS: A syringe, right.

NURSE B: So in the middle -- the third from the left box, at the top it says, "Information regarding infusion preparation". That's how the nurses that have what we call draw up the medication have done so. So the insulin is diluted within sodium chloride, which gives you then your syringe and then the pump is

then set -- it's almost like a computer -- to give so much of what is in that syringe per hour.

MR JUSTICE GOSS: Then there comes a time when the syringe runs out?

NURSE B: Runs out or expires, yes. Because you have -- from memory, with insulin, you have to change it every 12 hours.

MR JUSTICE GOSS: Right. Sorry, Mr Driver, I've taken over here. I'll stop.

MR DRIVER: Not at all.

So you took us through how entries 1 and 2 correspond to each other and I think you were going to continue through the page, were you?

NURSE B: Yes. So then it looks like the infusion has then stopped and then on 2 August at 02.10, the insulin has been recommenced.

DRIVER: Could I ask you to pause there? What is it that informs you that the insulin had been stopped? Which entry?

NURSE B: There's -- the "Time finished" says 02.30.

DRIVER: Thank you.

NURSE B: So that could -- it's very difficult to assess it without the notes for the nurses. That could be that this syringe has finished, like the judge said, or has expired, and then they've immediately started another one. It's quite confusing to see when you've not been directly involved.

MR JUSTICE GOSS: But that would be 12 hours later, wouldn't it, 02.10 on 2 August?

NURSE B: Yes, but I've a feeling because it started at 2 pm on 01/08, that time in the finish is 02.30. I just don't think they've written 02/08 next to that 02.30, and then the actual new prescription has been written for 2.10.

Do you see what I say?

MR DRIVER: So that's the time of the prescription or the commencement of the infusion?

NURSE B: That's the time the doctor has written the prescription because the writing for the 02.10 meets the writing for the

date, which is the doctor's prescription. It's the same pen, isn't it? And then the nurses have signed down the bottom.

MR JUSTICE GOSS: As you say, you're not the author of any of these notes --

NURSE B: No.

MR JUSTICE GOSS: -- which is one of the difficulties.

NURSE B: No, but I do know when I was on the start of the shift with [Baby E] on that day, insulin was not infusing.

I've written in my notes "recommenced".

MR DRIVER: Thank you for that.

Does your Lordship have any questions?

MR JUSTICE GOSS: No, I'm going to invite Mr Myers.

Further cross-examination by MR MYERS

MR MYERS: I am just going to raise this to assist, if it does, because I have the reference to the nursing notes that these apply to with the narrative that's in the notes. We can deal with it in whatever way your Lordship or my learned friends wish. Rather like we did with the apnoea chart and the desaturation chart, we can ask [Nurse B] simply to assist us by reading those notes into the record or some other way, but we could do it just like we did with that and I have those references here.

MR JUSTICE GOSS: Let's do it now while it's...

(Pause)

MR MYERS: Yes, it might assist in just that way, just so we have the information.

I'm going to -- you see we've got the four dates here, [Nurse B]? 31 August at 06.45?

NURSE B: Yes.

MYERS: 1 August at 14.00?

NURSE B: Yes.

MYERS: 2 August at 02.10?

NURSE B: Yes.

MYERS: And 3 August at 15.00?

NURSE B: Yes.

MYERS: So just to assist with this point I'm going to go to where that is in the nursing records so we can see what it says. I'm going to ask Mr Murphy just to help by putting these up on the screen.

Starting first of all with 31 July. That's at 2571, please, Mr Murphy.

It may be these have to become additions in due course, ladies and gentlemen. 2571.

If we look at the bottom right-hand side, it says:

"Addendum, 31 July 2015, 6.54, by [initials of Nurse E]."

That's [Nurse E], who is one of the nurses on the unit, isn't it?

NURSE B: Yes.

MYERS: This says:

"Repeat blood glucose 13.3 again, therefore Actrapid insulin commenced at 06.45. Running at 0.33ml/hour. Blood glucose for repeat at 07.45."

In fact, that's the end of the note so far as insulin is concerned, but that dovetails with what we see as the first entry on the Actrapid prescription intravenous form, isn't it?

NURSE B: Yes.

MYERS: All right. So that shows the time that it's commenced.

The next that we saw was at 2 pm on 1 August.

That's at page 2578, Mr Murphy.

This is the central entry for 1 August 2015, the entry actually made at 19.38 by Bernadette Butterworth, who's one of the nurses on the unit, isn't she, [Nurse B]?

NURSE B: Yes.

MYERS: If we look at that central entry we can see:

"Blood glucose at 8 am at 10mmols."

Does that mean the reading of 10, when we have seen the various, does that mean 10?

NURSE B: Sorry, let me just read it.

MYERS: Yes, of course.

(Pause)

NURSE B: Yes. She's missed the zero --

MYERS: Yes.

NURSE B: -- or she's missed whatever number it was after the dot.

MYERS: "Informed Dr Ogden on the ward round, who asked for BMs to be done..."

What does BMs stand for?

NURSE B: Blood sugars.

MYERS: "... [blood sugars] to be done 6 hourly. Repeated at 14.00 hours and had risen to 15. Dr Ogden informed and was recommenced on insulin at 0.02 units. Repeat glucose 1 hour after insulin commenced and glucose had decreased to 14.2. Dr Ogden informed. Repeat glucose after a further 2 hours and had decreased to 12.8. Dr Ogden informed. Repeat in a further 2 hours."

If we carry on to the entry below that for 1 August 2015 at 19.51 by Nurse Butterworth:

"Had previously documented that blood glucose was 10mmols. It was 10.4mmols pressures (sic) and site of long line remains satisfactory."

NURSE B: So she's amended at the top where I said it says 10 point and then millimoles, she has corrected herself.

She's noted an error in her notes, so she's put 10.4.

MYERS: Right. Can I ask, does it help when you look at that as to whether or not this is topping up an infusion that was taking place or was this a fresh infusion that was given to [Baby E]?

NURSE B: They're writing "recommenced" --

MYERS: Yes.

NURSE B: -- so it could be a fresh infusion or it could -- it's very difficult, if I can't write the times down exactly when they were in front of me, to go from one to the other. It could be that the insulin was simply paused, switched off to the baby, you then repeat some blood sugars to make sure it's not gone back up again and then they switch it back on --

MYERS: All right.

NURSE B: -- but it suggests that they are new infusions.

MYERS: New infusions from the look of that. The next one, remember the third one, I'm going to go to a nursing entry for overnight of 1 and 2 August. And it's at 2581, please. This is the third one on our Actrapid form and it's in the notes at 2581.

It helps if we start with the top of this because this is an entry by [initials of Nurse C], who is [Nurse C].

It begins up at 1 August at 21.03, the entry is made, and there's information about that third dose that cuts across both this and the entry below. Perhaps if I read it with you, we have the information:

"Night shift. Settled in humidified incubator. Self-ventilating in air. No signs of respiratory distress. Episodes of brady and desats on day shift noted. Warm and well perfused. Tolerating trophic feeds via NGT. Abdo full, soft. NGT aspirates milky on day shift. BNO."

Which we know means bowels not open?

NURSE B: Correct.

MYERS: Is that pooing as in "pooing well into nappies"?

NURSE B: Sorry, that's "PU-ing", passing urine.

MYERS: "PU-ing well into nappies. Weighed. Creatine continues to climb. Repeat U&Es..."

What's U&Es?

NURSE B: It's a blood test, urea and electrolytes.

MYERS: "... sent this evening. Satisfactory CBG."

NURSE B: Capillary blood gas.

MYERS: "Skin intact. Long line secure and appears patent. Site clean and dry, dressing intact."

And then it says:

"Blood glucose at 11.1 at 20.30. Insulin continues."

So this is carrying on from the insulin that we've seen?

NURSE B: Yes.

MYERS: Then at 6.35:

"Settled night."

It deals with a record of fleeting desats that we've already looked at actually when oxygen was given briefly.

And then three lines up from the bottom:

"Blood glucose levels as charted. Insulin increased to 0.03 units/kg/hour. Skin intact. Long line secure."

So that would appear to be a change --

NURSE B: In the rate.

MYERS: -- at that time?

NURSE B: Yes.

MYERS: And that was the third one that we saw.

NURSE B: Yes. No, was that the second one?

MYERS: The second one.

NURSE B: I'd have to go back to the prescription chart again.

MYERS: Let's do that so we don't lose track to remind ourselves. Can we look at slide 94 again, Mr Murphy?

I've got the nursing note in front of me, if it helps, and the note we've just read for 2 August at 06.35 said that insulin was increased to 0.3 units per kg per hour, which does equate with our third column along if you look under "dose".

NURSE B: Yes.

MYERS: All right. So what we have for the third one is an increase in the rate, in effect, is that correct?

NURSE B: From the second column?

MYERS: From the second. So that's what's happened there.

Then we can deal with the final one, your one, [Nurse B], which is in the nursing notes at page 2588, so I'd be grateful if we could go there.

It's the lower of the two entries. 3 August 2015 at 17.24.

We can see the reference to insulin if we go and look at the end of the second line into the third line:

"Capillary blood gas satisfactory but blood sugar 18.5mmols. SHO Thomas informed and insulin recommenced at 15.30 at a rate of 0.02 units/kg/hour. Checked 1 hour later and 13.5mmols. To recheck after 1 hour."

So that's the fourth entry that we have seen on the Actrapid prescription fluid chart, isn't it?

NURSE B: Yes. That's my entry.

MYERS: And where it says "recommenced", does that help with whether or not you're continuing with the dose that's been running without a break or whether there had been a break and then it had restarted, or is that something you're unable to say?

NURSE B: For my entry on this one I remember specifically that I started it in the afternoon. [Baby E] was not on that medicine in the morning.

MYERS: Right. So we've seen that the first one on the chart was the initial dose. In fact, can we just go back to the chart, please, Mr Murphy, which is at slide 94?

31 July was the initial dose of insulin. It appears on 1 August 2015 that a fresh dose commenced and then the rate was changed as it continued over into 2 August 2015.

NURSE B: It appears that way, yes.

MYERS: And then by the time we get to the dose that you administered, that was a fresh dose restarting at that time?

NURSE B: For myself it was definitely a new medicine. The part that's just confusing me is there's a time there in "time finished".

MYERS: Which one are you pointing to?

NURSE B: In the second column at 02.30. I can't say what that is.

MYERS: All right.

NURSE B: But that's what's making me just think which way round are things and I can't comment because I'm not involved.

MYERS: All right. But we do notice in fact the time finished of 02.30 under 1 August looks very close to where the time starts for the change, 02.10, as it happens, on 2 August.

NURSE B: Yes. But as I say, I can't --

MYERS: Yes, all right.

NURSE B: -- comment as to what that is.

MR MYERS: That's as far as we can get on those entries we have there. Thank you, [Nurse B].

Further re-examination by MR DRIVER

MR DRIVER: Can I invite you to clarify as to the entry on 3 August and the time finished there 01.40, 4 August, which would coincide with the futile attempts to resuscitate the baby?

NURSE B: Correct.

MR DRIVER: Thank you.

Questions from THE JUDGE

MR JUSTICE GOSS: Just one matter: you said that definitely there was no insulin being administered during the day shift on the 3rd?

NURSE B: Correct, until 3 pm.

MR JUSTICE GOSS: The last prescription was at 2.10 on the morning of the 2nd.

NURSE B: Yes.

MR JUSTICE GOSS: And you said that it would last for about 12 hours.

NURSE B: If they didn't stop it, for whatever reason that may be, and as you quite rightly point out, there's no finish time in that box of that dose.

MR JUSTICE GOSS: But if it was being administered hourly --

NURSE B: It's a continual infusion, so the only way that an infusion stops is if a nurse physically stops the machine for -- that may be because that baby no longer requires the medicine.

MR JUSTICE GOSS: But the point I'm seeking to make is if it ran for 12 hours it would finish at 2 o'clock in the afternoon on the 2nd. So that when you were --

NURSE B: Yes.

MR JUSTICE GOSS: You see the point?

NURSE B: I see exactly what you're saying.

MR JUSTICE GOSS: So there was no insulin, according to this chart, being infused between the afternoon of the 2nd and the afternoon of the 3rd?

NURSE B: You will have to look within the nursing and medical records for that time period. All I can 100% say is there was no insulin running for [Baby E] that morning.

MR JUSTICE GOSS: Thank you. We've spent a lot of time on that, I'm sorry.

MR DRIVER: As I indicated earlier, the only remaining evidence to be called is just the few minutes of statement reading, and I mean a few, which could be easily deferred to tomorrow morning.

MR JUSTICE GOSS: Well, the alternative is if the witness doesn't mind waiting for these few minutes --

MR DRIVER: It's uncontroversial stuff, as you would expect.

MR JUSTICE GOSS: Is that all right? Are you content, Mr Myers?

MR MYERS: Yes, we are, my Lord.

MR JUSTICE GOSS: Do you mind waiting there? We've got a short time to go and these statements are being read.

NURSE B: Yes.

MR JUSTICE GOSS: They're not controversial, so you don't need to block your ears or anything.

Witness statement of CAROLINE OAKLEY (read)

MR DRIVER: The first statement maker is Caroline Oakley.

It is dated 6 April 2018. She begins by saying:

"I have been asked to comment on baby [Baby E] and in particular his care on 4 August 2015.

"I was working a night shift, the 3rd into 4 August 2015, and was shift leader on this shift. As shift leader I would not normally have an allocated baby to care for but if the unit was particularly busy I could find myself allocated a baby to look after. Lucy Letby was the designated nurse for [Baby E] on this shift.

"I have reviewed the nursing notes for this shift and can state I am not documented as having cared for [Baby E] on this shift.

"I have reviewed the blood transfusion and IV charts and can see that I double-checked a saline bolus at 00.10 hours and a blood transfusion at 00.50 hours with Belinda Simcock.

"I will have been present during the full resuscitation of [Baby E] with other members of staff and doctors from the unit but cannot remember what I was doing or what roles others were doing. When resuscitation happens, everyone just gets on with helping the baby and could find themselves involved in a number of jobs and not just have one role.

"I do not recall attending a debrief as a result of the death of [Baby E]."

Witness statement of SHELLEY TOMLINS (read)

MR DRIVER: The next and final statement to be read was made by Shelley Tomlins, dated 17 August 2018:

"I am making this statement in relation to an ongoing investigation regarding the neonatal unit of the Countess of Chester period 2015 to 2016.

"When I worked there, I was employed as a neonatal nurse and my role was to care for both premature and sick newborn babies on the neonatal unit. I now reside in Australia and still work as a neonatal nurse. This statement relates to a baby called [Baby E]

and I have been asked what involvement I had in relation to his care. I have consulted copies of his medical records and notes prior to completing this statement.

"I am aware from the notes that [Baby E] was born on 29 July 2015. He was one of a set of twins and was the first born of the two of them. They were born at 29 weeks' gestation.

"[Baby E] passed away on 4 August 2015 in the early hours of the morning. I cared for [Baby E] after he died on 4 August 2015 for the day shift starting 07.30 hours the same day. I took handover from my colleague Lucy Letby and shortly after I went to the parent accommodation unit to introduce myself properly to his mum and dad.

"As well as providing emotional support to [Baby E]'s parents that day, my role included liaising with the medical team and also the bereavement coordinator about the practicalities surrounding his death. This was mostly about ascertaining whether [Baby E] was to have a post-mortem, getting the required documentation completed, and deciding when his body was to be moved to the hospital mortuary. I also sat down in discussion with mum, dad and consultant [Dr C] to talk about what most likely caused [Baby E]'s deterioration and death.

"Throughout the day I kept the parents updated with any new information known about the coroner's verdict for the post-mortem and I am aware that a decision was made not to have one carried out for [Baby E]. Myself and [Dr C] were the staff members to inform the parents about this decision.

"As it was my first time caring for a baby that had died, I sought support and advice from colleagues with the practical aspects of the role. I recall there being a large amount of paperwork. In particular I would have discussed the case with the nurse in charge.

"Unfortunately, I cannot recall with certainty the staff members I worked with that day other than Staff Nurse [Nurse B].

"In terms of the physical care of [Baby E], my role was to prepare his body for the mortuary in accordance with the hospital protocol. I did not specifically have a bereavement nursing role whilst at the Countess. As part of our role as neonatal nurses, many of us attended a grief/bereavement study day at Liverpool Women's Hospital and it was expected that we would be able to care for a dying or deceased baby and their family sensitively, should the occasion arise."

That concludes the content of the statement.

MR JUSTICE GOSS: Thank you very much.

That, as you've heard, is as far as we can go today, as I foreshadowed when we began sitting this morning.

Could you please be ready to continue at 10.30 tomorrow morning?

Thank you very much for coming and giving evidence to us today. You are coming back, as you know, on a future occasion. In addition to what I said to you last time -- are you all right?

NURSE B: (Inaudible).

MR JUSTICE GOSS: You'll remember last time when you completed your evidence and we discussed the fact that you were coming back to give evidence again, I told you not to discuss with anyone, by any means, anything to do with this case and not to conduct any enquiries about it. This case has attracted a lot of publicity and we are aware that there are news feeds out of detailed evidence that is given during the course of the trial and audio news feeds. Would you please not read any of those about what other witnesses have said during the course of the case?

NURSE B: Okay.

MR JUSTICE GOSS: All right? Just get on with your ordinary everyday tasks, please, but don't conduct any investigation into this case.

NURSE B: Okay.

MR JUSTICE GOSS: Thank you very much indeed. I'm not picking you out for that. It's just something that has been raised with me and it's to preserve the integrity of your evidence, obviously, so that you are not influenced by what other people may have said.

You'll understand that, members of the jury. At the very outset I said to you that the importance is this case is tried on the evidence placed before you and the importance of maintaining the integrity of the system.

All right? Thank you very much then. You know your obligations and responsibilities as jurors.

10.30 tomorrow morning. Thank you.

(2.52 pm)

(The court adjourned until 10.30 am on Wednesday, 16 November 2022)