

Wednesday, 9 October 2024

(10.00 am)

(Proceedings delayed)

(10.05 am)

LADY JUSTICE THIRLWALL: Good morning, everyone, I'm sorry for the slightly delayed start. There's been a slight rearrangement of the witness order, which I'll leave Mr De La Poer to tell you about.

MR DE LA POER: My Lady, thank you. Yes, in a change to what was published, our first witness today will be Dr Anna Milan, please.

DR ANNA MILAN (sworn)

Questions by MR DE LA POER

LADY JUSTICE THIRLWALL: Do sit down, Anna Milan. Mr De La Poer.

MR DE LA POER: Please could you give us your full name.

A. Anna Margaret Milan.

Q. And, Dr Milan, can you confirm for us, please, that on 15 May of this year you provided the Inquiry with a witness statement?

A. I did, yes.

Q. And are the contents of that witness statement true to the best of your knowledge and belief?

A. They are, yes.

1

Q. And so that we are clear, you are a doctor of biochemistry rather than a medical doctor; is that right?

A. That's correct, yes, via PhD.

Q. Now, in 2015/2016, as you've told us, you were a principal clinical scientist. Were you one of three?

A. I was, yes.

Q. Also within your team, did you have anybody above you?

A. Yes, there was a Consultant above who's clinical lead.

Q. And below you?

A. Yes, so previous bands similar to what I'd been, so there's more senior clinical scientists below and then trainees.

Q. And together were you a team of 13?

A. We were, yes.

Q. Now, I'd like to ask you, please, about Child F, and we'll begin, please, by bringing up on screen INQ0000861. That's a screenshot that you're familiar with, I believe.

A. It is, yes.

Q. Let's just introduce some of the elements of this. Was it your role and that of your colleagues at the Liverpool Clinical Laboratories to undertake testing

3

Q. I start by introducing you. Following a period of university and formal training, did you qualify as a clinical scientist in 2008?

A. I did, yes.

Q. And did you take up the role of principal clinical scientist at that time?

A. I took up the role of senior in 2008 and then principal in 2011.

Q. Thank you. Along the way to becoming the principal clinical scientist, did you obtain membership of the Royal College of Pathologists in 2009?

A. I did. It's in two parts, so I completed the full fellowship by 2011.

Q. Thank you. Then, as you've have told us, you took up the position of Principal Clinical Scientist in 2011 and to bring us up to date, in 2017, did you get appointed to the role of Consultant Clinical Scientist?

A. I did, yes, at Liverpool.

Q. And all of these posts that we've discussed, were they at the Liverpool Clinical Laboratories?

A. They are, yes.

Q. And the Liverpool Clinical Laboratories form part of the Liverpool University Hospital NHS Foundation Trust; is that correct?

A. They do. They do.

2

on blood from other hospitals?

A. Yes. So we're a large referral centre, so we get -- we get all the Liverpool work but we also take referral work in from all across the UK.

Q. And was there an agreement at the time with the Countess of Chester Hospital that certain blood testing would be referred to you but for their benefit?

A. Yes, so every hospital has the choice of where they want to refer work, but Chester chose to send any tests that they didn't offer to Liverpool.

Q. Is it your understanding that a test identifying the level of insulin and C-peptide was one of the tests that was referred to Liverpool?

A. That's correct, yes.

Q. Just help us to understand that test. We don't need to go deep into the science here but is there something particularly complex or time-consuming about that test that means that a district hospital wouldn't be the obvious place to do it and a large centre like yours would be?

A. It's not a frequently requested test, so people tend to work with efficiency, so as a referral centre we would offer the assay and then smaller laboratories would send the work into ourselves. We don't get a large workload. We're largely an adult

4

1 hospital. There is in Liverpool Alder Hey, so they
 2 would offer paediatric service to the Liverpool region.
 3 So it was -- it's run on a -- on an ad hoc basis, or it
 4 was.

5 **Q.** And in terms of a request to test both the
 6 insulin level and the C-peptide level in the blood,
 7 which was the part of the request that Liverpool
 8 received, for Child F, what would you be expecting
 9 a clinician to want to learn from that test?

10 **A.** So there's always -- any test that's requested
 11 there should always be a benefit to the patient. So
 12 if -- as we know, this child was hypoglycaemia or
 13 hypoglycaemic they want to try and investigate the cause
 14 of it, so performing a C-peptide and insulin is one of
 15 the differentials to help understand the mechanism for
 16 that hypoglycaemia.

17 **Q.** So you would expect that that test would be
 18 requested when a child was hypoglycaemic?

19 **A.** Yes.

20 **LADY JUSTICE THIRLWALL:** Just can you explain what
 21 that means.

22 **A.** Yes, sorry. So that's a low glucose, so
 23 glucose below the reference range.

24 **MR DE LA POER:** Sometimes referred to as low blood
 25 sugar --

5

1 **A.** Yes.

2 **Q.** And then we have some further dates, C-peptide
 3 at 6 August 16.15 and insulin at 6 August at 16.15.
 4 What are those dates references to, please?

5 **A.** So those are when we receive that sample at
 6 Liverpool. So the sample would have been sent from the
 7 Chester laboratory to ourselves and because it was
 8 collected probably at the end of the day, they wouldn't
 9 have sent that over unless it was an urgent request
 10 until the next day. So we received it on the 6th in the
 11 afternoon.

12 **Q.** So within approximately 24 hours of the sample
 13 being taken from the patient, it's in your hands at the
 14 Liverpool laboratory?

15 **A.** It is, yes.

16 **Q.** And is, therefore, available to be tested by
 17 you?

18 **A.** Yes. I mean, we -- we -- at the time in
 19 Liverpool we ran these in batches, so this would have
 20 been frozen until analysis unless it had been requested
 21 as an urgent.

22 **Q.** And having looked at the records, have you
 23 seen any evidence that this particular sample was
 24 requested as urgent?

25 **A.** It wasn't, no.

7

1 **A.** Yes.

2 **Q.** -- in ordinary life.

3 **A.** In ordinary life.

4 **Q.** So you wouldn't expect that request to be made
 5 if a child or patient had high blood sugar or was
 6 hyperglycaemic?

7 **A.** Generally it's not in a child.

8 **Q.** And so the starting point is that you as the
 9 laboratory will be working on the assumption that the
 10 patient is likely to have been hypoglycaemic at the time
 11 that the test was requested and the blood taken?

12 **A.** Yes, we would never assume. We would always
 13 try and hope that there's clinical details provided with
 14 the test, and obviously with it being a referral test
 15 we'd hope that that would cascade through the local
 16 laboratory to be passed through to us.

17 **Q.** Of course. Perhaps assumption but that would
 18 be your working hypothesis?

19 **A.** Yes.

20 **Q.** Obviously requiring to be checked before any
 21 proper interpretation is made?

22 **A.** Absolutely, yes.

23 **Q.** And here, if we look at this screenshot, we
 24 can see at the top that it was -- top left-hand
 25 corner -- collected on 5 August 2017 at 17.56?

6

1 **Q.** So if we move to the detail of this, we can
 2 see that next to C-peptide there's a value, and next to
 3 insulin there's a value?

4 **A.** Yes.

5 **Q.** Can you just talk us through, please, what
 6 those two values signify?

7 **A.** Yes. So for the C-peptide, the units haven't
 8 appeared on this screen but it was undetectable, so the
 9 bottom of our measuring range, so the lowest we could
 10 accurately report, was 169, so this was below that and
 11 that's in picomoles per litre, that's the units for
 12 C-peptide. So it could have been 165, it could have
 13 been zero. We could not quantitate below that level at
 14 that time.

15 For the insulin it's reported in two units, so the
 16 one that the arrow is pointing to is -- or the first
 17 arrow, sorry, is the milli-international units. And
 18 then the second one with the SI is the picomoles per
 19 litre units. And it's the picomoles that's used with
 20 the C-peptide to look at the ratio of appropriateness.

21 **Q.** So the --

22 **A.** So it's a very high insulin -- sorry,
 23 I interrupted you there.

24 **Q.** Not at all, it's your evidence so tell us --

25 **A.** Yes, so it's a very high insulin of 4,657

8

1 picomoles per litre and undetectable C-peptide.

2 **Q.** Now, if we have a look at another screenshot
3 that we have, INQ0000862. We'll just speak to the other
4 end of the process in Liverpool.

5 **A.** Yes.

6 **Q.** That -- that records the sample arriving and
7 the times and the dates. Obviously it records the
8 results. Presumably they're populated into that screen
9 once they become available?

10 **A.** Yes.

11 **Q.** And do we know from this screenshot that we're
12 looking at on screen that they became available to the
13 Liverpool laboratory on the 12th; is that right?

14 **A.** That's correct, yes, so we didn't analyse them
15 the day we received them. They were analysed on
16 12 August.

17 **Q.** Just help us with the time frame there. Some
18 people may be thinking that feels like quite a long time
19 for an important or potentially important blood result.
20 Was that in accordance with the agreement that you had
21 at the time? Did this result take longer than you would
22 have expected? Was this fast for what you were doing at
23 the time? Help us, please.

24 **A.** Yes, so for a routine request this was
25 appropriate. So we used to run these -- we used to be

9

1 potential significance is of having a very high level of
2 insulin and an undetectable level of C-peptide?

3 **A.** So when insulin's formed in the body it's
4 formed from a precursor, so it's a molecule that
5 contains insulin but it's got parts of it that stop it
6 being reactive. So once it's cleaved in the body you
7 get one C-peptide and one insulin.

8 So in health it's equimolarly produced, so equal
9 portions, and insulin has a very short half-life,
10 whereas C-peptide has a longer half-life, so it hangs
11 around for longer.

12 If the normal ratio in health should be that
13 C-peptide to insulin has a ratio of about 10 to 1,
14 sometimes that can be 5 to 1, depending on metabolism.
15 In this case it was the other way round. So insulin is
16 extremely high with an undetectable C-peptide. So that
17 points to the fact that this wasn't produced by the body
18 and so the primary differential is exogenous insulin
19 administration.

20 **Q.** When you say primary differential, is that
21 a -- can that be put another way, that your first
22 thought will be that it is likely to be?

23 **A.** Yes, yes.

24 **Q.** So just to go back over that so it's
25 absolutely clear, you would expect there to be more

11

1 in an older building, it's now knocked down but -- so we
2 used to run insulin and C-peptides twice a week. So
3 depending on where the weekend sat, depending on what
4 time samples were received, they would be prepared and
5 run in a batch, and so this was within our appropriate
6 time frame for a routine request.

7 If we get urgent requests we can expedite them and
8 run them the day that we get them if requested.

9 **Q.** And let's just have a look at some of the
10 information that we can see recorded here. Now, the
11 first thing to say is that this wasn't you dealing with
12 this particular entry that was a colleague of yours.

13 **A.** It was, yes.

14 **Q.** We know what the results were, we saw those on
15 the previous screen, but the advice/information, which
16 is recorded at on 12 August 2015 at 16.40 "Low C-Peptide
17 to insulin" --

18 **A.** Yes.

19 **Q.** -- and then "? Exogenous".

20 **A.** (Nods).

21 **Q.** So now we just need to understand a little bit
22 more about that ratio.

23 **A.** Yes.

24 **Q.** And you're very much the expert in the room on
25 this. So tell us, please, what the significance or

10

1 C-peptide than insulin if the body had produced it
2 naturally?

3 **A.** Absolutely, yes.

4 **Q.** And, as you've told us, this is the reverse.

5 And, of course, as we've established, the working
6 hypothesis to be checked is that this result would only
7 have been -- or only likely to have been requested if
8 the child had low blood sugar, was hypoglycaemic?

9 **A.** Yes, and querying what the cause of that could
10 be.

11 **Q.** And so if we just start to put all of this
12 together in the minds of the informed lab scientist, it
13 is likely, although it needs to be checked, the child
14 had low blood sugar --

15 **A.** Yes.

16 **Q.** -- hypoglycaemic, and it is likely that they
17 have been administered insulin.

18 **A.** Yes.

19 **Q.** Now, insulin is given to patients who are
20 hyperglycaemic; is that right?

21 **A.** That's correct.

22 **Q.** And the purpose of it is to bring the blood
23 sugar down.

24 **A.** Yes.

25 **Q.** And so does it follow, then, that you would

12

1 not ordinarily expect that a child would be receiving
 2 insulin and be hypoglycaemic or have a low blood sugar?
 3 **A.** That would be the correct assumption, it
 4 shouldn't be in that situation. Not in an insulin that
 5 level particularly.
 6 **Q.** And so to the informed lab scientist, does
 7 that give rise to three -- one of three likely
 8 scenarios, (1) that too much insulin has been
 9 administered, in other words that the child was
 10 originally hyperglycaemic but they've been given such
 11 a lot of insulin that it has made them hypoglycaemic?
 12 **A.** Yes.
 13 **Q.** So potentially a medication error, too much
 14 insulin has been given?
 15 **A.** Yes.
 16 **Q.** Or the child shouldn't have received insulin
 17 at all and someone has accidentally given them insulin,
 18 in other words perhaps because they thought they were
 19 giving it to that baby when they'd misidentified who
 20 needed it, so also a potential medical error; is that
 21 right?
 22 **A.** It could be, yes.
 23 **Q.** Or the third scenario, that somebody has
 24 deliberately given insulin to a child who they knew
 25 didn't need it?

13

1 guidance issued by the Royal College of Pathologists; is
 2 that right?
 3 **A.** We do, yes.
 4 **Q.** And is it the position that that guidance at
 5 the time, and I think still now, but at the time did not
 6 have a protocol for whether a phone call was needed in
 7 this sort of scenario?
 8 **A.** That's correct, yes, it's not in the
 9 guidelines.
 10 **Q.** It's not in the guidance?
 11 **A.** No.
 12 **Q.** But within your laboratory you're not slaves
 13 to the guidance, are you?
 14 **A.** You can't be.
 15 **Q.** No. You are expected to exercise clinical
 16 judgment as well?
 17 **A.** That's what our training and role is, yes.
 18 **Q.** And here what is quite apparent is that your
 19 colleague has exercised that clinical judgment and
 20 rather than just putting the results in the post for
 21 them to arrive whenever they do back at the Countess of
 22 Chester, they've picked up the phone and spoken to
 23 someone.
 24 **A.** They have, yes.
 25 **Q.** And just help us with the way in which that

15

1 **A.** That could be the case as well, yes.
 2 **Q.** Yes. But in terms of the likely explanations
 3 for this, are those the three that will spring to mind?
 4 **A.** Yes. I mean, obviously you wouldn't always
 5 err on the side of suspicion, you would think that it's
 6 been -- they've overshoot by giving too much insulin.
 7 **Q.** But that may still be a medical error?
 8 **A.** Yes.
 9 **Q.** So whilst your mind might not -- within those
 10 three possibilities you might be tending towards one
 11 just because that's your natural way of thinking about
 12 it --
 13 **A.** Yes.
 14 **Q.** -- in the best case it's a potential medical
 15 error, and in the worst case it is somebody has tried to
 16 harm or kill?
 17 **A.** Potentially, yes. Yes.
 18 **Q.** And is that in fact really what a competent
 19 clinical scientist should be thinking when they see
 20 results like that?
 21 **A.** So when you see results -- that's why it
 22 warranted a phone call to Chester because -- just to
 23 expedite that information to the clinical team.
 24 **Q.** Now, I just want to have a look at that
 25 telephone call. Within the lab you operate under

14

1 conversation would go. So obviously this is experienced
 2 and knowledgeable professional to experienced and
 3 knowledgeable professional, so I'm sure they're not
 4 speaking in the terms that I am to you, but how would
 5 you expect that conversation to go?
 6 **A.** Yes, so the -- the biochemist that rang this
 7 result through, if it had been myself would have been
 8 done the same thing. We'd have, first of all, just
 9 double-checked that the glucose was low at the time this
 10 sample was taken.
 11 **Q.** Can I just stop you there. Did you have that
 12 information available to you?
 13 **A.** Not -- not when we actually authorised the
 14 result, but when we spoke to them we were told they were
 15 hypoglycaemic at the time.
 16 **Q.** Yes, thank you.
 17 **A.** So that -- that sort of cements the comment
 18 that's been put on there. So we would then say, "Well,
 19 actually we are concerned about this result, there is
 20 a very high insulin with undetectable C-peptide, it
 21 suggests there's exogenous insulin present, it's now for
 22 you guys to discuss it with the clinical team at
 23 Chester." And by clinical team I mean the patient --
 24 the doctors on the wards.
 25 **Q.** And, again, from the colleague who's receiving

16

1 this information, who is, like you, also an expert in
2 it, would you expect that they would be thinking with
3 that information the same three possibilities that at
4 best this may be a clinical error, at worst this is
5 somebody trying to harm a patient?

6 **A.** Yeah. I mean, like I said, we always err on
7 the side of unsuspecting, so it would have -- it would
8 have just been that they think it's -- it's an error and
9 it needs investigation.

10 **Q.** You say that you err on the side of not
11 suspicious, but isn't the correct way to look at this
12 that there is a risk and that that risk needs to be
13 addressed immediately?

14 **A.** Yeah. I mean, the risk is to the child being
15 still hypoglycaemic. Obviously this is quite a few days
16 later, so we would hope that they weren't. But it was
17 really just to start investigating the causes of how
18 that had occurred.

19 **Q.** Well, quite. Because even if too much insulin
20 had been administered and caused the child to enter
21 a hypoglycaemic state, you would still expect there to
22 be a thorough investigation of that because perhaps
23 someone's written the wrong prescription for insulin or
24 perhaps somebody has picked up the wrong level, the
25 wrong amount. So there are potentially systemic

17

1 wards.

2 **Q.** Why would it be for the clinical team to judge
3 whether a further test is required at Guildford as
4 opposed to the biochemist?

5 **A.** So generally if a test is going to be
6 undertaken there has to be a benefit to the patient. So
7 we wouldn't know at the time of authorising this -- or
8 the Chester team might -- what the current clinical
9 status was of that patient. So it's important that if
10 you're going to undertake a test it has an impact on the
11 patient's management.

12 **Q.** And why Guildford?

13 **A.** So Guildford is a specialist referral lab in
14 the UK. It's the only one that does specialist insulin
15 testing. And even they don't test for different types
16 of insulin.

17 But as everybody in the UK measures insulin, we all
18 do it by a test called an immunoassay, and there's
19 obviously been issues suggested around that because it
20 cannot distinguish between exogenous and endogenous.
21 However, with using a C-peptide that helps your
22 differential, it gives you the robust nature of your
23 test to say that it's exogenous. But what we'd want to
24 do is eliminate any other potential interference if it
25 didn't fit the clinical situation.

19

1 problems that need to be addressed, even if the child is
2 now well.

3 **A.** Yeah, and that should be the response of
4 a team to that result.

5 **Q.** Now, let's just be very clear about it. The
6 team, who do you mean?

7 **A.** Sorry, yes, the team that are looking after
8 that child.

9 **Q.** So are you excluding from that the biochemist
10 at Chester or are they part of the team?

11 **A.** So from the sort of biochemistry point of view
12 obviously we've put an additional comment on there about
13 further investigations but it's more what is the current
14 state of that patient and do they need further
15 investigations. That's where the role of the laboratory
16 would aim, but most of it is in dissemination of that to
17 the clinical team looking after the patient so that they
18 can then decide the next course of action.

19 **Q.** Well, let's just address the further
20 investigation that is proposed:

21 "Suggest send sample to Guildford for exogenous
22 insulin. "

23 Now, that is advice being given to the biochemist
24 at Chester; is that right?

25 **A.** Yes, to pass on to the clinical team on the

18

1 Now, if that baby hadn't been hypoglycaemic, then
2 this wouldn't have fit, so it would have to have been
3 further investigated. But as it fitted clinically,
4 whilst we put that comment on there, I don't know of
5 anybody that's actually referred for exogenous insulin
6 testing. And actually Guildford don't do it, they send
7 to Germany. So nobody in UK offers a test which can say
8 this is a certain brand of insulin.

9 **Q.** So, in other words, looking at the molecule
10 and determining whether it is synthetic or naturally
11 produced?

12 **A.** Yes. Yeah.

13 **Q.** And so if this had been you making this call,
14 would you have seen any benefit in sending the sample to
15 Guildford, or for the purpose the benefit of the patient
16 did you have enough information already?

17 **A.** We had enough information already. So we knew
18 the clinical state. We knew these results provided the
19 cause of the hypoglycaemia, which had resolved at the
20 time that the result was telephoned through. So
21 additional testing wouldn't have made any difference to
22 the clinical management of that patient.

23 **Q.** And there was -- you have a quality assurance
24 process within your laboratory, which we don't need to
25 go into the daily of, but the headline is this,

20

1 Dr Milan, is this right that you wouldn't -- your
2 laboratory wouldn't have phoned through a result that
3 they weren't satisfied was accurate?

4 **A.** We wouldn't have even measured the sample if
5 we weren't sure that the analyser was performing
6 appropriately that day. And then with the results, we
7 have to double-check that the -- it's a quality control
8 procedure before we even release a result on to
9 an electronic system to be communicated.

10 **Q.** So let's just have a look at the other end
11 just for your comment. So we're going to look and see
12 how this is recorded on the ward.

13 If we go to INQ0000859. We're going to go to
14 page 334, please. Now, it may just be my eyesight but
15 I suspect we need to crop into that a little.

16 **LADY JUSTICE THIRLWALL:** It's a bit of a challenge.

17 **MR DE LA POER:** So 334. That was what I was
18 expecting. Thank you very much indeed.

19 So, again, this is something that you have had
20 an opportunity to see in advance of today; is that
21 right?

22 **A.** Yeah, only just for this Inquiry. I haven't
23 seen it before that.

24 **Q.** And, of course, it wouldn't be ordinary
25 practice for you to see the ward notes in Liverpool.

21

1 **Q.** But there's nothing misleading about that,
2 because anybody interpreting these results can see what
3 the insulin level is, what the C-peptide level is and
4 the fact that it was at an undetectable level --

5 **A.** Yes.

6 **Q.** -- and so that's not going to lead to any
7 confusion in an informed person, is it?

8 **A.** No, and it's actually got an L by it, so it's
9 indicating that it's low, and there is a reference range
10 there for that ratio. It's not come up very clear on
11 this but it does say 5 to 10, which is the ratio that we
12 would expect.

13 **Q.** So, again, to an informed person this is
14 a very low ratio --

15 **A.** Yes.

16 **Q.** -- a long way outside of the normal range?

17 **A.** (Nods).

18 **Q.** Now, we'll just, finally, look at what is
19 recorded in the clinical notes, and obviously this is
20 two steps removed from your laboratory, but let's just
21 check, from your point of view, using your expertise,
22 what's been recorded. The same INQ page 39, please.

23 Again, the system is just catching up.

24 **A.** That's okay.

25 **Q.** Again, you will -- this will be very familiar

23

1 **A.** No.

2 **Q.** And so far as you can tell, let's see if we
3 can interpret these results. If we look towards the
4 bottom, we've got results telephoned by Con Lewe --

5 **A.** Yes.

6 **Q.** -- at 16.49.

7 **A.** Yes, so even though it wasn't recorded on the
8 previous screen, my colleague must have phoned it to
9 Dr Emma Lewis who was working at Chester, and she's
10 phoned through to the ward then.

11 **Q.** And if we consider the timings, that phone
12 call is nine minutes after the phone call from your lab
13 to the laboratory at Chester?

14 **A.** Correct.

15 **Q.** And just looking at what's recorded on there,
16 are you satisfied that the results obtained by your lab
17 have been accurately captured on that document?

18 **A.** Yes, I am, yes.

19 **Q.** I think the ratio is recorded as 0.0.

20 **A.** Yes, it's an IT glitch unfortunately because
21 the insulin -- sorry, because the C-peptide is recorded
22 as less than 169 it doesn't have a number to put into
23 that ratio, so it can't calculate it.

24 **Q.** So it defaults to zero?

25 **A.** Yes.

22

1 to you once it comes up on to screen. They're
2 handwritten medical notes. That appears to be the
3 correct page but it's in fact lower down that we want to
4 see, please.

5 There we are. Thank you very much indeed.

6 So, again, just using your expertise, please,
7 Dr Milan, the results that came from your lab, are you
8 satisfied that the person writing these notes has
9 correctly identified the relevant parts of the printout
10 sheet that we just looked at?

11 **A.** Yes, I am. They've used the correct form of
12 the insulins, they've used the right SR units value,
13 which is the 4657. They've recorded that as high. The
14 C-peptide, even though they've called it insulin
15 C-peptide it should be clear that's just C-peptide as
16 low, and they've put the less than sign in. And then
17 the ratio they have got is zero. And I think that's
18 a down arrow of lowness, but it's missing half an arrow.

19 **Q.** And we've then got "Discussed with Dr ZA", so
20 that's the person making the entry:

21 "Insulin high. C-peptide low. Unusual for
22 hypoglycaemia."

23 Again, a correct interpretation of the results?

24 **A.** Yes, and obviously they will know on the ward
25 whether they've been given insulin or not. So the fact

24

1 that they've put "unusual for hypoglycaemia" would infer
2 that they didn't give them insulin.

3 **Q.** Thank you. We can take that down. We're
4 going to just pause now and consider the responsibility
5 of everybody in this chain of events.

6 Accepting entirely that the clinicians have a very
7 big responsibility in this situation, not least because
8 they have access to the notes, they were the ones who
9 commissioned the test, and they are the ones who
10 ultimately can check whether insulin was prescribed, and
11 if so whether the correct amount of insulin was
12 prescribed.

13 **A.** Yes.

14 **Q.** But if we take a step before that, looking at
15 the role of the in-house laboratory, your colleagues
16 there will have a very high level of expertise in the
17 interpretation of such results, won't they?

18 **A.** They should do, yes. I mean, they've done the
19 same exams, which is as part of your professional
20 examination you look at all anolytes, even tests that
21 you don't offer routinely.

22 **Q.** And, again, they will have their own
23 protocols, and I'm sure you will feel a little
24 uncomfortable commenting upon what another organisation
25 should do, but I'm here looking at the professional

25

1 responsibility of the professional person in the
2 in-house lab communicating to the ward?

3 **A.** It's the whole chain. It's our responsibility
4 to make sure Chester get that from ourselves and then
5 it's the closing the loop then back to the clinical team
6 from the Chester laboratory.

7 **Q.** Because, do you agree, this is potentially
8 a safeguarding issue?

9 **A.** Safeguarding, yes, but obviously that's a very
10 much a clinical decision because we don't have the
11 information available. For us it's a blood test, it's
12 a clinical case, but for them they have all the details.

13 So if you were on the ward with those results that is --
14 that would be considered a safeguarding issue, yes.

15 **Q.** While you say you don't have all the details,
16 safeguarding, do you agree, is premised on the idea that
17 if there may be a risk, action is required?

18 **A.** It is, but obviously we don't have all the
19 information to determine that full risk, and that risk
20 does rest with the clinical team.

21 **Q.** Do you think back in 2015, when dealing with
22 results of this nature, that because of that
23 safeguarding risk, there needed to be greater resilience
24 built into this chain of communication to make sure that
25 action and investigation occurred?

27

1 responsibility of someone like you.

2 **A.** Yes.

3 **Q.** How important is it that the person who is
4 speaking to the ward makes absolutely clear that it is
5 likely that there is some kind of medical problem here
6 with these results?

7 **A.** I mean, that's vital. I mean, the reason we
8 rang it was to try and emphasise that, and so the
9 message has been translated because we can see that it's
10 gone -- transcribed through to the notes, so it's very
11 important that that message is narrated to the clinical
12 team via that liaison with Chester.

13 **Q.** And this isn't a very common state of affairs,
14 is it --

15 **A.** No.

16 **Q.** -- that a hypoglycaemic child will have very
17 high insulin and very low C-peptide?

18 **A.** Very uncommon.

19 **Q.** And so from the point of view of alarm bells,
20 red flags, whatever you want to -- that should stick
21 with the person as being, "I really need to make sure
22 that this is communicated, taken seriously and acted
23 upon"?

24 **A.** Yes.

25 **Q.** And you would agree that that is the

26

1 **A.** I think at the time, once we'd analysed the
2 result, that chain was fast. We could have measured it
3 sooner, we could have been informed that it was urgent,
4 and we could have closed that front end of that, so that
5 result actually may have directly impacted on patient
6 care.

7 **Q.** But I'm talking about systemic resilience,
8 obviously that's an important part, how quickly it
9 happens, but once you are seized with the knowledge --

10 **A.** Yes.

11 **Q.** -- isn't it of vital importance that at every
12 stage every person understands their responsibility and
13 that action does result at the end?

14 **A.** Absolutely. That's why we have an audit
15 trail.

16 **Q.** And for that -- I just want to invite you to
17 consider something, it's again distant from your
18 position by at least one step, but do you think that
19 results of that potential significance need to be
20 communicated to the Consultant as opposed to a junior
21 doctor? Do you think that level of resilience is
22 required so that there is an in-person conversation
23 between the person with the greatest knowledge and
24 expertise on the ward as opposed to potentially being
25 passed via junior doctors? Do you have a view on that?

28

1 A. It's very difficult because we obviously
2 telephone an awful lot of abnormal and critical results
3 routinely to wards. You'll find that the staff that are
4 the most busy are unable to take those calls because it
5 might mean them leaving a situation where they're more
6 required. So we never have a requirement that we have
7 to speak to the most senior person on the ward. It's
8 just to make sure that you have given that to somebody
9 that clinically understands it.

10 Q. What about another way of building resilience
11 in, which is that an email goes to the Lead Clinician as
12 well, that they can look at in slower time to make sure
13 that they are checking in with their colleagues to make
14 sure that they haven't overlooked it, because, from what
15 you've told us, there's no two ways about it, this is
16 a highly significant result?

17 A. Yes. With emails I think there's always
18 a degree of difficulty with that because you've got no
19 feedback on whether that's actually been acknowledged or
20 read, so an email can sit unread in somebody's inbox.
21 So, again, that wouldn't be our primary route of
22 communication.

23 Q. No, I wasn't suggesting it replaces the
24 telephone call, it's just about -- we know, and there's
25 been a candid recognition of this, that the Consultant

29

1 screen here.

2 A. Yes.

3 Q. We can interpret this relatively speedily.
4 Collected on 9 April from Child L, received by your
5 laboratory 11 April. So this time two days rather than
6 one but --

7 A. Yes.

8 Q. -- presumably that just depends on the post
9 and --

10 A. They're transported by vehicle, samples are to
11 us, especially for an insulin C-peptide because they
12 have to be sent chilled. So it would have been stored
13 and processed appropriately and then sent when the next
14 transport.

15 Q. Now, here, am I right, you tell me, we have
16 a C-peptide level that is detectable?

17 A. Yes. So it's 264 picomoles per litre. So it
18 is above the bottom of that detectable limit.

19 Q. But is that a low C-peptide level?

20 A. So it's always about whether it's appropriate
21 for the insulin level. So on its own in isolation in
22 this case you wouldn't be able to interpret it, but in
23 line with that insulin it's inappropriately low again.

24 Q. Yes. And the insulin figure we're here
25 focusing on is the lower one, the 1,099; is that right?

31

1 who looked at it, I'm paraphrasing here, considered
2 whether or not that had been deliberately administered
3 and dismissed it as being unthinkable.

4 A. (Nods).

5 Q. An error, as she candidly accepted. But what
6 we're looking here is at systemic issues and whether we
7 can build in a situation where that doesn't happen
8 again, and really I'm just seeking your views on --

9 A. Yeah, I think now obviously IT has really
10 supported laboratory medicine and patients because we do
11 have electronic patient records now. So we don't have
12 paper notes, so it can be recorded and it's always there
13 as a memory so that you can click on results and see
14 them. So I would say that's the best mechanism that
15 it's kept in electronic patient record.

16 Q. Have you yourself ever had to phone through
17 a result like this?

18 A. Not an insulin C-peptide, but obviously day in
19 day out, as part of our role, we do phone abnormal
20 results to critical units.

21 Q. Do you think that it is sufficiently abnormal
22 for somebody in your position that such a telephone call
23 would stick with you?

24 A. Yes.

25 Q. Child L, please. INQ0001175. So a familiar

30

1 A. It is.

2 Q. And, again, you are expecting that top number
3 to be 5 or 10 times bigger than that bottom number?

4 A. Absolutely, yes.

5 Q. So, I hope I get the maths right, 5,000 or
6 10,000?

7 A. Yes.

8 Q. Now, we have a note at the bottom of this
9 screen:

10 "Difficult to interpret without concurrent
11 glucose."

12 Is that simply because in your lab you didn't have
13 the glucose?

14 A. Yes. So we never undertake the glucose
15 analysis. That would have been done -- and it could
16 have been done via various mechanisms. They use point
17 of care glucose, which is where you do it on a heel
18 prick on the ward or a lab-based glucose, and we didn't
19 have evidence of either of those with this request.

20 Q. But just putting yourself in the minds of the
21 clinicians and why they would ask for such a test --
22 again, this is the working hypothesis --

23 A. Yes.

24 Q. -- you would have expected them to have done
25 that heel prick test, discovered the child was

32

1 hypoglycaemic and requested the test, that's the
 2 ordinary sequence of events?
 3 **A.** Yes, absolutely. I mean, the -- the only way
 4 to be able to interpret this is if it was taken at the
 5 time of hypoglycaemia. But, again, we don't assume. We
 6 would like to see the result to make that a definitive
 7 interpretation.
 8 **Q.** And are you -- you're satisfied, then, that if
 9 the child was hypoglycaemic then the results were
 10 inappropriate?
 11 **A.** Correct.
 12 **Q.** And did you have any involvement in
 13 telephoning this result through?
 14 **A.** No, this was one of my colleagues again.
 15 **Q.** But, again, this was a result that you've
 16 looked at the records and you're satisfied that it was
 17 communicated the same day?
 18 **A.** Yes.
 19 **Q.** So although the ratio is slightly different,
 20 this is, as before, stepping outside of the ordinary
 21 protocol of just putting it in the post, sending it back
 22 saying, "This is abnormal"?
 23 **A.** Yes.
 24 **Q.** And would you expect a similar conversation to
 25 the one that you've told us about from your colleague to

33

1 **A.** Yes.
 2 **Q.** -- for C-peptide, which you've told us is
 3 longer --
 4 **A.** Yes.
 5 **Q.** -- and so you would expect there to be some
 6 C-peptide still in the system --
 7 **A.** Yes.
 8 **Q.** -- even if not produced at the time of the
 9 test?
 10 **A.** Yes.
 11 **Q.** Dr Milan, I just wanted to ask you about now,
 12 please, and the future.
 13 You tell us in your witness statement that the new
 14 facilities are now giving you a real-time opportunity.
 15 Can you just tell us what that -- what that means in
 16 ordinary language?
 17 **A.** Yes. So -- I mean, our old facilities we'd
 18 outgrown them, which is why some assays were kept and
 19 run offline. But now we've got a purpose-built
 20 laboratory. Every sample is run in real-time that comes
 21 in for tests, for example like insulin and C-peptide.
 22 So as soon as we get a sample it will be through the lab
 23 that same day and a result available either at the end
 24 of that day or the first thing the next morning. So we
 25 have improved process for turnaround time.

35

1 the biochemist at the Countess of Chester?
 2 **A.** Yes, I would.
 3 **Q.** "Tell me what the -- the glucose level is";
 4 right?
 5 **A.** Therefore -- yeah, "Therefore, this is our
 6 interpretation", and they would then communicate that to
 7 the ward.
 8 **Q.** Well, we're going to hear from the scientist
 9 who dealt with this call potentially later today or next
 10 week. But just help us, if the child was slightly above
 11 the hypoglycaemic range, would this result still be
 12 a cause for concern?
 13 **A.** Just because of the -- the reversal of that
 14 ratio, yes, it would.
 15 **Q.** So it doesn't need to be bang within the
 16 hypoglycaemic range for you to look at those numbers as
 17 a professional and say, as before, someone's -- may have
 18 given them too much, someone may have given them insulin
 19 when they didn't need it, or someone may have
 20 deliberately administered insulin to harm them?
 21 **A.** Yes, and the fact that there's a detectable
 22 C-peptide means at some stage that child has made its
 23 own insulin because the C-peptide will be there for
 24 longer than insulin.
 25 **Q.** So this is the residual half-life --

34

1 We have also brought in a process where Chester now
 2 send us the glucose result on the request so that we can
 3 make sure that our interpretation is appropriate on any
 4 additional insulin C-peptide requests.
 5 **Q.** So when you say "on request", does that mean
 6 that they tell you what the result is when they ask for
 7 the test or do you have to go back to them?
 8 **A.** They actually -- I mean it's old-fashioned but
 9 they write it on the request form for us. So we
 10 actually enter that in our system, so we've got a full
 11 profile then to be able to interpret that accordingly.
 12 **Q.** Why do you think, given the potential
 13 significance of this, that that -- the old system
 14 required you only to have two-thirds of the picture and
 15 then have to make a phone call to know whether there was
 16 a problem?
 17 **A.** I guess sometimes it takes a situation for
 18 things to improve, and it's always about service
 19 improvement, and that's what we're always striving for.
 20 And I think also, as far as pathology goes, we're
 21 working as a network now. That had started. It was in
 22 its infancy in 2015/16 but we're working as Cheshire and
 23 Merseyside now, so ultimately we're all going to be on
 24 one IT system in the future. We say in the future, it
 25 could be four/five years off, so we will actually have

36

1 full record access across Cheshire and Merseyside, so it
2 will again improve these processes to make sure --

3 **Q.** Will that --

4 **A.** -- interpretation is appropriate.

5 **Q.** Will that allow you to check the ward notes --

6 **A.** Yes.

7 **Q.** -- to see whether or not insulin has been
8 prescribed?

9 **A.** Yes.

10 **Q.** And will your protocol mandate that once you
11 have access to it if you get results similar to this?

12 **A.** As part of our training anybody, if they get
13 results like that, will want to put an appropriate
14 comment, so we'll look for that and actually check the
15 records before putting a comment on that.

16 **Q.** You mentioned that it takes a situation like
17 this to generate change. But we know that a nurse in
18 Stepping Hill used insulin to kill patients, and that
19 was in 2011, tried and sentenced in 2015, so just
20 before.

21 We know the notorious case of Beverley Allitt who
22 used insulin. Do you think that, in 2015, your lab
23 should have been further ahead with its thinking about
24 how to deal with these results, given those cases?

25 **A.** I think as a laboratory -- in laboratory

37

1 important that we detect this, you all need to be on
2 your guard", does that seem surprising to you now?

3 **A.** I mean, hindsight's a wonderful thing and
4 lessons learnt, but obviously we -- we routinely have
5 overdoses of many different anolytes, not just insulin
6 and C-peptide. So we -- it's about having appropriate
7 processes in place, and, no, we didn't.

8 **MR DE LA POER:** Dr Milan, thank you very much.

9 Indeed those are my questions, my Lady. There are
10 no Rule 10 questions for Dr Milan.

11 **LADY JUSTICE THIRLWALL:** Thank you very much
12 indeed, Mr De La Poer.

13 Dr Milan, thank you very much indeed for coming
14 along this morning and for making so much of the science
15 so much clearer for the rest of us. That completes your
16 evidence and you are free to go.

17 **A.** Thank you very much.

18 **MR DE LA POER:** My Lady, our next witness should
19 not take us too far past our ordinary break at about
20 11.30, so it may be convenient to deal with that witness
21 now or my Lady could take a break.

22 **LADY JUSTICE THIRLWALL:** No, I think we will take
23 the break now so that we can work out precisely what we
24 are going to do, how we're going to order the witnesses
25 for the rest of the day, so we will start again at

39

1 medicine you are one step back from the patient, so, you
2 know, you don't have that -- that luxury of being able
3 to perhaps review all of the clinical situations on
4 that. But also, again, I suppose it comes back to
5 suspicion. We have one -- we have 3,000 results a day
6 but on that day we had one that's potentially very
7 suspicious, so it's putting in processes for one result
8 out of 3,000.

9 So it's about adapting to a situation, so maybe.

10 But, again, we don't -- we didn't have processes in
11 place for that.

12 **Q.** Was there any discussion within your lab about
13 the Stepping Hill case?

14 **A.** Not that I recall, no.

15 **Q.** And just looking back on it, bearing in mind
16 that this is your subject area --

17 **A.** Mm-hm.

18 **Q.** -- the potential, albeit extremely rare, use
19 of drugs as a weapon, does that seem surprising to you
20 that there wasn't training and dissemination of that
21 information given to you as a laboratory saying, "Look,
22 we've had a local" -- because it wasn't a million miles
23 away from your lab --

24 **A.** No.

25 **Q.** -- "We've a local case of this. It's so

38

1 quarter past 11.

2 **(10.57 am)**

3 **(A short break)**

4 **(11.16 am)**

5 **LADY JUSTICE THIRLWALL:** Mr Bershadski.

6 **MR BERSHADSKI:** Good morning, my Lady.

7 **LADY JUSTICE THIRLWALL:** Would you like to come up
8 to the desk, please, and take the oath.

9 **KATHRYN ANN DE-BERGER (sworn)**

10 **LADY JUSTICE THIRLWALL:** Do sit down.

11 **A.** Thank you.

12 **Questions by MR BERSHADSKI**

13 **MR BERSHADSKI:** Good morning.

14 **A.** Good morning.

15 **Q.** Could you state your full name please?

16 **A.** Kathryn Ann De-Beger.

17 **Q.** Is it right that you provided the Inquiry with
18 a statement dated 30 May of this year?

19 **A.** That's correct.

20 **Q.** And are the contents of that statement true
21 and accurate to the best of your knowledge and belief?

22 **A.** They are.

23 **Q.** Thank you. Is it right Ms De-Beger that you
24 qualified as a nurse in 1985 and started working as an
25 occupational health nurse in 1995?

40

1 A. That's correct.
 2 Q. And I think you started working at the
 3 Countess of Chester Hospital in the occupational health
 4 nursing field from 2001; is that right?
 5 A. I believe it was 2009.
 6 Q. And were you the occupational health --
 7 A. 2009, yes.
 8 Q. And were you the occupational health manager
 9 from 2010?
 10 A. I was.
 11 Q. Could you just in a few words summarise for us
 12 what your role as an occupational health nurse involved?
 13 A. Okay, so occupational health is all about the
 14 physical and mental well-being of all employees in the
 15 workplace, so we're concerned with the individual and
 16 the effects on health. So it's a unique speciality in
 17 that we don't have any patient contact. We are dealing
 18 with members of staff that are employed by the Countess.
 19 So in essence the staff are our patients.
 20 The role encompasses a variety of different roles,
 21 I suppose, but one of them is seeing staff that are
 22 being managed under HR policies, management policies.
 23 So although occupational health is totally independent
 24 and impartial, we do sit under HR but we don't have any
 25 influence on the application or the decision-making of

41

1 A. (Nods).
 2 Q. In this case that was Eirian Powell; is that
 3 right?
 4 A. I believe it was.
 5 Q. Thank you. And I think it says there:
 6 "As I mentioned to you on the phone ..."
 7 So would that have been a conversation between
 8 yourself on the phone with Eirian Powell or somebody
 9 else?
 10 A. That reason for referral would have been
 11 written by Eirian.
 12 Q. Yes. And it goes on to say:
 13 "I requested that Lucy come to the Occupational
 14 Health Department for support especially in view of the
 15 proposed allegation that will evidently come to light."
 16 Do you recall what was said to you about "the
 17 proposed allegation that will evidently come to light"
 18 at this point?
 19 A. No, that would have been all the information
 20 we received that's written on this referral. But this
 21 referral isn't the first time that I would have met
 22 Lucy Letby. I met her earlier than when -- this
 23 referral.
 24 Q. Right. So this referral we can see at the top
 25 is dated 30 June --

43

1 any HR policies. We are there to support and give
 2 advice to members of staff going through those policies
 3 in a very independent, impartial manner and
 4 non-judgmental.
 5 Q. Thank you for that, Ms De-Beger. You say in
 6 your statement that you were first asked to provide some
 7 support to Letby in July 2016; is that right?
 8 A. That's correct.
 9 Q. Now, if I could ask for a document up on the
 10 screen, this is the referral, as I understand it, which
 11 your department would have received, that's 0018046.
 12 Thank you. Do you recognise this document,
 13 Ms De-Beger?
 14 A. I do recognise that document.
 15 Q. Now, can you just help us, would that document
 16 have come in directly to you or to your department more
 17 generally?
 18 A. That would have come directly to the
 19 department.
 20 Q. Would you have read it?
 21 A. I believe I did because I believe that's my
 22 writing at the top that says "Nurse appointment".
 23 Q. Thank you. We can see under "Reason for
 24 Referral" -- now, that presumably would have been
 25 completed by the person mistaking the referral to you?

42

1 A. Yes.
 2 Q. -- 2 -- well, it says "2916", I think
 3 presumably that's 30 June 2016. When would you have --
 4 A. So --
 5 Q. -- met --
 6 A. So the appointment for this, as you can see,
 7 is Thursday, 21 July.
 8 Q. Yes.
 9 A. But I saw Lucy Letby, I believe -- well,
 10 I can't remember without looking at my notes, but
 11 I believe it was the week before.
 12 Q. So the week before the appointment?
 13 A. Yes.
 14 Q. So after you received this form, presumably?
 15 A. Yes, but I probably wouldn't have known about
 16 that form when I first saw Lucy Letby.
 17 Q. Okay.
 18 A. Lucy Letby was brought to the department by
 19 her manager, and that was when I first saw her.
 20 Q. And do you think at that point you would have
 21 been given some information in however broad terms about
 22 the proposed allegation that will evidently come to
 23 light?
 24 A. No, none whatsoever.
 25 Q. So would you have known that there was

44

1 a proposed allegation that will evidently come to light?

2 **A.** At the appointment I saw her about -- around
3 about the 14th or 16th of July I was not told -- I was
4 not told what the allegations were, no.

5 **Q.** Okay. So you would have known that there was
6 some sort of allegation but not what it was?

7 **A.** No, I only knew that there was an
8 investigation on the neonatal unit and Lucy was on
9 restricted practice and so that's why they brought her
10 down to me.

11 **Q.** Okay. If I could, please, turn up another
12 document on the screen, this is 0003174. If we can go
13 to page 30 -- sorry, to page 29 of that, please. You
14 can see an email here, on page 29, of 8 July 2016. And
15 if we just go over a couple of pages to page 31, towards
16 the bottom there, can you see where it says
17 "Sue Hodkinson", can you just tell the Inquiry who that
18 was?

19 **A.** Sue Hodkinson was the Executive Director of HR
20 and my direct line manager.

21 **Q.** Yes. And so it says there:
22 "Sue Hodkinson updated at 1.40 pm Kathryn De-Beger
23 and Katie Holstrum have visited the NNU at 12.15 pm
24 today. Team spoken with. Shift leader spoken with. No
25 immediate support put in place but team feel

45

1 that Lucy Letby had been redeployed away from the
2 neonatal unit?

3 **A.** That's correct.

4 **Q.** So would it be fair to say that around
5 July 2016 you would have known that the substance of the
6 allegation against Lucy Letby was that she was --
7 somehow may have been related to those deaths?

8 **A.** No. The reason I -- I would think that she
9 was moved to a non-clinical role was because there --
10 she was having to redo her competencies and there was
11 the investigation, but no more about accusations around
12 her being involved, no.

13 **Q.** So did you make any connection in your mind
14 between the fact that you were visiting the neonatal
15 unit because of deaths and Letby being somebody that you
16 were supporting in particular?

17 **A.** Sorry, can you repeat the question?

18 **Q.** Did you make any connection in your mind at
19 that time between the fact that the neonatal unit needed
20 support because of increased deaths and that Letby had
21 been redeployed away from that unit?

22 **A.** I would have made the connection that
23 Lucy Letby would have been part of the investigation
24 that they were looking at, yes.

25 **Q.** Yes. I'm just picking this up because I think

47

1 vulnerable."

2 Do you recall visiting the neonatal unit on or
3 around 8 July 2016?

4 **A.** I have no direct recollection of visiting on
5 this particular day, but Occupational Health did visit
6 various wards and departments throughout the hospital on
7 a regular planned basis.

8 **Q.** Well, do you recall visiting the neonatal unit
9 if not on that specific date then around that time of
10 the summer of 2016?

11 **A.** Yes, I do.

12 **Q.** And what was the purpose of your visit to the
13 neonatal unit then?

14 **A.** So, as I said at the beginning, our role was
15 about the health and well-being of staff, so we would
16 have gone to do a welfare visit to see how the staff
17 were managing and coping.

18 **Q.** And what was your understanding of why you
19 were going to see the neonatal unit around that time to
20 see how the staff were coping?

21 **A.** Because there was an increase in deaths on the
22 unit and that was under investigation.

23 **Q.** Right. So is it fair to say that in around
24 July 2016, you would have known both that there was
25 an increase in neonatal deaths on the neonatal unit and

46

1 in your statement you suggest at paragraph 10 that it
2 was at some point later after you started providing
3 Letby with support, that you were made aware that the
4 investigation was to do with deaths on the neonatal
5 unit, but I think you're now saying that you would have
6 been aware closer to July 2016, that that was the case?

7 **A.** I'm saying that on the very first time I met
8 Lucy Letby on the 14th or 16th of July I was not aware
9 of any connection or that there was an increase in
10 deaths on the unit. But subsequently, later, in my
11 other meetings with her, I was, but I can't pinpoint the
12 time when that might have been.

13 **Q.** Okay. And is it right that you started from
14 July 2016 visiting the neonatal unit on a weekly basis
15 to provide the staff there with support in light of the
16 increase in deaths?

17 **A.** I don't believe it was a weekly basis but it
18 would have been a regular basis, yes.

19 **Q.** Well, just so -- just so that you have it, can
20 I ask for document 0014604, page 24. Yes, just the
21 previous page.

22 Do you recall speaking to investigators from the
23 Royal College of Paediatrics, the RCPCH team?

24 **A.** I didn't recall until I was provided with this
25 evidence for the Inquiry.

48

1 Q. I think these are typed notes of an interview
2 with you that they held on 1 September. Again, we've
3 got a slightly odd date there, 1 September 2016, and you
4 can see it just says, three lines up from the bottom:

5 "Dropped in to see how staff are. Was two to three
6 times years ..."

7 Presumably that means was two to three times
8 a year:

9 "... after the problems weekly basis."

10 A. Yeah, that could have been correct at that
11 time but it wouldn't have been correct for a prolonged
12 period of time. There's no way we could have visited
13 the neonatal unit on a weekly basis for the period of
14 time we're talking about.

15 Q. So you would have been visiting the NNU on
16 a weekly basis, what, from July 2016 until at least
17 September 2016; is that right?

18 A. I haven't got any evidence of that but that
19 could be correct.

20 Q. And did you discuss the increase in deaths of
21 babies on the NNU with staff when you conducted these
22 regular visits?

23 A. No, I didn't.

24 Q. So what were you discussing with them?

25 A. We were discussing their health and well-being

49

1 Q. Now, would -- would -- this high amount of
2 direct messaging over texts, would that be a normal part
3 of the kind of support you would provide to a staff
4 member?

5 A. No, it would not.

6 Q. If we look at some of the messages, for
7 example if we start from page 18 of that document that's
8 on screen, please. Towards the top there, there's
9 a discussion of going out shopping in Liverpool.

10 Over the page, on page 19, I think we can see some
11 continued discussions about shopping, about family
12 matters, an upcoming wedding.

13 And over the page, on page 20, some discussion
14 about cooking.

15 Would it be usual for you to be having these sorts
16 of discussions about personal extraneous matters with
17 a member of staff that you were supporting that was
18 going through an HR process of some sort?

19 A. No, it wouldn't be normal at all. As I say,
20 I've not been in contact in a WhatsApp group with any
21 other member of staff, but I've not been supporting
22 staff in this situation ever before and I felt at the
23 time that I was the only support that Lucy Letby had.

24 I was given that role by the Trust to support her,
25 to support her mental health, to support her well-being

51

1 because that's what occupational health is all about.

2 Q. Thank you. If I could just take you to
3 another document, please, 0101342. We've got an extract
4 of some of the text messages that you exchanged with
5 Lucy Letby there.

6 Would it be fair to say that there was
7 a significant amount of text message and WhatsApp
8 messaging between you and Letby for the period that you
9 were providing her with support?

10 A. That would be correct.

11 Q. Now, I don't know, I'm sure you haven't
12 counted them up, but I've estimated around 750 messages
13 may have gone between you over the period of around
14 15 months. Does that sound about right?

15 A. That could be right, including all the group
16 messages as well, yes.

17 Q. And that was a WhatsApp group you're referring
18 to, which I think you were a member of along with
19 Karen Rees, Hayley Cooper and Lucy Letby; is that right?

20 A. That's correct.

21 Q. Now, I think you've said in your statement
22 that being part of a WhatsApp group to provide support
23 for a member of staff was not a usual thing for you to
24 do as part of your role; is that right?

25 A. That's right.

50

1 going through what I thought at the time was a very
2 distressing situation, and it was given to me to support
3 her the best that I could and keep her in work, to
4 maintain her mental health during that period, and
5 I felt that fell just on me.

6 So in order to do that, I did that to the best of
7 my ability, and that was why there were so many messages
8 to try and make sure that she was okay. And all the
9 messages can't be about mindfulness and coping
10 strategies to keep her grounded and to keep her in
11 moment, it was about normally events as well.

12 Q. If we go to page 24, please, of those
13 messages. You say to her -- and I think the green
14 message will be one from you; is that right?

15 A. It will be but, I can't read it on the screen.

16 **LADY JUSTICE THIRLWALL:** Neither can I.

17 **MR BERSHADSKI:** The screens aren't always the best
18 quality. I'll read out the relevant bit.

19 A. Thank you.

20 Q. You say to her:

21 "We are supporting all the staff. I was on the
22 unit yesterday and will go again Monday but you are my
23 priority."

24 Why was Letby your priority if you were also tasked
25 with supporting all the members of staff on the neonatal

52

1 unit?

2 **A.** Because I was the only person that Lucy Letby
3 was seeing. I did have other members of the team that
4 were able to do ward and neonatal unit visits.

5 **Q.** You did mention before that you were part of
6 a support group along with Karen Rees and Hayley Cooper
7 on WhatsApp. So would it be fair to say that there
8 were -- you weren't the only member of staff who was
9 supporting Letby at this time; is that fair?

10 **A.** That is fair, but in the role that I did I had
11 a very different role to them. So, as you are aware,
12 Hayley Cooper is her Union rep, so she would have
13 advised her on Union matters. Karen Rees was a very
14 senior member of staff who would advise her on other
15 matters, clinical matters maybe. I was the only person,
16 in my view, that was supporting her well-being at that
17 time.

18 **Q.** You would have, presumably most of the time,
19 been seeing Letby as part of regular one-to-one
20 Occupational Health support meetings?

21 **A.** (Nods).

22 **Q.** And they would be -- you would document them
23 in a formal way as part of your work; is that right?

24 **A.** That's correct.

25 **Q.** Why did you also need, in addition to

53

1 a serious allegation has been made against a member of
2 staff; is that right?

3 **A.** That is correct.

4 **Q.** With the benefit of hindsight, what do you
5 think -- and as a senior Occupational Health nurse, what
6 do you think the substance of that guidance should have
7 been for how to manage a member of staff in this
8 situation?

9 **A.** I do feel there should be guidance on the --
10 as you're putting it, the amount of time and contact
11 that you have with somebody that's going through this.
12 But at the time, I didn't feel there was any other
13 alternative. There was nobody else to share this with.
14 I had no clinical supervision to talk to this -- with
15 anybody. So I was working to the best of my ability,
16 but there is some learning that could be taken from
17 this, definitely.

18 **Q.** I think it's right that you attended one
19 meeting with Letby and her parents where there was
20 an argument between Letby and her parents about how to
21 deal with the process that she was under; is that right?

22 **A.** That's correct.

23 **Q.** Do you think, again with the benefit of
24 hindsight, that such guidance should prevent you from
25 getting involved with that sort of intra-familial

55

1 providing that regular support documented, to have this
2 extensive informal channel of communication with her, do
3 you think?

4 **A.** Because that then enabled Lucy Letby to
5 contact me when she needed to, even if that was outside
6 of my work hours.

7 **Q.** You said at the start of your evidence that
8 part of your role as Occupational Health nurse and
9 Occupational Health manager is to provide a completely
10 independent service in effect to a member of staff.

11 Do you think on reflection and with the benefit of
12 hindsight that having such a significant degree of
13 informal personal contact with a member of staff that
14 you are supporting that that might tend to detract from
15 that independence which you are required to maintain?

16 **A.** When I say independence, I mean independence
17 from HR, independence from any policies and procedures.
18 We are just concentrating on that individual member of
19 staff. So in doing this I felt I was going above and
20 beyond my job role, and my job role was given to me by
21 the Trust to support her through this investigation.

22 **Q.** I think you've said towards the end of your
23 witness statement that you think it would be useful for
24 there to be -- to have been a bit more guidance for
25 somebody in your role about how to act in that role when

54

1 dispute?

2 **A.** So anybody attending an Occupational Health
3 appointment can bring somebody with them. So they can
4 bring their partner and they can bring their Union rep,
5 they can bring their manager. So anybody attending can
6 bring somebody with them for support. So that's not
7 unusual.

8 Now -- and in this case, Lucy Letby rang me from
9 home asking to see me and ask whether she could bring
10 her mother with her. So I agreed because that is my
11 standard practice.

12 **Q.** Is it right that you also had contact on the
13 phone directly with Letby's father?

14 **A.** I do not recall any telephone calls with
15 Letby's father.

16 **Q.** I think you may have seen that there's
17 a witness who suggests that there was pressure being put
18 on you that you were in effect being harassed by Letby's
19 father. Is that incorrect, then; is that what you're
20 saying?

21 **A.** I have no recollection of any telephone calls.
22 I have no recollection of being harassed.

23 **Q.** Thank you. Could I ask you to please turn up
24 or to put up on the screen document 0017911 and page 7
25 of that document, please.

56

1 Ms De-Beger, this is an extract from a witness
2 statement that you gave to the police as part of the
3 criminal proceedings. I just want to ask you about one
4 passage of that.

5 You see in the middle of the page it says:
6 "Lucy did ask for meetings with me on anniversaries
7 of some of the babies' deaths as she was particularly
8 distressed."

9 How many times, approximately, did Letby ask you
10 for meetings on anniversaries of the deaths of babies?

11 **A.** To my recollection, it was only once.

12 **Q.** Did any of the other members of staff that you
13 were supporting on the neonatal unit, nurses in
14 particular, did they ask you for meetings around the
15 anniversaries of the deaths of babies?

16 **A.** No.

17 **Q.** Is it right, therefore, that Letby's distress
18 around anniversaries of babies was unusual compared to
19 other nurses that you were supporting at the time?

20 **A.** I can only take it on that at the meeting that
21 I had with Lucy Letby she spoke about being particularly
22 distressed that week because it was, as she recalled, an
23 anniversary of one of the baby's deaths. But we then
24 would have a meeting that was just about her managing
25 her feelings, her symptoms and talking about coping

57

1 Countess --

2 **A.** Correct.

3 **Q.** -- in this role. In that period of time, so
4 from when you started in 2010 until July 2017, how many
5 times had you come across a situation where a member of
6 staff was displaying this kind of distress around the
7 anniversary of the death of a patient, is that at all
8 a normal situation for you to confront?

9 **A.** I can't recall another situation, no.

10 **Q.** Given that you knew at this time that the
11 allegation was that Letby had deliberately killed babies
12 on the neonatal unit, did it give you any cause for
13 concern that she was displaying this distress at the
14 anniversary of a baby death?

15 **A.** No, not at all, because she -- it was in the
16 context of she said that she was feeling particularly
17 distressed but how much more distressed would the
18 parents be at the loss of their baby, that's how she
19 framed it, and -- but we had no other conversation about
20 that.

21 **Q.** And if I could just ask one more document to
22 be put up on the screen. This is 0063777. If we go to
23 page 2, so we can follow this chain of emails.

24 You will see at the bottom Letby emails you on
25 25 April asking if you'll be around saying that she's

59

1 strategies.

2 **Q.** And so this meeting that she asked for was in
3 July 2017 I think you've said in your police statement?

4 **A.** (Nods).

5 **Q.** So by that point, would you have known that
6 some of the allegations against Letby was that she had
7 deliberately killed babies on the neonatal unit?

8 **A.** That is likely. So I see members of staff who
9 are under an investigation for all sorts of reasons, it
10 could be that they've allegedly committed theft, fraud,
11 been racist, whatever it is, and I offer the staff
12 support, coping strategies, onward referrals throughout
13 the whole of that investigation and until it reaches the
14 conclusion.

15 Now, the conclusion can be that the person's given
16 a written warning, they're dismissed, or they're
17 actually returned to work. Now, that does not influence
18 what I do in my practice during that investigation with
19 that member of staff because, as I said to you, it's
20 independent, it's impartial and it's non-judgmental. So
21 I would look after staff during that investigation
22 without knowing any of the detail or that detail
23 impacting on what I do.

24 **Q.** I think you've said earlier that you've been
25 supporting members of staff since 2010 at the

58

1 not having a good week and that she's going to Alder Hey
2 the following day, and she's asking you whether you've
3 read some amended minutes of a document.

4 And you respond on the same day saying:

5 "I think going to Alder Hey is a good idea. It
6 will be something positive. How was Saturday? Did you
7 go to an event there? I think you should go to
8 Alder Hey regularly, it will give you a little break
9 from the stress here."

10 Would you have known at this point, so April 2017,
11 that the allegation against Letby is that she killed
12 babies on the neonatal unit?

13 **A.** I'm presuming I would have known by then, yes.

14 **Q.** Why did you think, in that case, with that
15 knowledge, that Lucy going to Alder Hey would be a good
16 idea and something positive?

17 **A.** Because I would of assumed that that was in
18 place and agreed by senior managers, and -- and if it
19 was agreed, which I assumed it was, then to be away from
20 the stress of the Countess would have been a good idea
21 for her health and well-being.

22 **Q.** Do you think it fair to say that at this point
23 you would have personally not agreed with the allegation
24 against Letby, that's why you thought it would be a good
25 idea for her to go?

60

1 A. Say that again, sorry.
 2 Q. Well, is it fair to say that you, at this
 3 point, had taken a view that it was safe for her to go
 4 to Alder Hey?
 5 A. That's not my remit at all.
 6 Q. If we go back up the page to follow the chain
 7 to page 1. You say to her in your -- in the email at
 8 3.55, just below the middle of the page:
 9 "I understand why you are feeling like you are but
 10 you have all the reassurances that the execs and us
 11 support you returning to the NNU and that is where you
 12 belong."
 13 Why did you feel, at this point, that the
 14 Executives were supporting Letby returning to the NNU?
 15 A. Because that's all the information that was --
 16 well, that was the information that was always given to
 17 Lucy Letby at our meetings. So at the meetings with
 18 Sue Hodgkinson, Alison Kelly, Karen Rees, Hayley Cooper
 19 and myself the meetings were all about how we could work
 20 to returning her to the NNU.
 21 Q. I think you had known by this point that she
 22 had been given a management instruction that she wasn't
 23 even allowed to visit the NNU; is that right?
 24 A. I don't know whether it was by this time.
 25 I haven't got a timeline, but --

61

1 that's what I reply to her on her confusion about what
 2 was -- what was happening.
 3 Q. I think you address in your statement that
 4 you're aware of safeguarding principles and that if you
 5 come into possession of any information that might cause
 6 you to think there's a risk to somebody, that you would
 7 deal appropriately with that and pass it on; is that
 8 fair?
 9 A. That's fair.
 10 Q. And I think you say in your statement that you
 11 didn't come across any such information when you were
 12 dealing with Letby, hence you didn't initiate any of the
 13 safeguarding routes that you were aware of.
 14 With the benefit of hindsight now, knowing that
 15 Letby was accused and has been convicted of killing
 16 babies on the neonatal unit, do you think that this
 17 email from her could have been enough for you to mention
 18 it to somebody?
 19 A. No, I don't, because she says "maybe I have
 20 done something", she doesn't say she has, and I know
 21 that she was very distressed and stressed at that
 22 particular time, and all the conversations that we've
 23 had previous to this she has always told me that she'd
 24 done nothing wrong, why did -- why were people doing
 25 this to her? And why did the Consultants hate her so

63

1 Q. Okay. And you reply -- well, she replies to
 2 you -- sorry, just up the page -- at 4.07 she says:
 3 "I feel as though this must be my fault and maybe
 4 I have done something wrong to the babies and blame
 5 myself -- do you think that's normal?"
 6 Do you see that?
 7 A. Yes, I do.
 8 Q. Given you say you knew by this point that the
 9 allegation against Letby was that she deliberately
 10 killed babies on the neonatal unit, did it give you any
 11 cause for concern when you received that email from
 12 Letby saying, "I feel as though this must be my fault",
 13 et cetera?
 14 A. No, I didn't, because at that time, in
 15 April 17, I believe that mediation between the
 16 clinicians and Lucy Letby had broken down and she was
 17 very distressed about that. Her -- she was -- it was
 18 a plan to return her to the neonatal unit at the
 19 beginning of April and that had been paused, so she was
 20 very upset about that, and this -- I do remember this
 21 time being that she was very, very distressed, very
 22 confused about why she couldn't go back, why it had been
 23 paused when it had been planned that she was going back
 24 and she'd been visiting the unit. So I felt that that
 25 was an explanation of all those mixed emotions, and

62

1 much? And I heard that many times.
 2 Q. I think you'd said in your statement that you
 3 didn't tend to have discussions with Letby about the
 4 actual allegations.
 5 A. (Nods).
 6 Q. So is it fair to say you must have had some
 7 discussions about the substance of the allegations
 8 because you say she was telling you she'd done nothing
 9 wrong?
 10 A. So she would tell me she has done nothing
 11 wrong and how that made her feel --
 12 Q. Yes.
 13 A. -- but nothing about the babies or deaths.
 14 Q. Just going back to the point you made earlier
 15 that you -- it's your wish that there had been some
 16 more -- some clearer guidelines about how to provide
 17 Occupational Health support to members of staff accused
 18 of misconduct, do you think that if there had been such
 19 guidance in place you might have acted differently upon
 20 receipt of such a message from Letby?
 21 A. I think if I'd had some clinical supervision
 22 it might have been something that I would have spoken to
 23 them about, yes.
 24 **LADY JUSTICE THIRLWALL:** Clinical supervision,
 25 that's where someone's responsibility is to you and so

64

1 you can offload. I know it's called "supervision" but
 2 is that what you mean --
 3 **A.** Yes.
 4 **LADY JUSTICE THIRLWALL:** -- someone was there for
 5 you?

6 **A.** Yes, it's like a mentorship or a clinical
 7 supervision where you might want to discuss particular
 8 cases that you've got and you would -- with somebody
 9 that was equally qualified that you would be helped on
 10 the way forward with that particular case, yes.

11 **LADY JUSTICE THIRLWALL:** I follow, thank you.

12 **MR BERSHADSKI:** Thank you, my Lady, those are my
 13 questions for Ms De-Beger.

14 **LADY JUSTICE THIRLWALL:** Thank you, Mr Bershadski.
 15 Ms De-Beger, I've got no more questions for you.
 16 Thank you very much for coming and giving your evidence
 17 to us today. You are free to go.

18 **A.** Thank you.

19 **LADY JUSTICE THIRLWALL:** I think the next witness
 20 is going to be ready at 1 o'clock, so I suggest that we
 21 take the lunch break now and we will start again at
 22 1 o'clock.

23 (11.54 am)

(The luncheon adjournment)

24 (12.59 pm)

65

1 **A.** No, '81.
 2 **Q.** '81, I beg your pardon. And you became
 3 a member of the Royal College of Pathologists in 1996?
 4 **A.** That's correct, yes.
 5 **Q.** And a fellow in 2004?
 6 **A.** Yes, that's right.
 7 **Q.** You are a chartered -- a registered chartered
 8 scientist?
 9 **A.** Yes.
 10 **Q.** And a member of the Association for Laboratory
 11 Medicine?
 12 **A.** Yes, that's correct.
 13 **Q.** And you have been on the GMC specialist
 14 register for chemical pathology since 17 April 1997?
 15 **A.** Yes, that's correct.
 16 **Q.** And you are currently a Consultant chemical
 17 pathologist at the Countess of Chester Hospital; is that
 18 right?
 19 **A.** Yes, that's right.
 20 **Q.** And did you hold that position in 2015/2016?
 21 **A.** Yes, I've been in that position since 1996.
 22 **Q.** Dr Bowles, I would like to begin the substance
 23 of your evidence by considering your department in 2016.
 24 So that department, firstly, is the blood science
 25 department; is that right?

67

1 **LADY JUSTICE THIRLWALL:** Mr De La Poer.

2 **MR DE LA POER:** My Lady, our final live witness for
 3 today is Dr Shirley Bowles, and I wonder if she might
 4 come forward to the witness box, please.

5 **LADY JUSTICE THIRLWALL:** Yes, Dr Bowles, do come
 6 forward.

7 **DR SHIRLEY BOWLES (affirmed)**

8 **LADY JUSTICE THIRLWALL:** Thank you very much
 9 indeed, Dr Bowles, do sit down.

10 **A.** Thank you.

11 **Questions by MR DE LA POER**

12 **MR DE LA POER:** Please could you give us your full
 13 name.

14 **A.** Dr Shirley Anne Bowles.

15 **Q.** Dr Bowles, can you confirm, please, that you
 16 provided to Inquiry a witness statement dated 24 May of
 17 this year?

18 **A.** Yes, I did.

19 **Q.** And are the contents of that witness statement
 20 true to the best of your knowledge and belief?

21 **A.** Yes, they are.

22 **Q.** I'll just deal with your background first, if
 23 we may.

24 You qualified as a medical doctor in 1996; is that
 25 right?

66

1 **A.** Yes, that's right.
 2 **Q.** And in 2016, where did you sit within the
 3 hierarchy of that department?
 4 **A.** I was director of blood sciences.
 5 **Q.** So at the very top?
 6 **A.** Well, it's sort of -- yes, I mean, it's a --
 7 I suppose it's where the buck stops with respect to sort
 8 of problems in the department, but there are other
 9 managers who also are responsible for running the
 10 day-to-day.
 11 **Q.** And were you the sole Consultant chemical
 12 pathologist at that time?
 13 **A.** Yes, I was the only chemical pathologist but
 14 there was also a Consultant clinical scientist working
 15 alongside me.
 16 **Q.** And between the two of you, did you share the
 17 duty biochemist role?
 18 **A.** We did, yes.
 19 **Q.** Just tell us, please, in a nutshell what the
 20 duty biochemist role was in 2016?
 21 **A.** Well, it was on a rota basis, you do a day at
 22 a time, and there was a variety of things that would
 23 fall under that umbrella, things like reviewing the
 24 "send away" lists because when samples were sent away we
 25 would review them to see if they all seemed appropriate

68

1 in terms of what was being sent and why, but the main
2 bulk of it was to do with looking through the various
3 reports of results.

4 So there would be two main groups of results.
5 There would be some that had been filed after analysis
6 for us to look at, so they would be some of the more
7 complex tests like hormones, two more markers,
8 et cetera, where it was felt they weren't required for
9 the immediate management of the patient, so they could
10 actually be held back for a -- you know, until the duty
11 biochemist was able to review them, and it could be
12 helpful for comments, et cetera, to be.

13 And then there was another group of results which
14 we called the exception report, which I instigated,
15 which was results that had already been authorised but
16 we felt should -- would benefit from another review.

17 So there were often results that were extremely
18 abnormal and fell on to our telephone list, and we would
19 then review them and see -- make sure that they had been
20 telephoned, if that was appropriate, check that if there
21 was any additional investigations could be added because
22 sometimes, for example, if there was a very high calcium
23 we might add a parathyroid hormone to see if we could
24 help determine the cause of that high calcium. And
25 sometimes I would check to see whether the clinical team

69

1 **A.** Oh, it's difficult to say because you always
2 feel you're -- you're stretched. I think we've always
3 felt that they were on the lean side of the staffing
4 spectrum. In terms of the sort of clinical team there
5 were only two of us, so if -- and, for example, on that
6 particular week Dr Lewis was actually on annual leave so
7 I was actually on my own all week, so we would be doing
8 duty biochemist five days as well as doing clinic. So
9 there were times when it did feel a bit pressured but
10 I think there is a feeling in the NHS that you just sort
11 of get on with it really and -- and manage.

12 **Q.** I appreciate others have spoken about that
13 attitude in terms of just making do and carrying on, but
14 the week that we're going to be focused upon you've
15 described your colleague being away leaving --

16 **A.** Yes.

17 **Q.** -- you to do five straight days as duty
18 biochemist on top of your other duties.

19 **A.** Yes.

20 **Q.** I mean, being realistic about it, was that too
21 much for one person to be doing well or would you say
22 that you, that week, were able to do every aspect of
23 your job well?

24 **A.** I would hope I would. I mean, I've got
25 experience to prioritise and I would hope that I would

71

1 had acted on the results. So, for example, if someone
2 had a very high potassium I would look up the patient
3 again and see whether it had been repeated or whether
4 there was anything saying that they'd actually done
5 something about it. So it was a sort of second check of
6 results that had already gone out.

7 We would also field any phone calls to the lab
8 about anything, any queries about how to investigate
9 patients, et cetera.

10 **Q.** In that duty biochemist role, would you be the
11 person being asked for if another laboratory had urgent
12 or abnormal results that they wanted to speak to
13 somebody about in your department?

14 **A.** Usually. Occasionally there were
15 relationships perhaps with, for example, some of the
16 clinical scientists a different lab might know Dr Lewis
17 well and they might decide they might have a phone
18 number of and just call her directly, but other times
19 they would just ask to speak to the duty biochemist and
20 then they would be put through to whoever was doing that
21 duty at the time.

22 **Q.** In terms of how your department was
23 functioning in 2016, was it able to cope with the
24 demands which were being placed on it, or was it under
25 strain?

70

1 know what were the important things to do and what were
2 the things that could be left.

3 But, yes, you would feel busy -- very busy. But,
4 as I say, it was a situation I'd always been in, because
5 in fact when I started at Countess of Chester I didn't
6 even have a clinical scientist, so I was actually on my
7 own. So it's -- it wasn't something that I sort of saw
8 as unusual, and I don't think it's unusual in the NHS.
9 I mean, for sort of the hospitals the size the Countess
10 it would have been quite common to only have
11 a Consultant scientist and the chemical pathologists in
12 that department, so I don't think I saw it as
13 exceptional.

14 It was busy, I hoped that I managed it well.

15 **Q.** Part of your role as duty biochemist, as we
16 understand it, would be to contact the ward or
17 particular departments in the event that certain results
18 justified it.

19 **A.** Yes.

20 **Q.** Focusing upon the paediatric ward and more
21 specifically the neonatal unit, what was your experience
22 at that time of being able to get hold of a doctor to
23 speak to of sufficient knowledge, authority and
24 experience to talk about results?

25 **A.** I have to admit that I don't actually think

72

1 that I'd actually had to call the neonatal unit very
 2 often because most of the results that were phoned
 3 through would have been done by the -- by medical
 4 scientists. Most of the sort of every day results like
 5 bilirubins or potassiums, et cetera, they would have
 6 been done by the people actually analysing the
 7 specimens. We had a protocol for telephoning results,
 8 and those results that came straight through off the
 9 machines would have been phoned by the biomedical
 10 scientist.

11 So the need for myself or Dr Lewis to intervene was
 12 probably very infrequent. But, in general, if I had to
 13 get hold of people on the wards it was variable as to
 14 how successful I would be.

15 **Q.** In that the telephone wasn't always answered
 16 or that it was answered but the person you wanted to
 17 speak to wasn't available or a combination of the two?

18 **A.** A combination of the two. It wasn't unusual,
 19 particularly at busy times of the day, which would
 20 include sort of in the morning, that nobody would answer
 21 the phone and you'd have to try again later, or you
 22 would answer the phone -- and I usually, if I was
 23 ringing, I would want to speak to a doctor rather
 24 than -- I mean, when the biomedical scientists ring
 25 results, they generally just give it to whoever answers

73

1 doctor or the Consultant in charge of the patient, what
 2 sort of request would you be making when the phone is
 3 answered?

4 **A.** I would usually be looking for the doctor who
 5 was looking after that patient, so it could be -- it
 6 wouldn't normally be the Consultant because they
 7 wouldn't usually be on the ward. It would be unusual
 8 unless I had to hit a ward round. So it would usually
 9 be one of the doctors who was directly involved in that
 10 patient's care.

11 **Q.** Let's just walk through the process. We've
 12 heard from your colleague, Dr Milan, this morning,
 13 something about the Liverpool end of the process, but
 14 your understanding is that -- and I'm just summarising
 15 your witness statement here for you to agree or
 16 disagree -- that blood would be taken on the ward, it
 17 would arrive at your lab first with the request on it.

18 **A.** Yes.

19 **Q.** That if it was a test that your lab did your
 20 lab would undertake that test. If it wasn't a test for
 21 your lab but it was a test for Liverpool, that you would
 22 prepare the sample for transport and ensure it was
 23 correctly pack and arrange for the transport to
 24 Liverpool --

25 **A.** Yes --

75

1 the phone. I mean, there's a protocol for, you know,
 2 asking them to repeat the results back, et cetera, but
 3 they would just give them to whoever answered the phone.

4 Usually when I was phoning results I was wanting to
 5 know a little bit more information, so I would normally
 6 ask to speak to the doctor, and sometimes there would --
 7 the doctor would not be on the ward or they may be on
 8 the ward but weren't available to speak to either
 9 because they were doing a procedure or they were on
 10 a ward round, in which case I would either ask them to
 11 call me back or I would take a bleep number and try
 12 again later.

13 **Q.** So in terms of what sort of occasions when you
 14 needed to be involved, it required a doctor at the other
 15 end?

16 **A.** Well, usually, because I normally wanted to
 17 know a little bit more about the patient, and usually
 18 the doctor would have a better indication of the sort of
 19 things I was talking about. I have spoken to nurses who
 20 were particularly in the more specialised units where
 21 they were more intensive one to one and, therefore,
 22 would know a lot about the patient, but usually I would
 23 want to speak to a doctor.

24 **Q.** When you say doctor, are you just asking for
 25 any doctor on the ward at that time or the patient's

74

1 **Q.** -- have I got that right?

2 **A.** -- it would be -- I mean, depending on the
 3 type of requests, sometimes the samples needed to be
 4 frozen, sometimes they could just be stored in the
 5 refrigerator, so each -- I mean, we have quite a lot of
 6 documentation around what's required for each particular
 7 type of test. So -- I mean, obviously I'm not directly
 8 involved in that, but the staff in the laboratory
 9 would -- when they get the request in, they would take
 10 whichever sample -- if there was a sample specifically
 11 for a referral laboratory or if they just would take
 12 a part of one of the samples they had, which, as I say,
 13 they would either put to one side in the fridge or store
 14 it frozen until they were able to send it on the next
 15 transport, which would usually be the next working day.
 16 For Liverpool in particular we had transport every
 17 day -- well, Monday to Friday so that they would -- it
 18 would go on the next day's transport.

19 **Q.** And in terms of the particular test that we're
 20 focused upon, the insulin C-peptide and the ratio
 21 between the two, we understand that that wasn't a test
 22 that the Countess was doing in-house at that time.

23 **A.** No.

24 **Q.** Can you just help us to understand why that
 25 wasn't an in-house test and why you needed to outsource

76

1 that?

2 **A.** Well, in -- very few laboratories would do
3 insulin. They're specialist tests, they're not asked
4 for -- when you make a decision about whether to have
5 a test in a lab or send it elsewhere it's usually
6 a decision based on how quickly the results are
7 required. Anything that we think needs to be required
8 within four hours for a patient's immediate management
9 we would do in-house. But more esoteric tests need to
10 be done in specialised laboratories because it's not
11 feasible for every laboratory to set up this -- the
12 instrumentation, the expertise that's required to do
13 these assays, and if you are only doing a few, then you
14 would not have that expertise inevitably because people
15 wouldn't have the familiarity with the test.

16 So I think, as far as my understanding is,
17 Liverpool does the insulin and C-peptides for the whole
18 area. I could be wrong, but that's my understanding.
19 So they would have all the hospitals from the
20 Cheshire/Merseyside region sending their samples there,
21 which allows them to -- there's also an economy of scale
22 as well but it allows them to develop the assay and have
23 the expertise in performing those assays.
24 **Q.** And just help us with a little further
25 understanding about the thought process you would expect

77

1 **Q.** And, therefore, the clinician, if that was
2 going to be the outcome, would be expecting to see both
3 a high level of insulin and a high level of C-peptide;
4 is that right?

5 **A.** Well, it depends what the cause was because
6 they can also be the opposite. You can have a lack of
7 the other hormones that increase glucose that can also
8 be a cause of hypoglycaemia. So the three hormones that
9 they do look at commonly are the glucose -- insulin,
10 cortisol, and growth hormone, and they're the sort of
11 three main hormones that keep glucose within relatively
12 close limits in healthy individuals. So if you have an
13 imbalance of any of those that would give
14 an explanation.

15 **Q.** Absolutely, but one part of that triangle of
16 drugs is the insulin --

17 **A.** Yes.

18 **Q.** -- and so the reason why you ask for the
19 insulin level is because that might provide the
20 explanation for why the child is --

21 **A.** Yes.

22 **Q.** -- hypoglycaemic?

23 **A.** Yes. You would be looking to see whether it
24 was low or high in the context of the glucose, yes.

25 **Q.** And, of course, the additional piece of

79

1 for somebody asking for that test. If a clinician has
2 a child who is hypoglycaemic, so low blood glucose, and
3 they said they wanted an insulin and C-peptide test,
4 what would you expect the clinical reasoning for that
5 request to be?

6 **A.** Well, they would be looking for a reason for
7 the blood glucose to be low. I mean, it's not uncommon
8 for neonates to have low blood glucose, especially if
9 they are premature or small. But -- and a lot of the
10 time they may not go through the full investigation
11 because it may be a very transient thing which is easily
12 managed.

13 If it's proving a little more difficult to manage,
14 they might want to try and understand what the cause is.
15 And insulin is the main hormone that reduces glucose
16 levels so, you know, too much insulin can be a cause of
17 a low glucose, so that would be the rationale behind
18 asking for that particular test.

19 **Q.** And so under that clinical reasoning, the
20 clinician doesn't know the explanation but is thinking
21 to themselves, "This baby might be producing too much
22 insulin causing him or herself to become hypoglycaemic,
23 and the test, the insulin and C-peptide, may confirm
24 that."

25 **A.** Yes.

78

1 information in the request is for the C-peptide
2 because --

3 **A.** Yes.

4 **Q.** -- if that C-peptide is high, then the
5 clinician can say to themselves, "This child is
6 producing a lot of insulin, we need it think about how
7 we manage that"?

8 **A.** Yes. So there is a relative relationship
9 between the two, yes.

10 **Q.** Yes. So that's what's in the clinician's mind
11 when they ask for the insulin and for the C-peptide?

12 **A.** I assume so, yes, they're looking for that
13 cause.

14 **Q.** That's what you would expect?

15 **A.** Yes.

16 **Q.** So let's just look, please, at the
17 circumstances relating to Child L with those factors in
18 mind, and we can begin by having a look at INQ0001169 at
19 page 216, please.

20 So here we're looking at a record from the Countess
21 of Chester. This is a record I think you're familiar
22 with, is that right, Dr Bowles?

23 **A.** Yes.

24 **Q.** And just draw our attention, please, to a few
25 items. I think we can see towards the top left, about

80

1 a third the way down, the date 9 April 2016 at 15.45.
 2 Do you see that?
 3 A. Yes.
 4 Q. In fact it's a little lower than that?
 5 A. I can't see the 15.45 -- oh, yes, I can, yes.
 6 Q. Lower than where it's being highlighted --
 7 A. Yes, I can see that now, yes.
 8 Q. You can see that? Thank you very much indeed.
 9 And would you -- what would you understand that
 10 entry to correspond with?
 11 A. That would have been probably the time that
 12 the request was made for the blood test, so that would
 13 have been made on the unit for -- for the actual
 14 request.
 15 Q. So the chain of events in terms of the record
 16 starts with that, with somebody on the unit saying,
 17 "I would like the following tests undertaken"?
 18 A. Yes.
 19 Q. So we can take that down, please.
 20 You would then have expected the sample to reach
 21 your laboratory --
 22 A. Yes.
 23 Q. -- is that right? You just looked at the
 24 screen there, was there -- was there a record on there
 25 that might help you with that question?

81

1 collect these specimens when the baby is hypoglycaemic,
 2 but we usually do a check of the blood sugar in the
 3 laboratory because that's considered more reliable than
 4 the -- the glucose meters.
 5 So they would -- you need -- in order to interpret
 6 the results, you do need the glucose to be low, so they
 7 would -- they would collect those results at a time when
 8 the baby was recorded as being hypoglycaemic.
 9 Q. So that hypoglycaemia entry there against the
 10 words "relevant clinical details", is that what your
 11 laboratory has been told by the ward or is that as
 12 a result of your laboratory's check?
 13 A. No, that's -- that's what they would have told
 14 that -- that was what they would have told the ward.
 15 From the ward, yes.
 16 Q. But to be checked and to be calibrated
 17 accurately by your --
 18 A. Yes, to be checked, yes.
 19 Q. Yes. Obviously we can also see -- and this is
 20 the other matter I omitted to ask you about -- that on
 21 the 11th of the 4th, just below where it's highlighted,
 22 we've got "closed", and I think by you. I think
 23 that's -- that would be a reference to your name; is
 24 that right?
 25 A. Yes, that was -- I think that was related to

83

1 A. Yes, it was received --
 2 Q. Can we bring that back up again?
 3 A. It was received in laboratory at 18.26.
 4 Q. Thank you. Could we bring that up again.
 5 Thank you. That's my mistake.
 6 So where should we be --
 7 A. That's -- at the top, there's -- next to the
 8 specimen number there's -- the next column along there's
 9 three --
 10 Q. I see so we've got, "Ordered for COLL
 11 received"?
 12 A. Yes, the received would be when the sample
 13 barcode was read by the specimen reception, so they
 14 would wand the barcode, and that was what's called
 15 "receiving specimen into the laboratory".
 16 Q. Now, in fact there's a matter I overlooked to
 17 ask you about -- in fact two. We can see hypoglycaemia
 18 is marked in the very centre.
 19 A. Yes.
 20 Q. So would that be information provided from the
 21 ward as a result of a heel prick test that they'd done
 22 or would you actually see --
 23 A. Yes. I mean, they would generally monitor the
 24 baby's blood sugars using the heel prick tests and
 25 glucose meters on the unit because they're supposed to

82

1 the cortisol and growth hormone results.
 2 Q. Yes. So those are the results that you can do
 3 in-house.
 4 A. Yes.
 5 Q. And so you can close those ones off within
 6 two days of receiving them --
 7 A. Yeah, well, those -- that would have --
 8 because this was a Saturday the 9th --
 9 Q. Yes.
 10 A. -- and the 11th was the Monday, so that --
 11 I would have been duty biochemist on that day, so that
 12 would have been one of the results that I looked through
 13 on that particular day.
 14 Q. So in-house dealt with within two days
 15 first --
 16 A. Yes.
 17 Q. -- day of the week. But, of course, we've got
 18 part of the sample going off to Liverpool for the
 19 testing for the C-peptide --
 20 A. Yes.
 21 Q. -- and insulin.
 22 A. That would have been transported on the Monday
 23 with the Liverpool transport.
 24 Q. Thank you. So we can --
 25 **LADY JUSTICE THIRLWALL:** Sorry, just before you --

84

1 **MR DE LA POER:** My Lady, of course.
 2 **LADY JUSTICE THIRLWALL:** -- I just want to check my
 3 note at the top when we've got the three timings, or
 4 rather unknown, unknown, and then what time was it
 5 received in your --
 6 **A.** I think it is 18.26, is it not?
 7 **LADY JUSTICE THIRLWALL:** Well, that was my
 8 question. I couldn't see whether it was 15, 16 or 18.
 9 **A.** I think it must be 18 because the entry was
 10 only made at 15.49, so I think it was 18.26.
 11 **LADY JUSTICE THIRLWALL:** So 18.26 on the basis that
 12 it must have been that -- there would have been that
 13 much time between it being taken and then received?
 14 **A.** Yes, and then the timings that are below which
 15 are the sort of series, there's an 18.29, that would
 16 have been when the sample was put on the track to have
 17 the in-house samples done. So we have a robotic track
 18 and that reads the barcode as well and that was at
 19 18.29.
 20 **MR DE LA POER:** That in the bottom half --
 21 **A.** Yes.
 22 **Q.** -- that series of columns --
 23 **A.** Yes, that is right.
 24 **Q.** -- there we can see --
 25 **LADY JUSTICE THIRLWALL:** So 18.26 followed by
 85

1 in-house tests that you'd done, there was no obvious
 2 explanation for the very near hypoglycaemia?
 3 **A.** No, they were what would be expected in that
 4 situation. I mean, obviously if there was a deficiency
 5 of hormonal -- of growth hormone or cortisol you
 6 might -- that might be picked up in that situation
 7 because they could perhaps be the cause of
 8 a hypoglycaemia, but those look like perfectly normal
 9 responses in that situation.
 10 **Q.** And so -- I'm not suggesting this happened but
 11 anybody looking at just those results and knowing that
 12 another result was due would be expecting a high level
 13 of insulin to come back, would that be the hypothesis
 14 that you would have waiting to be confirmed, because
 15 that would then explain why the blood sugar was very
 16 low?
 17 **A.** Yes. I mean, there may be other non-hormonal
 18 explanations but that's probably a reasonable
 19 supposition, yes.
 20 **Q.** And so we come to the 14 April, and you were
 21 the duty biochemist, as you've told us, that day. And
 22 we understand from the evidence from the Liverpool end
 23 that a telephone call was made. And whether you
 24 answered it or whether someone answered it and put it
 25 through to you, you ended up in conversation with
 87

1 18.29. Thank you very much.
 2 **MR DE LA POER:** So in terms of the in-house
 3 results, what -- before you received the final part of
 4 the puzzle from Liverpool, what conclusions if any could
 5 be reached from those in-house tests?
 6 **A.** I think from what I can remember, all the
 7 results were relatively normal. The glucose was low, it
 8 was 2.8, not quite within the definition of
 9 hypoglycaemia, but certainly low.
 10 The growth hormone was relatively high, which is
 11 what you would expect in a hypoglycaemic patient because
 12 glucose -- growth hormone and cortisol tend to raise
 13 cortisol levels -- glucose levels, so you would expect
 14 the normal reaction would be for them to be increased.
 15 The cortisol doesn't look raised but the reference
 16 range that's given on the -- on the -- the report is
 17 based on a 9 am cortisol, which is -- cortisol has what
 18 we call a diurnal rhythm, so it tends to be high --
 19 highest in the morning and lowest at midnight, so
 20 a result that's -- looks like it's within the reference
 21 range but is -- later in the day could be considered to
 22 be higher than you might expect if the patient wasn't
 23 stressed by having hypoglycaemia.
 24 **Q.** So we can take that down.
 25 So does it come to this that, in terms of the
 86

1 somebody --
 2 **A.** Yes.
 3 **Q.** -- from Liverpool; is that right?
 4 **A.** Well, I -- yes. I mean, I have to emphasise
 5 that I don't actually remember this -- any of this had
 6 actually happened. It's -- I'm purely reliant on the
 7 records that I've been presented with and also the usual
 8 practices -- procedures in the lab and practices at the
 9 time. It was many years afterwards before I was -- this
 10 was highlighted to me. So I have to say that I'm basing
 11 this on supposition as to what I would have done in that
 12 situation, apart from the ones where I actually have
 13 documentary evidence of my actions.
 14 **Q.** Well, we'll come to all of that in a moment.
 15 Let's just build the picture. INQ0001176.
 16 Now, this is the Liverpool end, this is an entry on
 17 their system, and we can see that that person has
 18 recorded on the system that the advice is:
 19 "Difficult to interpret without concurrent glucose
 20 but may be inappropriate if patient was hypoglycaemic at
 21 the time of collection."
 22 And your full name is indicated about three lines
 23 above.
 24 **A.** Yes.
 25 **Q.** And we've got the time there in terms of their
 88

1 system record of 9.38 and 23 seconds.

2 **A.** Yes. I mean, I would not have actually seen
3 that comment.

4 **Q.** No, I'm not suggesting for a moment --

5 **A.** But I assume that's the thrust of the
6 conversation that I had.

7 **Q.** Well, exactly so. So this is what that person
8 has recorded their advice as being in that situation
9 and --

10 **A.** Yes.

11 **Q.** -- if we just take yourself out of the
12 situation for a moment, just think about these results,
13 that's good advice, is it?

14 **A.** Yes. I mean, on the basis of results, yes,
15 that seems a reasonable decision.

16 **Q.** So you would have -- you would have expected
17 somebody with those results in Liverpool to be saying
18 something like that?

19 **A.** Yes.

20 **Q.** But, of course, the missing piece of the
21 puzzle for them, a piece of information that you had,
22 was the glucose level.

23 **A.** Yes, that's right.

24 **Q.** So let's now have a look at the other side,
25 the note at Chester, INQ0001169 at page 217, please.

89

1 this printout?

2 **A.** Yes. I mean, that's what made me realise
3 I had obviously -- probably had had a phone call, even
4 though I didn't remember it, because I wouldn't normally
5 enter the results of tests myself. They would normally
6 have been done by one of the biomedical scientists and
7 then we would check them as a second check. So the fact
8 that I entered them was a clue to me that I probably had
9 a phone call or else alternatively that the -- sometimes
10 the post does come addressed to me and I would open it,
11 and then I might see a result and think, "Oh, I should
12 do something with this."

13 But I think -- obviously now I know it was a phone
14 call that prompted me to act on them. Because our
15 normal process is the results go to a box upstairs and
16 the biomedical scientists work their way through them,
17 and because there are so many pieces of paper it
18 actually can take quite a long time for them to work
19 their way through, so with a result like this obviously
20 I would want to make sure there's no delay I've made the
21 decision to enter it myself.

22 **Q.** And in fact we can see just directly below,
23 about an inch on my screen, 9.38 is the entry time. So
24 if you just go straight down the screen about four
25 lines, we should see a 9.38 next to the date with your

91

1 Now, regrettably, there are aspects of this that
2 are harder to make out, but I think that the relevant
3 details are just appearing on the bottom of our screen
4 there.

5 We can see there the insulin result of 1,099. Is
6 that the number that we should be looking at?

7 **A.** Yes.

8 **Q.** And we can see under that interpretation of
9 insulin level depends on glucose, so that appears to
10 precisely match --

11 **A.** Yes, that --

12 **Q.** -- what the record of advice from Liverpool.

13 **A.** That goes on automatically I think on every
14 insulin.

15 **Q.** That's a warning to everybody, don't assume,
16 double-check?

17 **A.** Yes.

18 **Q.** I understand. So it looks like the advice at
19 Liverpool was in line with your automated warning.

20 And then we've got the insulin C-pep at 264. Is
21 that the right number that we should be looking at?

22 **A.** I think so, yes.

23 **Q.** Now, let's just consider these circumstances.

24 Firstly, will you have manually input those entries
25 into this -- into a pro forma on a screen that produces

90

1 name.

2 I wonder if we can just highlight that so that --
3 so four lines down. There we are. And, of course, we
4 know that the Liverpool record is timed at exactly the
5 same time, which, again putting the pieces together,
6 demonstrates, doesn't it, that this was a telephone call
7 from Liverpool --

8 **A.** Yes.

9 **Q.** -- to you and you are at the same time, one in
10 Liverpool, you in Chester, making entries on your system
11 about that call?

12 **A.** Well, I don't know whether I would have made
13 the entries directly at that time. I usually write them
14 down and then read them back, but certainly I put them
15 in very shortly after the phone call or around the time
16 of the phone call.

17 **Q.** So we're going to come to, further along that
18 row in a moment, the verified. But I just -- before we
19 get to verified, let's just talk about the context of
20 this.

21 What were the circumstances in which you would
22 expect Liverpool to be telephoning through a result for
23 what was otherwise a non-urgent testing request?

24 **A.** They would ring through results that they felt
25 needed someone to look at and possibly act upon, bearing

92

1 in mind that they might not have all the information
2 that they required.

3 **Q.** Is it -- bearing in mind that they could
4 otherwise just put it in the post and it could turn up
5 a couple of days later, be sorted through and so on,
6 does it in fact indicate that this is urgent --

7 **A.** It indicates --

8 **Q.** -- if they're telephoning --

9 **A.** -- that it's either urgent or unexpected or
10 unusual, yes.

11 **Q.** So that's the fact of the telephone call.

12 Let's look at the results themselves.

13 We've heard from Dr Milan that in the event that
14 this was insulin secreted by the body, one would expect
15 the C-peptide level to be five or ten times higher than
16 the insulin level.

17 **A.** Yes, that's what the ratio indicates, yes.

18 **Q.** And so that number 264 should have been, if
19 this was naturally occurring insulin, between 5 and
20 10,000.

21 **A.** Yes, yes.

22 **Q.** And it is -- and I won't attempt to say how
23 many factors, but many factors less than that, isn't it?

24 **A.** Yes.

25 **Q.** And from the point of view of you as

93

1 indicate that the child was very nearly within the
2 hypoglycaemic range; is that right?

3 **A.** Yes.

4 **Q.** And working on the hypothesis that this is
5 externally administered insulin, doesn't that only leave
6 three possibilities? Let me tell you what they are and
7 you can see if you agree or disagree. Either that child
8 had been legitimately given insulin but they had been
9 given so much in a hyperglycaemic state that it had
10 almost taken them to state of hypoglycaemia. That's
11 possibility 1.

12 Possibility 2 -- that they have accidentally been
13 given insulin, in other words it wasn't indicated for
14 them at all but by reason of some kind of medication
15 confusion they've received it.

16 Or option number 3, somebody has deliberately given
17 insulin when it was not clinically indicated, which
18 would obviously be the most serious possible
19 implication.

20 So those are the three possibilities for your
21 conclusion. Do you agree or disagree with that?

22 **A.** Yes. I mean, I have been -- highlighted
23 another case that did have similar results and was
24 diagnosed as congenital hyperinsulinism, but I was a bit
25 dubious about the likelihood of that diagnosis. But

95

1 a scientist understanding how the human body works and
2 what the ratios should be, is your interpretation of
3 that result it's at least highly likely that that child
4 has received insulin by way of medication as in
5 externally?

6 **A.** Yes. I mean, obviously I'm sort of looking
7 back and interpreting them trying not to think about
8 what I know now compared to what I knew then but, yes,
9 this certainly would have been a puzzling result in
10 a patient on the neonatal unit.

11 **Q.** We're going to look -- because you use the
12 "puzzling" in your statement we're going to have a look
13 at that in a moment. But from your point of view,
14 understanding how the ratio of insulin and C-peptide
15 should work, that is the obvious conclusion, isn't it?

16 **A.** Yes, it seemed to be -- seems to be
17 a conclusion that it looks like there is external
18 administration of insulin.

19 **Q.** And, of course, you had access to the glucose
20 level.

21 **A.** Yes.

22 **Q.** And you had that prompt that you ought to
23 check it --

24 **A.** (Nods).

25 **Q.** -- and checking the glucose level would

94

1 the -- in my mind, at that time, yes, the three --

2 **Q.** Yes --

3 **A.** -- were probably the most likely.

4 **Q.** -- exactly so. I mean, we're not talking
5 about extremities, whether they do or do not
6 legitimately exist. As a doctor as a pathologist
7 interpreting these are going to start with the most
8 obvious explanations, aren't you --

9 **A.** Yes.

10 **Q.** -- and exclude those? But those three are the
11 obvious explanation for the -- this result?

12 **A.** Yes, yes, I would agree.

13 **Q.** And it being one of those three, do you agree
14 at best it's likely that there has been a medication
15 error?

16 **A.** Yes. I mean, I -- I can't say whether
17 I thought through that clearly at that time about the
18 possible scenarios. I possibly just thought this is
19 something I need to convey and find out a bit more
20 about. So I may not have -- in the -- you know, at the
21 time I may not have actually gone through that process,
22 I might have just thought, "I need to speak to someone
23 about these results."

24 **Q.** That poses this question: why wouldn't you
25 have thought in that structured way about these results?

96

1 A. I don't know. I mean, sometimes you just get
2 results that are puzzling, and I guess the obvious thing
3 to do is to try and find out a bit more information
4 about them. Rather than to sit and sort of wonder
5 actually to try and find some facts out about it.

6 Q. I suppose the reason you would do your own
7 analysis is that you would then be able to decide what
8 level of priority to give your efforts that followed.
9 Do you follow the reasoning of that, that if you had sat
10 there and thought, "At best someone's has made
11 a medication error, I really need it make sure that
12 I speak to somebody about this and have a proper
13 discussion about them", that would be a valuable use of
14 your time analysing what these results might mean; is
15 that fair?

16 A. That's fair but, as I say, I can't remember
17 what my process of thoughts -- thought processes were at
18 that time. All I know is that I obviously felt the need
19 to ensure the results were communicated rapidly.

20 Q. Now, do you in the lab have access to the
21 patient medical records, the electronic ones?

22 A. At that time, we had very limited access
23 because most of the clinical notes were paper-based.
24 The only notes that were available on the computer
25 system were the nurse care -- nurse care notes --

97

1 have entered a result and you just -- you're not --
2 there's nothing untoward about result, it's an
3 instantaneous process, so basically you just press A and
4 return, so it would be instantaneous. So the fact there
5 was this two-minute gap was what made me think that that
6 would be my usual practice would -- that I tried to
7 telephone someone at that stage.

8 Q. You have said two minutes, in fact they
9 verified that's being highlighted here is against a time
10 I think of 9.36 to the left.

11 A. Entered 9.36. Oh, well, I --

12 Q. And then the line below --

13 A. Oh, it's there. So there's -- yes, so
14 there's -- right okay.

15 Well, yes, the 9.36 that's possibly -- that's
16 a bit -- I don't quite understand that. Is it 9.36?
17 I assume they were all 9.38 actually because --

18 Q. Well, it may be that that's my eyesight and
19 bad reproduction.

20 **LADY JUSTICE THIRLWALL:** It's 9.36.

21 A. I can't understand why there would be two
22 different times actually. I assumed it was 9.38.

23 Q. At all events, there's at least a two-minute
24 gap --

25 A. Yes.

99

1 patient care notes.

2 The doctors' notes were all paper and then they
3 would be scanned on to what we call Evolve, usually
4 quite some time later, so we wouldn't have access to all
5 the information about the patient at that time.

6 Q. Would the nursing notes, if you looked at
7 them, that you did have access, to tell you whether or
8 not a patient had been prescribed insulin or had
9 received insulin?

10 A. They were very variable as to what detail was
11 in them. A lot of it was things like details about
12 their feeds, et cetera, and so it would vary from one
13 baby to another or one patient to another what detail
14 was in those particular notes, so it wouldn't
15 necessarily say what medication they were given.

16 Q. But it might?

17 A. It might, but it wouldn't always.

18 Q. So let's look at that verifying, because you
19 mention that second timing in your witness statement, so
20 if we look back towards the bottom where we were looking
21 at 9.38 we can see the VER and then the time 9.40.

22 A. Yes.

23 Q. So just tell us, what is the significance of
24 the verification step of the procedure?

25 A. Well, if you're actually verifying after you

98

1 Q. -- for at least most of these results --

2 A. Yes.

3 Q. -- as against the verification, and so just
4 looking back at your practice at the time, what might be
5 an explanation for the fact that you haven't just
6 pressed "Enter" to verify the results?

7 A. That I tried to contact someone with the
8 results. And I would -- I would hold back the
9 verification because if you do manage to speak to
10 someone then you can put a comment -- electronic comment
11 to that effect on the -- on the report before it's
12 verified.

13 Q. Does it follow from that answer that if
14 have -- once you verified it you can't then add
15 a comment?

16 A. It's not very straightforward, you have to go
17 back to a process to edit and everything, so it's much
18 more straightforward to wait until you've actually
19 spoken to someone and then put -- you could just put P,
20 phoned, and there's a little box came up to say what
21 time you'd phoned it, et cetera. So you would tend to
22 hold back until you'd actually phoned the result
23 through.

24 So the fact that there was no comment there but
25 there was that gap makes me think I had tried to phone

100

1 but hadn't actually been successful in speaking to
2 anyone at that stage.

3 **Q.** A combination of the delay to verify but the
4 lack of a comment put together in your mind means,
5 "I did call, but nobody answered"?

6 **A.** Well, it could be I called and somebody
7 answered but I wasn't able to speak to the person
8 I needed to speak to. As I said before, what can
9 sometimes happen -- I mean, it may be there was no
10 answer but it could be that someone answered, I asked to
11 speak to the doctor looking after this baby, and the --
12 whoever it was had told me that they were either not on
13 the unit or they might have been doing a procedure, they
14 might have been on a ward round and, therefore, they
15 weren't available to come to the phone.

16 So I would have then made a note of that with the
17 view to try and speak to them later. But I --
18 especially if I did think they were on the ward round,
19 then verifying the result would be sensible because they
20 may then see that result while they were on the ward
21 round.

22 **Q.** Having verified it, is it then posted to the
23 electronic records?

24 **A.** Yes, it goes directly to the clinical notes
25 then so they can see it.

101

1 that this is one of three possibilities and you don't
2 have to jump straight to that. Before you get there,
3 this could have been a serious medication error.

4 Again, just your word "puzzled", if you're
5 recognising the possibility it might be a serious
6 medication error as the best case, surely you would be
7 concerned or worried?

8 **A.** Well, I think both. I mean, obviously, yes,
9 I would be -- "puzzled" I suppose is not sure of what
10 the possible explanation is and concerned enough to want
11 to phone and make sure that it's seen by the staff.
12 Yes, obviously I would be concerned.

13 But I -- puzzled I suppose was because I was faced
14 with a set of results that didn't -- there didn't seem
15 to be a reasonable explanation for and, as you say, the
16 explanations that could be would be disturbing.

17 **Q.** Medication errors are well-recognised problem,
18 isn't it?

19 **A.** Yes.

20 **Q.** It does happen. And if it had happened, it
21 would be absolutely imperative, do you agree, that
22 everybody on the ward knew about it so that they could
23 make sure no harm was done, make sure the patient is
24 okay, make sure that the systems are robust, make sure
25 it doesn't happen again. Isn't that the reaction that

103

1 **Q.** Now, I would like to going back to the word
2 that you used earlier about it being a puzzle or you
3 were experiencing some puzzlement with this.

4 Just explain to us, please, in your own words, why
5 you think that this result is "puzzling" as opposed to
6 perhaps "worrying" or "of concern" or "ringing alarm
7 bells", why do you choose the word "puzzling"?

8 **A.** I suppose I was probably influenced, perhaps
9 falsely, as it turns out, by the fact that this was
10 a baby that had been on the neonatal unit since birth
11 and, therefore, I guess the idea that anyone was trying
12 to deliberately harm babies would have been, you know,
13 a very, I suppose, unthinkable or at least so horrifying
14 as to not really want to go there. I think it was --
15 I think probably was -- that would be my process of
16 thought that surely not.

17 **Q.** Can I just ask you about --

18 **A.** And I didn't -- as I say, I had no knowledge
19 of any problems on the neonatal unit at that stage, so
20 I -- I wasn't working within the context of, you know,
21 there having been unexpected problems on there.

22 **Q.** You've talked us through your thought process
23 about how you couldn't really conceive of how somebody
24 could be doing harm deliberately. But I think we'd --
25 correct me if I'm wrong, but we'd already established

102

1 you would expect from someone flagging a medication
2 error?

3 **A.** Yes.

4 **Q.** And so I just -- it's my last question really
5 about the -- your use of the word "puzzle" and
6 "puzzlement". It's just as you've used that word both
7 in your witness statement and in your oral evidence,
8 looking back on it, do you think you will have seen this
9 as more of something that is intriguing and confusing as
10 opposed to a serious cause for concern? Do you think
11 your choice of language just reflects that that is
12 likely to have been your mental state back in 2016?

13 **A.** Well, at the time obviously -- as I say,
14 I don't remember that date or any of the events around
15 this from actual memory. I think I would have just
16 looked at these results as being something that required
17 explanation and I would look for further -- further
18 information in order to try and explain them.

19 I can't remember what my thought processes were at
20 the time.

21 **Q.** Had you heard of the case of Beverley Allitt?

22 **A.** I was -- I was vaguely -- yeah, I mean, I have
23 heard of heard that name, yes.

24 **Q.** And that -- were you aware that she used
25 insulin?

104

1 A. Possibly. I'm not sure whether I was aware at
2 2016. But, I mean, I am now, yes.

3 Q. I mean, we also know of a case relatively
4 locally to the Countess in 2011 when a nurse used
5 insulin to kill two patients. Were you aware of that
6 case in Stepping Hill?

7 A. Probably, yes.

8 Q. And so although it was a difficult thing to
9 conceive of it wasn't impossible to imagine because it
10 had happened in reality, do you agree with that?

11 A. Yes, but I suppose you always tend to think
12 those as being one-offs and you don't expect them to be
13 in your own institution, I suppose. It's something
14 you -- I mean, if I -- I had been aware that there had
15 been problems with babies on the unit, then obviously
16 this would have been a huge red flag, but at that stage
17 I had absolutely no knowledge of any problems on the
18 unit.

19 So it was like having a piece of a jigsaw but
20 I didn't actually know there was a jigsaw. So, you
21 know, it was standing alone as an isolated result, and
22 obviously looking at it now it's very obvious what it
23 was saying, but at that time I -- I guess I just
24 didn't -- it didn't fire that suspicion.

25 Q. Do you think it should have? Not with the
105

1 of the telephone call that you received and you don't
2 have a positive memory of having spoken to anybody on
3 the ward about this.

4 A. No.

5 Q. I would just like to examine that,
6 acknowledging -- and we'll come back to your notes and
7 the fact that they'd been destroyed -- but if you had
8 had the sort of thought process that we've been
9 discussing, in other words at best this is a medication
10 error which really urgently needs to be addressed, in
11 the context of results that you had never previously
12 seen before, do you think you would have remembered
13 a conversation with a doctor about those results?

14 A. I don't know.

15 Q. Just on an ordinary human level, and you tell
16 us about your experience, but human beings tend to
17 remember exceptional, alarming, concerning events ahead
18 of ordinary run-of-the-mill events, and I'm just
19 inviting you to consider whether -- if you had thought
20 in those terms whether you would have had a memory of
21 having phoned it through, spoken to somebody, told them,
22 "Look, there's a problem here, you really need to look
23 closely at this"?

24 A. I mean, I've racked my brains, you know, to
25 try and think about what I can remember of this case,
107

1 benefit of hindsight, but just knowing about Stepping
2 Hill, seeing those results, knowing that the child was
3 almost hypoglycaemic, do you think it should have at the
4 time caused you to recognise that there was potentially
5 a very serious problem here?

6 A. Yes. I mean, I don't know that I didn't
7 recognise there was a problem, but I probably didn't
8 have that deliberate harm at the top of my list.
9 I think -- I suppose I was hoping that there would be
10 some sort of explanation that was less sinister than
11 that.

12 Q. Had you ever before in your career come across
13 that combination of hormonal profile, so where there was
14 no explanation from the in-house tests for the
15 hypoglycaemia or virtual hypoglycaemia and you had
16 a C-peptide and insulin level like that?

17 A. Probably not. But I don't look at a lot of
18 these results. I mean, we did a search of 10 years of
19 C-peptide and insulins recently and there were over 300,
20 but only 23 of them were from neonates, so that's only
21 a few a year, and obviously I would have seen a --
22 a proportion of those but not meant -- not all of them,
23 so it wasn't a set of results that I was used to looking
24 at frequently.

25 Q. And as you've told us, you had no -- no memory
106

1 and the trouble is the more you think about it the more
2 you can come up with snippets of conversation that you
3 think may be -- may be related, but I couldn't reliably
4 say that anything I remember is either real or is
5 related to this case in particular.

6 I mean, we do get unusual results that we discuss
7 with doctors quite regularly. I mean, as duty
8 biochemists you look at 2 or 300 sets of results a day,
9 so it's not unusual to see results that are difficult to
10 explain or -- or, you know, unusual you might want to
11 talk to someone about.

12 So in that context, you know, I don't remember.
13 And, you know, I genuinely can't say that I have
14 memories of that -- of any conversation.

15 Q. If we just think about how that conversation
16 would have worked. You would have said, "These are the
17 results." Presumably you would have said, "This
18 indicates the child has been injected with insulin or
19 given insulin in some way and it's caused them to become
20 hypoglycaemic." Is that the sort of thing that you
21 would be saying?

22 A. Well, yes, along those lines that this was
23 a result that -- yes, that tended to indicate insulin
24 administration and that was -- you know, we'd try to
25 understand how that could have happened.
108

1 Q. Yes, and what they had at the ward level that
2 you may have had access to but you may not have is
3 absolute confirmation about whether that child was
4 prescribed insulin, and so presumably you would have
5 said, "I think you need to go and check whether that
6 child was prescribed insulin because if they were, they
7 might have been given too much, and if they weren't,
8 we've got a really big problem." Is that the sort of
9 thing that you'd be saying to the doctor?

10 A. I think what I probably would have said is
11 that this, "These results suggest it the child has been
12 given insulin and I don't really understand how that
13 could have happened in these circumstances and obviously
14 that needs looking into."

15 I mean, whether that was something the doctor would
16 know offhand or whether they would have to go and check,
17 I don't know. I mean, we do tend to find that if
18 results are registered as being unexpected and they're
19 often set aside as unusual, a quirk, laboratory error,
20 especially in a situation where -- which was the
21 situation here that the patient was no longer
22 hypoglycaemic, so it's not unusual for us to ring
23 results through and then for people to say or not even
24 to say, to just go away and actually just note that
25 there doesn't seem to be anything to explain it but

109

1 a concern about these results, that the doctor then
2 wouldn't write it down? I appreciate ultimately it will
3 be down to the doctor, but is that what you would expect
4 to happen?

5 A. No, it's not what I expect. But, again, it
6 would depend on where the doctor was when I spoke to
7 them. You know, it's all speculation really about, you
8 know, what -- I know they did have the results and they
9 did comment on them in the notes. They did say the
10 C-peptide insulin ratio was low, so they did comment on
11 it. But, you know, I can't say what happened beyond
12 that.

13 Q. That comment you're referring to is the
14 following day on the ward round.

15 A. Yes.

16 Q. So not in the context of any conversation with
17 you.

18 A. No.

19 Q. Did you have access to the Datix system?

20 A. Yes.

21 Q. Do you think that these results merited
22 a Datix report from you?

23 A. Well, they may have merited a Datix.
24 I suppose the question would be who would have the
25 information to complete that Datix.

111

1 we'll just put it to one side.

2 Q. There was no question of any error with the
3 test here, though, was there?

4 A. No, but that doesn't stop the clinician
5 sometimes believing that that might be an explanation.

6 Q. But isn't that where your role comes in to say
7 "I've no reason to think this is wrong", with all your
8 expertise in the lab, it's come from Liverpool, they've
9 got excellent quality assurance process, "I'm satisfied,
10 as far as I can be, that this is right, you can't
11 dismiss this, you need to look into it", isn't that part
12 of your role speaking to the doctor?

13 A. Yes, but the decision about whether they
14 actually say that it's -- if they went away and then
15 found it had a result that was -- didn't fit in with
16 what they expected and the baby was quite well, they
17 might have just noted that it was unusual but not -- not
18 actually taken any further action, which I think was the
19 case with another child in the -- in the --

20 Q. There is a note for Child F. By contrast
21 there isn't -- and I think you've satisfied yourself of
22 this, there is no corresponding note for Child L.

23 Again, putting these things together, is that
24 what -- would you expect that if you'd spoken to
25 a doctor and communicated to them that there was

110

1 Q. But did you have enough information here to
2 complete a Datix so that a further investigation could
3 take place?

4 A. I suppose in retrospect I may well have done.
5 But, yes, I didn't -- I didn't do that. As I say,
6 I probably felt I didn't have the complete picture at
7 that stage.

8 Q. You say with retrospect, in fact with the
9 information you had at the time, do you think you did
10 have information to do a Datix or that you had
11 insufficient?

12 A. I think it would have been necessary to have
13 a bit more information about the patient before
14 completing it. So it could have been after
15 a conversation, I suppose, or it may have been
16 reasonable depending on what the conclusion about the
17 results was for the doctors on the unit to have done it.

18 Q. Does the fact that you didn't complete a Datix
19 tend to suggest you didn't speak to a doctor or do you
20 regard that as a neutral factor?

21 A. No, I don't think I would necessarily have
22 completed a Datix on the basis -- on regardless of
23 whether or not I had spoken to the doctor.

24 Q. I mean, did you see yourself as under
25 an obligation to complete a Datix when there were

112

1 potential clinical issues that needed further
2 investigation?

3 **A.** Yes, I suppose I did. But, again, at the
4 laboratory side of things we do have a limited amount of
5 information available and so where there are patients
6 involved we do often rely on the clinicians actually
7 doing a lot of the investigation because they have more
8 information. But, yes, in retrospect it may have been
9 a reasonable thing to do.

10 **Q.** Your notes which have been destroyed and,
11 therefore, you can't refer to them to say definitively
12 one way or the other whether you had such a telephone
13 call, just help us to understand why your notes would
14 have been destroyed?

15 **A.** Well, my practice is to use a diary each year
16 and I have -- at the end of each day I write down my
17 tasks for the following day and then if anything comes
18 up that I need to do, I add to it. So that's the sort
19 of place I would have written down any phone calls
20 I needed to make.

21 I don't keep those diaries for more than a couple
22 of years because generally we have relied on the audit
23 trails on the laboratory computers. I think most of my
24 colleagues have had paper-based telephone logs and they
25 don't tend to keep them for long periods either, so it's

113

1 speculative on there because, you know, for example, if
2 you said this could be a case of, you know, insulin
3 administration, it -- it wouldn't necessarily be
4 something you -- if you then are proved wrong that you
5 would want on that record forever.

6 So like the comment that Dr Davies put, it's --
7 they tend to be rather than anodyne comments that sort
8 of highlight something but they don't give the full
9 picture.

10 **Q.** It would be entirely my question -- I'm
11 talking about in the event that you had a conversation
12 with the clinician, that wouldn't be speculative at all,
13 that would -- you recording the key points that you had
14 conveyed.

15 **A.** Yes, but there wasn't anywhere formal for me
16 to put that in terms of -- other than walking out to the
17 ward and writing something in the notes.

18 **Q.** Do you think that was a failing in the system
19 that was being operated, that you don't seem to have had
20 a place on the patient record that everybody could see
21 about potentially important advice that you have given
22 to a doctor on the ward?

23 **A.** Yes. But that -- that was the system. There
24 was no access for us to actually write. As I say, we
25 would have had to walk to the unit and write it in the

115

1 not particularly unusual. Obviously in retrospect it
2 would have been helpful to have had that diary.

3 **Q.** So if you had a conversation with a doctor in
4 which you conveyed important information about the
5 patient, would you write that in your diary as opposed
6 to on any record accessible to anybody else?

7 **A.** Well, usually I would put something in the --
8 on the -- may have put something on the comment, but
9 obviously the difficulty is you have to be a little bit
10 careful about what you put in comments because if they
11 are speculative, they are obviously visible to a lot of
12 people. So I would probably put a -- usually put some
13 sort of comment on -- on the result if there was
14 a conversation.

15 But the records of the conversations generally
16 I probably would have anticipated if they were relevant
17 to the case, the doctor themselves would perhaps note
18 them down. I didn't have anywhere other than my own log
19 to write them down. I didn't have access to the patient
20 notes to write anything.

21 **Q.** But you could write a comment on -- on the
22 system.

23 **A.** I could write a comment -- well, if I hadn't
24 edited it I could have written a comment on the result
25 but you would be a little reluctant to put something

114

1 clinical notes at that point. There was nowhere else
2 for us to document it.

3 **Q.** And who had overall responsibility for that
4 system?

5 **A.** The --

6 **Q.** The system that meant that you couldn't write
7 on the patient records what advice you'd given to --

8 **A.** Well, it was the --

9 **Q.** -- a doctor?

10 **A.** Well, it was the hospital computer system, so
11 that was the way it was configured. I don't know --
12 I mean, obviously that's just the way the system was.

13 The current system we have now would allow us to do that
14 but that system didn't, so we --

15 **Q.** Do you --

16 **A.** -- didn't have access -- we didn't have
17 a place in the system to do that.

18 **Q.** Given your leadership role, do you think that
19 was something that you should have identified to the
20 hospital to say, "When I impart important information
21 about a patient to a doctor on the ward there needs to
22 be somewhere where I can record that that can be checked
23 in the future"?

24 **A.** Yeah. I mean, there was a lot of
25 functionality issues about Meditech that we didn't

116

1 necessarily find useful. For example, there was
 2 supposed to be, when it was introduced, an endorsement
 3 function where it could be seen that clinicians had
 4 actually reviewed the result and it could be shown that
 5 they had actually reviewed it. That never -- that
 6 functionality was never realised.

7 So I think there were a lot of limitations within
 8 that system. I suppose it was relatively old. 2002 it
 9 was introduced. But I have to say, I never really
 10 thought about having that functionality and I don't know
 11 whether we would have been able to introduce it or not.

12 **Q.** Finally on the destruction of your records,
 13 just to understand, we know that in June of 2017, so
 14 just over a year after any record that you would have
 15 written in your diary, that one of the doctors on the
 16 ward drew attention to a potential anomalous insulin
 17 result that they could recall, that was in June of 2017,
 18 very shortly after the police were contacted for the
 19 first time.

20 What was your awareness of whether there was any
 21 investigation going on by the police into events on the
 22 neonatal unit? Did you know in 2017?

23 **A.** No. I think the first thing I knew about it
 24 was in 2018 when -- I mean, obviously I knew that --
 25 I knew -- I think it was during 2018 I realised there

117

1 I'm just going to headline them for you. You describe
 2 those changes as "fundamental". Is that a fair
 3 description of the extent of them?

4 **A.** I thought I'd said that the -- fundamentally
 5 things hadn't changed but we'd made some --

6 **Q.** Forgive me -- well, it is important that you
 7 correct me if I get it wrong.

8 **A.** Well, what I think I said was the fundamental
 9 processes of how the laboratory works in terms of the
 10 analytical validation, et cetera, hadn't changed but
 11 there were differences to how we -- we recorded the duty
 12 biochemist role and telephone, et cetera.

13 **Q.** Then that is entirely my misremembering.

14 There is now an electronic transfer between labs.

15 **A.** No, there isn't?

16 **Q.** There isn't?

17 **A.** Well, we aspire to it, and we've aspired to it
 18 for probably well over a decade, but we haven't been
 19 able to implement it.

20 There is a system called Empex which we've been
 21 trying to instigate for many, many years. We never
 22 managed it. We are Meditech system. We'd hoped when
 23 our newer one, Cerner, came in it would work, and now
 24 we've been told we had to wait until the Cerner upgrade,
 25 which happened last month, so it's a piece of work that

119

1 were problems on the unit. My understanding is that the
 2 first approach to the laboratory for insulin results was
 3 in October 2018. I think someone spoke -- at that stage
 4 spoke to my colleague, Dr Lewis.

5 **Q.** And was it by that date that you had -- or
 6 before that date that you had destroyed your diary for
 7 2016?

8 **A.** No, I probably hadn't because I didn't
 9 appreciate my connection with this case until later,
 10 because it was only when I got all the printouts from
 11 the laboratory that I realised that I'd had any
 12 involvement with that particular case. So it was
 13 probably later than that. I would usually keep them
 14 a year or two and then dispose of them in the
 15 confidential waste.

16 **Q.** Do you think that once you realised that the
 17 police were investigating matters that touched upon your
 18 laboratory's operation that you should have kept your
 19 records then?

20 **A.** Well, as I say, it was towards the end of
 21 2018, so I don't -- I don't know that I would have -- it
 22 would have occurred to me at that stage that that was
 23 something that was required.

24 **Q.** Now, you deal in your statement, Dr Bowles,
 25 with a number of changes that have occurred since, and

118

1 we have been waiting for for many, many years but it
 2 hasn't -- it hasn't been realised yet.

3 **Q.** What about the number of duty biochemists, are
 4 there the same number --

5 **A.** Yeah, we have --

6 **Q.** -- or are there more?

7 **A.** We have more staff now. We have -- there's
 8 myself and the Consultant scientist who replaced
 9 Dr Lewis, and then there are -- there's another
 10 Consultant chemical pathologist who's 50% Chester and
 11 50% Wirral, Arrowe Park Hospital, and there's also
 12 a scientist -- a band 8A scientist who splits between
 13 the two sites as well. And then we also at the moment
 14 have a specialist Registrar, quite a senior specialist
 15 Registrar who is attached to the department. So there's
 16 now five of us that we are now able to share the duty
 17 biochemist rota.

18 **Q.** In terms of the particular issue of insulin
 19 and C-peptide, what is the level of understanding within
 20 the lab about the potential significance of such
 21 a result?

22 **A.** Well, I think we are all very attuned to the
 23 possibilities. As I say, we -- we've tried to instigate
 24 a regular review of the insulin C-peptide results.

25 I mean, very few of them are neonates. As I say, we

120

1 only get -- probably get an average of two or three
2 a year, neonates but we obviously are scrutinising them
3 more carefully.

4 **Q.** How about the approach to the telephone log,
5 is that the same or different?

6 **A.** No, we have a shared electronic telephone log
7 now, which was introduced, and this means all the people
8 who are duty biochemists use it to record telephone
9 conversations, either the ones they've received or ones
10 they have telephoned out, so it's there as a permanent
11 document. We also have on that document an instruction
12 to follow up any phone calls with an email confirmation
13 of the conversation, particularly if it's -- if it's
14 resolved. And we also have another note to say that if
15 we've been phoned by a referral laboratory we must phone
16 that result through.

17 **Q.** And what about the glucose result and
18 Liverpool, which historically they were not provided
19 with and needed to contact --

20 **A.** No, we do --

21 **Q.** -- you about?

22 **A.** We do -- it's not -- it's still not
23 the perfect system, we do try to make sure those results
24 are -- are sent. I think we haven't quite got it right
25 yet sometimes. It basically involves us writing the

121

1 I mean, we -- we are sort of thinking about the
2 sort of results that we could scrutinise and see whether
3 there's any likelihood of safeguarding issues. It's
4 quite difficult, though, because without the sort of
5 clinicians' prompting we don't have often samples that
6 are very clear-cut. I mean, obviously insulin and
7 C-peptide have been highlighted as one. We've -- we
8 have had urine samples, toxicology screens from a child
9 recently where there was cocaine in it. So that was
10 obviously a flag. But the GP was aware of that, that's
11 why they'd sent the sample.

12 So, you know, us just looking at the samples in
13 isolation is -- there are some that are obvious but
14 a lot of them would not be obvious because the results
15 would be not really specific to anything in particular.
16 But certainly better communication in terms of the sort
17 of things they are concerned about would be helpful.

18 **MR DE LA POER:** Dr Bowles, those are all my
19 questions.

20 **Questions by LADY JUSTICE THIRLWALL**

21 **LADY JUSTICE THIRLWALL:** Thank you, Mr De La Poer.

22 Dr Bowles, just can I pick up on something you were
23 just describing, which is that some results are not
24 obvious and some aren't clear-cut, but I think you
25 accept that the insulin C-peptide result was very

123

1 result on the form that goes off to the Liverpool.

2 I had hoped that maybe one thing we could do is
3 actually send them the glucose sample and they could
4 analyse it themselves. But then, of course, we need to
5 analyse it probably too to make sure it's worth sending
6 the samples, because if the child is not hypoglycaemia,
7 then it's probably not going to be helpful. So there
8 are still some quirks -- slight flaws in the system but
9 we are working to try and improve it.

10 **Q.** And finally this, are there any other changes
11 that, in your view, need to be made that haven't yet
12 been made or aren't in train to be made?

13 **A.** Well, as I say, the electronic transmission of
14 requests and results would obviously be very helpful.
15 I mean, I think one of the things that came out of this
16 for me is that the paediatricians perhaps didn't share
17 their concerns. I mean, I know it's a -- it was
18 a sensitive issue and it's difficult, but if we had
19 known that there were problems on the unit, then these
20 results would have been so much more significant to us
21 and we could have been very helpful. So there is a sort
22 of, you know, is it reasonable for them to think about,
23 if there are concerns, possibility of blood results
24 being important? We do tend to be sidelined a little in
25 the laboratory medicine side.

122

1 clear-cut.

2 **A.** In looking at it now it was certainly very
3 supportive of, you know, the scenario that -- that was
4 of concern.

5 **LADY JUSTICE THIRLWALL:** Yes. I mean, irrespective
6 of a scenario, it was still a very clear-cut result and
7 what it meant, I'm not going to ask you about again, you
8 have been through that.

9 Can I then turn to something else you mentioned,
10 which was about the sort of records and the availability
11 of the records, and you said there was no way you can
12 make a record on the patient notes, and you said,
13 "I could have walked over to the ward."

14 I appreciate that's not something you did on this
15 occasion -- I'm assuming it's not something you did on
16 this occasion?

17 **A.** No.

18 **LADY JUSTICE THIRLWALL:** Has there ever been
19 a situation when you would have done that? I'm not
20 suggesting there should have been, I would just like to
21 know --

22 **A.** I have occasionally actually gone to the wards
23 with a problem. I mean, with -- you know, where --
24 particularly if the wards that were close to the
25 laboratory, or I might have nipped on to the ward and

124

1 just sort of had a word with them. In that case I might
2 have scribbled in the notes to say, you know, this is
3 what I thought.

4 But, generally, we don't tend to write in the
5 notes. But, as I say, with the new system we could
6 raise a clinical note and actually write something now,
7 but there wasn't a place for us to do that at that time.

8 **LADY JUSTICE THIRLWALL:** And just what you just
9 said, "But we don't tend to write in the notes", so
10 I would just like to understand what difference it makes
11 that you can now write in the notes. Do you actually
12 write in the notes?

13 **A.** I haven't had -- I mean, I do write in the
14 notes for my own patients that I see.

15 **LADY JUSTICE THIRLWALL:** Sure. Yes.

16 **A.** I haven't really had cause to do so that I can
17 think of for any other patient as yet, but that
18 functionality is -- does exist.

19 **LADY JUSTICE THIRLWALL:** Thank you. Anything else.

20 **MR DE LA POER:** No, thank you, my Lady.

21 **LADY JUSTICE THIRLWALL:** Dr Bowles, thank you very
22 much for coming this afternoon. I know that was
23 a change from the arrangements that had been made --

24 **A.** Yes.

25 **LADY JUSTICE THIRLWALL:** -- but we're grateful to
125

1 being involved in the clinical care of babies on the
2 indictment at or around the time of collapse and/or
3 death, or who were connected with the events that took
4 place on the neonatal ward between June 2015 and
5 June 2016. This included doctors from the most senior
6 to the most junior, including Consultants, GP trainees,
7 resident doctors carrying out specialist paediatric
8 training, and locums.

9 Statements were obtained from doctors with
10 established careers at the hospital and from those who
11 spent six months training at the Countess of Chester or
12 worked for brief periods as a locum.

13 In addition to doctors who worked on or in
14 connection with the neonatal unit during the relevant
15 period, a small number of doctors who worked at
16 neighbouring hospitals but who were deemed likely to
17 have had relevant interactions with the neonatal unit or
18 staff working there were contacted by the Inquiry to
19 provide statements.

20 Doctors were asked about any involvement they had
21 in the care of babies named on the indictment. They
22 were also asked about their awareness of suspicions and
23 the raising of concerns about Letby, about the reviews
24 of unexpected neonatal deaths and adverse events,
25 including formal and informal debriefs, the safeguarding
127

1 you for coming and you're free to go now.

2 **A.** Thank you.

3 **MR DE LA POER:** My Lady, the balance of the day is
4 going to be occupied by Ms Brown. If you will excuse
5 me.

6 **LADY JUSTICE THIRLWALL:** Thank you, Mr De La Poer.

7 Now, I understand there's going to be -- you're

8 going to be reading out summaries of evidence,

9 Ms Brown --

10 **MS BROWN:** Yes.

11 **LADY JUSTICE THIRLWALL:** -- and I'll leave you to

12 introduce that. My only question is a completely

13 practical one. Firstly, how long do you think it will

14 take in total and when do you think we should take

15 a break?

16 **MS BROWN:** Well, I think it will take about

17 two hours, possibly slightly less. So it's really

18 whether a break before or whether a break part way

19 through, I'm in your hands.

20 **LADY JUSTICE THIRLWALL:** All right. Well, shall we

21 say we will go for 45 minutes, have a break at

22 3 o'clock. Ms Brown.

23 **Summary of Doctors' Evidence**

24 **MS BROWN:** My Lady, the Inquiry received statements

25 from 52 doctors who are identified by the Inquiry as
126

1 of babies in hospital and the culture of the hospital.

2 My Lady, I should emphasise that anyone else who
3 worked at the Countess of Chester between 2015 and 2017
4 who has direct knowledge and experience of matters under
5 investigation by the Inquiry and considers they have
6 relevant evidence to provide is encouraged to contact
7 the Inquiry via the Thirlwall Inquiry website.

8 Having received written statements, the Inquiry
9 compiled a provisional list of those witnesses who could
10 best assist the Inquiry with oral evidence. This
11 provisional list was circulated to all Core Participants
12 seeking their submissions on any additional witnesses
13 that should be called to give oral evidence or on
14 witnesses to be removed from the provisional list.
15 Following that process, a final proposed timetable of
16 witnesses for the oral hearings was circulated to all
17 Core Participants.

18 My Lady, for the purpose of these oral hearings,
19 I will now read out a summary of evidence from some of
20 the doctors who have not been called to give oral
21 evidence.

22 Dr Katherine Lyddon started her career as
23 a foundation doctor at the Countess of Chester Hospital.
24 She worked in the paediatric and neonatal department
25 from January 2015 to September 2015. Dr Lidden comments
128

1 positively on the "good teamwork and camaraderie between
2 the junior medical and nursing teams". However, she
3 notes that, at the time, "Consultants weren't very
4 present on the neonatal unit due to covering both
5 paediatrics and neonates".

6 Consultant neonatal wards at this time occurred on
7 two days a week, and Dr Lyddon comments:

8 "... from memory, there was some resentment from
9 the nursing staff that the Consultants weren't more
10 present."

11 Despite this, Dr Lyddon was of the view that "the
12 quality of relationships on the neonatal units didn't
13 affect the care received by the patients".

14 As with other doctors undergoing their training in
15 paediatrics, Dr Lyddon rotated around hospitals, moving
16 approximately every six months. Dr Lyddon's evidence is
17 that when she moved to Liverpool Women's Hospital in
18 September 2015 as part of her training there were:

19 "... some general comments that [the Countess of
20 Chester Hospital] was having a tough time and lots of
21 difficult cases. From memory these were generic
22 comments between nursing and medical staff."

23 Whilst at the Countess, Dr Lyddon was involved in
24 the cares of Child A and Child B and can, she says:

25 "... recall discussions between paediatric trainees
129

1 was Dr ZA's interpretation of the results."

2 Dr Lyddon's evidence is that she had no suspicions
3 about Letby but refers to:

4 "... vague memories of there being various
5 discussions at points about the unusually high number of
6 collapses and deaths on the unit."

7 She goes on to say:

8 "I recall being aware at some point that the
9 consultants collectively raised concerns and were
10 considering potential reasons. One potential reason
11 I remember being considered was if the TPN ([the] total
12 parenteral nutrition bags), could be contaminated or
13 issues with equipment."

14 Dr Lyddon does not recall any safeguarding training
15 covering what to do if there were concerns that a member
16 of staff was abusing patients, nor does she recall any
17 specific training on processes around a child death.

18 Had she had any concerns at the time she says she
19 would have spoken to a Consultant and that:

20 "... as an extremely junior member of staff,
21 I wouldn't think to take concerns outside of the Trust
22 as a first point of action."

23 However, Dr Lyddon says:

24 "... if I had concerns now (as a consultant) would
25 speak to other consultant colleagues in the first
131

1 and NNU nursing staff that the rashes [or] skin changes,
2 seen in both babies, [were] unusual and no one had seen
3 anything similar before."

4 Dr Lyddon says:

5 "I personally did not have any suspicions about
6 Child A's death and Child B's collapse."

7 Dr Lyddon was also involved in the care of Child E
8 and Child, F, being present at their birth. She sets
9 out in her statement that in relation to Child F she:

10 "... documented four results relating to the
11 hypoglycaemia (hypo) screen sent on 5 August 2015."

12 Dr Lyddon also put in the notes that she discussed
13 the results with Dr ZA and recorded:

14 "D/W discussed with Dr ZA -- insulin high,
15 c peptide low -- unusual for hypoglycaemia."

16 Dr Lyddon states she can not recall how she
17 received the results, nor can she recall the
18 conversation with Dr ZA. She says:

19 "... as a junior member of medical staff I didn't
20 appreciate the relevance of these results."

21 She goes on:

22 "As they were results I was unfamiliar with
23 interpreting I discussed them with the consultant
24 responsible that week, Dr ZA. I assume I documented the
25 word 'unusual' after my discussion with Dr ZA as that
130

1 instance. I would then want to discuss with the Medical
2 Director and seek advice from my defence union and the
3 RCPCH about where to go next."

4 Dr Gail Beech worked as a junior doctor at the
5 hospital during a similar period, between January
6 and September 2015, returning to work at the hospital
7 again after June 2016. Like Dr Lyddon, she also refers
8 to the issue of Consultant rounds stating:

9 "... when I returned to work at the hospital
10 after June 2016, the most noticeable difference ... was
11 that there was a consultant led ward round on the NNU
12 daily compared to twice per week before this date, and
13 a named consultant responsible specifically for the NNU
14 every day, rather than it being covered by the
15 Consultant also on duty for General Paediatric. This
16 felt like a positive change."

17 Dr Beech cannot recall any negative relationships
18 between staff. Her view now as a Consultant and based
19 on experience throughout her career is that
20 relationships between staff do affect the quality of
21 care being given to babies and comments on:

22 "... positive relationships impacting positively
23 and vice versa."

24 Dr Beech says that whilst working as a junior
25 doctor:
132

1 "I was not aware of how deaths on the NNU were
2 usually investigated."

3 In relation to safeguarding training, she states
4 that while she kept up to date with training:

5 "I cannot specifically recall it being mentioned
6 during any of this training about abuse on the part of
7 a member of staff towards babies or children in
8 hospital."

9 Dr Beech says she was not on shift when Child A
10 died and was not fully aware of the circumstances
11 surrounding his death. Neither was she on duty when
12 Child B collapsed.

13 She notes, however, that Child C's death:

14 "... was unexpected event to me personally as he
15 had overall been making progress and the last time I had
16 seen him on 12 June 2015, he had been very stable."

17 Dr Beech does not recall any discussion about any
18 possible similarities or connections between the death
19 of Child A, Child C and Child D and the collapse of
20 Child B. She states that she was "never worried about
21 the number of deaths on the NNU", noting that she had
22 not worked at a Level 2 NNU prior to her time at the
23 Countess of Chester and thus, "did not have anything to
24 compare it to".

25 Many of the junior doctors working on the NNU at
133

1 NNU."

2 Dr Hor was present at the start of the
3 resuscitation attempts for Child A and notes that:

4 "... It felt unusual to have a number of sudden
5 deteriorations of neonates during my time there."

6 However, Dr Hor goes on to say:

7 "Due to my limited experience in neonates, I did
8 not bring this to anyone's attention at the hospital or
9 elsewhere."

10 Dr Lucy Beebe was also a trainee GP. She worked on
11 the neonatal unit between August 2015 and February 2016.
12 She comments on the fact that:

13 "... the doctors and nurses worked well together
14 with a mutual respect."

15 Dr Beebe was involved in the care of Child I, and
16 in her police statement commented:

17 "I remember being quite frustrated that she would
18 go out to other Hospitals and then in a few days she
19 would come back better but with no answers."

20 In her statement to the Inquiry, Dr Beebe says:

21 "I remember being shocked about Child I's death
22 because I was not expecting her to die. Despite her
23 recurrent medical emergencies, I remember she had been
24 doing well and I thought she had come to a stage where
25 she was likely to be discharged home to her family in
135

1 the time were either completing their two years'
2 foundation training or, like Dr Lyddon and Dr Beech, on
3 a six-month placement at the hospital as part of their
4 specialist paediatric training.

5 Dr Christopher Woods gives a slightly different
6 perspective, as he was a GP trainee carrying out
7 a paediatric neonatal placement. He comments positively
8 on how "supportive" the Registrars and Consultants were
9 during his placement.

10 Dr Woods was present at Child A's collapse and
11 death. He does not recall being invited to a debrief
12 and goes on to reflect:

13 "I do think that this should have occurred ... the
14 death of Child A was the first neonatal resuscitation
15 I had been resolved in and a debrief would be important
16 for staff wellbeing as well as learning from the
17 process."

18 On the broader topic of debriefs, Dr Woods says:

19 "I feel that any member of staff involved in
20 a resuscitation effort (successful or not) should be
21 invited for a debrief about this."

22 Dr Hor, like Dr Woods, worked at the hospital as
23 a GP trainee between February 2015 and August 2015 and
24 describes:

25 "... a safe and supportive work culture on the
134

1 the future."

2 Dr Beebe recalls in her police statement an
3 occasion where she saw Letby crying inside room saying:
4 "It's always me when it happens."

5 But is unable to recall when this occurred.

6 Dr Beebe says this did not concern her as her
7 interpretation of the event was that Letby "had an
8 unfortunate run of shifts". Dr Beebe states that she:

9 "... did not have any suspicions about Letby during
10 my time on the NNU and was not aware of any concerns
11 being raised about her."

12 Dr Simon Greaves also worked on the NNU as part of
13 his GP training during the period from August to
14 December 2015. In contrast with most other trainee
15 doctors, he did not "feel particularly welcome there."

16 He described:

17 "... an unpleasant atmosphere and not
18 a particularly collaborative one between doctors and
19 nurses on the NNU."

20 Dr Greaves states that he was not aware of the
21 suspicions or concerns of the others about the conduct
22 of Letby.

23 Dr Veronika Jiraskova was also a GP trainee at the
24 hospital working in the paediatric team between
25 August 2015 and February 2016. Like Dr Greaves, her
136

1 experience of time on the NNU was less positive than
 2 others:
 3 "I found that the unit did not feel like a team
 4 that was working in a cohesive way, with some doctors
 5 disliking others ... I did not enjoy my time on the
 6 unit."

7 She continues:
 8 "... the team spirit in general did not feel
 9 healthy."

10 She adds:
 11 "... people were talking about behind one another's
 12 back and GP trainees were generally looked down at."

13 However, Dr Jiraskova notes that things became
 14 better the longer she was there and as she "got to know
 15 the people". Dr Jiraskova notes that she was
 16 "completely unaware of the suspicions or concerns of
 17 others about the conduct of Letby", discovering the
 18 allegation only through the media.

19 She expresses in her statement her personal "great
 20 doubts" that Letby "has committed the crimes that she
 21 denies".

22 Dr Sarah Rylance worked part-time as a paediatric
 23 Registrar at the hospital from February 2014 to
 24 July 2015. She describes the existence of:

25 "... a positive and supportive relationship between
 137

1 relationship between the nurses, midwives, junior
 2 doctors and the consultant team."

3 Dr Ogden had been involved in caring for Child A,
 4 and in her police statement said that Child A's death
 5 came "completely out of the blue".

6 In her statement to the Inquiry Dr Ogden explains
 7 that Child A:

8 "... had been stable for a preterm baby with stable
 9 blood results and requiring relatively moderate
 10 support."

11 Dr Ogden was involved in requesting an urgent
 12 post-mortem for Child A and was also involved in the
 13 care of Child B.

14 Dr Ogden states that:

15 "... the verbal post mortem initial findings did
 16 not identify a treatable cause for Child A's death or
 17 give an indication for the cause of Child B's collapse."

18 Dr Ogden gave evidence at the Coroner Inquest for
 19 Child A on 10 October 2016 both orally and in the form
 20 of a written statement. In addressing the issue of why
 21 she did not include in her statement to the Coroner,
 22 dated 23 February 2016, that Child A's death was
 23 unexpected, Dr Ogden says:

24 "The reason this was not included was because
 25 I understood my statement to the Coroner was a factual
 139

1 doctors, nurses and midwives at the hospital."

2 She also notes that:

3 "... the atmosphere on the NNU was caring and
 4 friendly, with respect for relationships between medical
 5 and nursing staff."

6 Dr Rylance had involvement in the care of Child C
 7 and Child D. She has no independent recollection of
 8 Child C and was not on duty when Child C died.

9 In relation to Child D, she notes in her statement
 10 to the Inquiry:

11 "I was surprised when I learned of Child D's death,
 12 since when I left the hospital at the end of my shift on
 13 21st June 2014, I believe Child D was improving
 14 clinically and would have a positive outcome."

15 She adds:

16 "To the best of my memory, I don't believe I was
 17 involved in any debrief. I believe that there should
 18 have been a debrief relating to the death of Child D and
 19 that I should have been involved, even if it occurred
 20 after I had left the Trust."

21 Dr Sally Ogden, now a Consultant neonatologist,
 22 worked at the Countess of Chester Hospital from
 23 March 2015 to September 2015 as a paediatric Registrar.

24 She notes that:

25 "... as far as I was aware there was a good
 138

1 statement of my involvement in relation to Child A's
 2 care and the events that occurred, rather than including
 3 opinion or speculation. At that time, I was not aware
 4 that there was a concern about any individual staff
 5 member on the unit and I had not worked on the unit
 6 since September 2015."

7 Dr Ogden says:

8 "With the knowledge now of what occurred on the
 9 unit, my opinion that the death was unexpected may have
 10 been relevant, but at the time I provided a factual
 11 account of my involvement of the events and was aware
 12 that the death was being reviewed by the Coroner."

13 Dr Ogden was also involved in the care of Child C
 14 and says that on being informed of his death at morning
 15 handover she was "surprised".

16 She was also involved in the care of Child F and
 17 Child I. In her statement Dr Ogden says:

18 "I do recall finding the number of collapses or
 19 deaths on the unit at that time as unusual and
 20 concerning. I am unsure specifically when this appeared
 21 to me as unusual, but it is likely to be around the time
 22 of several of these collapses/deaths that occurred
 23 within a few weeks of each other in June 2015. Whilst
 24 I do not recall that I specifically approached any
 25 Consultant in particular to raise specific concerns,
 140

1 I believe the whole department was discussing this
2 informally as being unusual and that the senior
3 Consultant team were raising this and investigating what
4 could have caused this. However, at my level I would
5 not have been involved in these specific discussions.

6 I felt confident that the Paediatric Consultants were
7 taking the rise in deaths seriously."

8 Dr Ogden goes on to say in her statement to the

9 Inquiry:

10 "During my time working at the Countess of Chester,
11 I was not aware of any specific concerns regarding
12 Letby. I only found this out from the newspaper reports
13 at a later date and from contact from the police."

14 Dr Alison Ventress, now a Consultant neonatologist,
15 worked at the hospital as a paediatric Registrar on
16 a number of rotations during her training, including
17 during the periods March 2015 to October 2015, and
18 January to March 2016.

19 Her evidence to the Inquiry is that:

20 "I think most doctors and nurses had good
21 professional relationships and respected each other's
22 roles and worked together well."

23 However, she adds:

24 "There was a feeling from the NNU nurses that the
25 NNU was an afterthought for many doctors and that

141

1 "was not aware of the raised insulin and low c-peptide"
2 adding that:

3 "These results usually takes days to weeks to
4 arrive and Child F was transferred to another hospital
5 by then."

6 Dr Ventress was involved in the care of Child G on
7 7 September 2015 and notes in her evidence that:

8 "Child G's deterioration was not expected as she
9 had been stable previously. However, unexpected
10 deteriorations are not infrequent in any Neonatal
11 Intensive Care unit especially in babies born extremely
12 premature like Child G and it can happen for several
13 reasons."

14 In relation to debriefs Dr Ventress says:

15 "Debriefs were held after unexpected deaths, but it
16 was always difficult to find a time when all staff
17 involved were able to attend at the same time. I do not
18 feel a formal debrief was needed for any of the babies
19 named in the indictment that I was involved with as none
20 of the deteriorations led to death at that time."

21 Dr Ventress says she "was not aware of any
22 suspicions about Letby" whilst she was working at the
23 hospital and only became aware that Letby had been
24 removed from clinical practice during a conversation
25 with Nurse T who Dr Ventress was friends with outside

143

1 paediatrics took priority and the NNU was second place.
2 However, I think this mainly reflected the bigger
3 workload on paediatrics compared to the NNU, which meant
4 that doctors of all levels spent more time in the
5 paediatric ward."

6 Dr Ventress says:

7 "... there were cliquey friendship groups amongst
8 some of the neonatal nurses, but I didn't see this
9 affecting the care given. I remember general
10 dissatisfaction from some nursing staff with the
11 management, but I can't remember any specific details."

12 Dr Ventress was involved in the care of Child F and
13 recalls a morning review on 5 August 2015 on the "Grand
14 Round" when all babies on the NNU were discussed in
15 a round-table meeting, not cot side, with the Consultant
16 of the week and the neonatal nurse in charge present
17 along with junior doctors. She says:

18 "... from reading the notes, the initial general
19 thought to the medical team for the cause of the low
20 sugars combined with tachycardia was possible sepsis."

21 She notes that the plan was to insert a new long
22 line and that:

23 "... there were no concerns that anything untoward
24 had happened."

25 Dr Ventress' evidence to the Inquiry is that she

142

1 work.

2 In common with other doctors, Dr Ventress refers to
3 undertaking safeguarding training noting that:

4 "... there was nothing specific in respect to abuse
5 by a member of staff."

6 She goes on to say:

7 "If I had any concerns in that regard, I would
8 initially have spoken to one of the Consultants for
9 advice."

10 Dr Ventress says that as a Registrar she:

11 "... did not have any training at that time on the
12 processes and organisation involved in reviewing child
13 deaths such as Child Death Review, Sudden Death in
14 Infancy [or] Childhood and the Coroners Office."

15 She adds:

16 "I cannot remember what the process is and
17 procedures were for raising concerns within the hospital
18 in 2015-2016 as I have worked in so many different
19 hospitals before and since then."

20 Dr Andrew Brunton, now a Consultant neonatologist,
21 worked at the hospital for a number of periods during
22 his paediatric training. Notably he worked as
23 a paediatric Registrar between February and July 2015.
24 His view was that:

25 "... team working between doctors nurses and

144

1 midwives at the hospital was excellent."

2 He recalls a "supportive culture" and describes the
3 Consultants on the neonatal unit as "supportive and
4 approachable", and the nursing staff as "hard working
5 and conscientious".

6 Dr Brunton was involved in the care of Child A,
7 Child C and Child D. In his statement to the Inquiry,
8 he describes the death of both Child A and Child C as
9 "unexpected".

10 In relation to Child D, Dr Brunton describes
11 contacting the Consultant on-call due to an "unusual"
12 rash and:

13 "... an unusual pattern of behaviour for a baby who
14 had been clinically stable previously."

15 He goes on to say:

16 "... it was clear that Child D's episode of
17 deterioration and subsequent death were completely
18 unexplained."

19 On the subject of debriefs, Dr Brunton says:

20 "I would have expected a debrief to have been held
21 regarding the death of Child D. If a debrief for
22 Child D was held, then I would have expected to be
23 invited as I was involved in the resuscitation efforts
24 of the baby at the time of their death. However, if it
25 occurred on a day when I was not on duty, then it may

145

1 collapsed and died. He adds that in his statement to
2 the Coroner he did not make any links regarding the
3 death of Child C and Child D and the collapse of Child B
4 as it had never been suggested to him that the incidents
5 were linked, noting that he left the Trust approximately
6 four weeks after Child D's death and was unaware of any
7 ongoing concerns regarding the neonatal unit at that
8 point.

9 Dr Soni, now a Consultant paediatrician, was
10 working as a Registrar at the hospital between
11 September 2015 and February 2016. Dr Soni states that
12 she had no concerns about working relationships in the
13 hospital and describes the paediatric department as
14 "a popular place to work". Noting that:

15 "... We as trainees had a lot of respect for the
16 consultants and they were all very supportive."

17 Dr Soni's evidence is that:

18 "I was not particularly worried about the number of
19 deaths but I thought it was strange."

20 She states that she:

21 "... was not aware and had no idea of the
22 suspicions and concerns of others about the conduct of
23 Letby ... I had never considered the possibility that
24 someone was harming the babies."

25 In relation to debriefs, Dr Soni notes:

147

1 not have been practical for me to attend as I lived in

2 Liverpool at the time."

3 Dr Brunton says he was unaware of any suspicions or
4 concerns regarding Letby. He notes that he completed
5 all the required safeguarding training but says he does:

6 "... not recall any modules that specifically
7 focused on abuse by a member of staff to a baby."

8 He goes on to say:

9 "... if this situation was suspected in my own
10 hospital I would initially turn to my consultant
11 colleagues, senior neonatal nursing staff colleagues as
12 well as the senior management team."

13 Whilst Dr Brunton says he cannot recollect training
14 about when to raise concerns or suspicions regarding
15 a colleague who is harming patients, he was aware in
16 2015 of professional organisations that could be
17 approached with specific concerns, including the Care
18 Quality Commission, GMC, General Medical Council,
19 NHS England and the local -- Child Death Overview Panel.

20 In relation to the Inquest for Child A, Dr Brunton
21 sets out that he was contacted by Dr Jayaram in relation
22 to providing a statement for the Coroner in
23 February 2016. Dr Brunton says he did not mention the
24 rash on Child A as he had not seen any such rash,
25 noting, however, he was not present when Child A

146

1 "I think there should be a process with the
2 neonatal unit to discuss all collapses [or] arrests in
3 a structured way and all the members involved in the
4 baby's care should be informed about the outcome."

5 In common with other doctors, Dr Soni's evidence is
6 that:

7 "I do update my safeguarding training regularly as
8 part of my mandatory training and revalidation but there
9 is no training about abuse or harm from members of staff
10 to children and babies."

11 Dr Soni states that if faced with a safeguarding
12 concern in the context of suspicion or abuse by a member
13 of staff towards babies or any patient she would raise
14 this via their manager and "seek advice from the Trust
15 safeguarding team" and "share information accordingly
16 and escalate".

17 Dr David Harkness was a paediatric Registrar at the
18 Countess of Chester from 2014 to 2016. He describes
19 feeling "very well supported by my consultant and
20 nursing colleagues", and describes a "friendly
21 atmosphere", noting that he:

22 "... felt that the relationships between staff on
23 the unit had a positive impact on the care of the
24 patients."

25 Dr Harkness describes his upset following what he

148

1 refers to as "unexpected" death of Child A. In relation
2 to debriefs he says:

3 "I do think that 'hot debriefs' those immediately
4 after the event and 'cold debriefs', those held over the
5 coming days or weeks are very beneficial for staff as
6 well, as well as trauma counselling, which is now
7 becoming common in practice."

8 Dr Harkness did attend a Neonatal Mortality Meeting
9 on 26 November 2015 when Child I's case was discussed.
10 However, he comments:

11 "... these meetings tend to review the events in
12 the notes and identify any learning. It is not
13 a comprehensive review of the case."

14 Dr Harkness was also involved in the care of
15 Child E. In his statement to the Inquiry he describes
16 being called to review Child E by Letby on the evening
17 of 3 August 2015 and there being a subsequent episode of
18 sudden substantial bleeding which he considered to be
19 "out of nowhere" and something he had "not seen before
20 or since".

21 Dr Harkness goes on to say:

22 "Child E then suddenly deteriorated and I noted
23 a strange discolouration over his body."

24 Dr Harkness says that he:

25 "... had seen this before in Child A ..."

149

1 a brief overview as part of wider safeguarding
2 training."

3 Dr Harkness also sets out in his statement to the
4 Inquiry his view that:

5 "... coroners are not extensively trained and
6 experienced in neonatal death to challenge the
7 information given."

8 He also comments:

9 "I feel strongly that where there is no clear
10 evidence of cause of death and/or death was not
11 anticipated 24 hours previously, these deaths should be
12 managed following SUDiC [or] PRUDIC protocols [PRUDIC
13 being the Welsh equivalent of the Sudden death in
14 childhood protocol] with wider discussion with Named
15 Doctors for safeguarding and/or child death, alongside
16 coroners and the Police where appropriate. Named
17 Doctors for child death must encourage and actively take
18 part in discussions when children die on the NNUs and
19 must be involved in perinatal morbidity and mortality
20 discussions ... The experience and background of the
21 Named Doctors will vary, with some having very little
22 neonatal experience and it is essential that they
23 consider and respect the opinions of colleagues with
24 neonatal experience, and consider seeking guidance from
25 other Named Doctors especially those with neonatal

151

1 Adding:

2 "... at this time, I did not have any concerns of
3 this being due to malicious activity and had no reason
4 to raise it as a concern ... whilst the unusual
5 discolouration was strange Child E was on different
6 medications and fluids to Child A and no link could be
7 established from a medical point of view between the
8 two."

9 In his current role as a Consultant paediatrician
10 and as named doctor for safeguarding children,
11 Dr Harkness has received extensive safeguarding
12 training. However, he states that he has:

13 "... not received any specific safeguarding
14 training relating to suspected abuse of patients by
15 staff towards babies or children in hospital ... to my
16 knowledge this is not commonly included in the level of
17 training required of any paediatrician".

18 Regarding training on procedures following a child
19 death, Dr Harkness says:

20 "I do not remember there being any in depth
21 training regarding CDOP [Child Death Overview Panel] or
22 ... [Sudden Death in Children] or coronial procedures
23 during my training, as such, I would certainly not
24 describe it as comprehensive. I would not have expected
25 this to form a core part of our training other than

150

1 experience."

2 Dr Emily Thomas, now a Consultant paediatrician,
3 worked at the Countess of Chester from March 2015 to
4 September 2015. She describes the neonatal unit as
5 being "friendly", saying that it was "easy to work with
6 the nurses on the neonatal unit", and that she was not
7 aware of any "negative relationships". Like many of the
8 trainee doctors she describes feeling "supported" as
9 a trainee and comments that she felt that "communication
10 between doctors and nurses was good", and that she felt
11 comfortable "asking for help and advice". She comments
12 on the fact that:

13 "... staff tended to enjoy working there and would
14 ask to rotate there because it was known to be
15 a positive working environment and the consultants were
16 supportive."

17 Dr Thomas was involved in the care of Child A and
18 Child B and describes being "really surprised" on
19 learning that Child A had died.

20 She was also involved in the care of Child D and
21 discussed the rash on Child D with Dr Brunton. She was
22 part of the medical team involved in the attempted
23 resuscitation of Child D, she says:

24 "As far as I am concerned, Child D's deterioration
25 and death were an unexpected event."

152

1 Dr Thomas comments in her statement to the Inquiry:

2 "Following the resuscitation, I recall that Letby
3 commented that 'this is the second baby that this has
4 happened to. This has happened to me a couple of
5 times.' This did not strike me as particularly unusual,
6 however, I think what stood out to me was how upset
7 Letby was. At the time, immediately after we stopped
8 resuscitation, we were all very much in shock and
9 quietly upset. Letby was visibly upset and needed
10 comforting. At the time I attributed this to the fact
11 that she had recently been at the resuscitation and
12 death of another baby, and therefore found the similar
13 situation more difficult to cope with."

14 Dr Thomas has a specific recollection in relation
15 to debriefs. She recalls being asked by Consultant
16 Dr Newby to produce a PowerPoint presentation containing
17 a timeline of events and results from Child D's case to
18 generate wider discussion at the joint paediatric and
19 obstetric Morbidity and Mortality meeting. Like other
20 doctors, Dr Thomas emphasises her view that:

21 "... a debrief or discussion about any serious
22 incident is important."

23 She comments in particular in relation to Child E
24 whose care she was involved in:

25 "I remember being worried that I had missed
153

1 suspicions of a member of staff harming a patient".

2 She goes on to say:

3 "I am not aware of any training that covers this."

4 Dr Thomas, in reflecting on events in her
5 statement, sets out the following:

6 "Closer scrutiny of neonatal deaths also now
7 occurs, which is a good thing, as often lessons can be
8 learnt to improve clinical practice and provide higher
9 quality care. Currently [regionally] all neonatal
10 deaths are being discussed with the Coroner. This
11 practice should continue. It would also be helpful for
12 junior members of staff in all health professional
13 teams, who might not have a good understanding of NHS
14 management systems to know how to escalate concerns
15 easily. There should be regular reminders about how to
16 access this process. This would also be useful for
17 rotating junior doctors who may not be familiar with the
18 Trust they are working in."

19 Dr Verghase worked on the Countess of Chester
20 Hospital during his training notably between
21 September 2015 and 2016 as a paediatric senior house
22 officer. He subsequently returned, working at the
23 hospital between September 2016 and March 2017 as
24 a Registrar.

25 Dr Verghase states that there was:
155

1 something so I think that a debrief would have been
2 helpful."

3 Dr Thomas's perspective from her current position
4 as a Consultant is that as a trainee with limited
5 experience the number of deaths:

6 "... did not stand out to me at the time. As
7 a rotating trainee, I would not have known about the
8 bigger picture."

9 She notes that she had previously worked at the
10 Liverpool Women's Hospital, which, as a Level 3 unit,
11 cared for sicker babies, so her experience of what was
12 normal was probably influenced by this. She goes on to
13 say:

14 "It is only since working as a more senior doctor
15 on other Level 2 neonatal units that I have gained the
16 breadth of experience to note how unusual the number of
17 deaths and unexpected collapses were. For example,
18 I have only been on shift for the death of one baby in
19 a Level 2 neonatal unit in the last nine years."

20 Dr Thomas comments that she has safeguarding
21 training which is renewed every three years and that at
22 the hospital where she is currently employed training
23 includes additional annual face-to-face training. She
24 notes, however, that the safeguarding training she has
25 received "does not cover what to do if there are
154

1 "... always a good relationship between medical
2 professionals (doctors nurses midwives and others) at
3 the hospital and that is why I requested to go back to
4 work at the [Countess of Chester Hospital]."

5 Dr Verghase comments that:

6 "... at other units I have worked in there would
7 have been a consultant face to face review of NNU
8 patients 1 to 3 times a day. However, when working at
9 the [Countess of Chester Hospital] if I had any concerns
10 with regard to any specific neonate all the consultants
11 were responsive to my ears and would have seen the
12 neonate either of their own accord or if I requested."

13 Dr Verghase says he did not have any concerns or
14 suspicions about Letby. However, he adds:

15 "... over the years I have seen NHS whistleblowers
16 so persistently poorly treated that it would make me
17 very nervous to raise my concerns if I ever had any."

18 Dr Katherine Davis underwent her two years
19 foundation training at the Countess of Chester from 2009
20 to 2011 and then returned during her paediatric training
21 working at the hospital from March 2015
22 to September 2015. Dr Davis comments that she:

23 "... never had any concerns about the quality of
24 care provided to the babies on the neonatal unit."

25 She noted also that:
156

1 "... the Consultants were some of the most
2 supportive I have ever worked with. I always felt able
3 to escalate concerns to my supervising Consultant and
4 I felt confident in the clinical and non-clinical advice
5 and support offered to me ... the paediatric department
6 in the Countess of Chester hospital always had a good
7 reputation with paediatric trainees."

8 It was Dr Davis who was crash called on
9 13 June 2015 when Child C collapsed. She attended and
10 assisted in the resuscitation, requesting that the
11 on-call Consultant, Dr Gibbs, attend. Dr Davis says in
12 her statement to the Inquiry:

13 "... we always think about the 'why' something may
14 have happened ... in this case, there was no obvious
15 explanation as to what may have caused Child C's
16 unexpected collapse."

17 She goes on to say:

18 "The lack of explanation for the collapse was
19 unusual but more unusual was the lack of response to
20 resuscitation and the complete lack of heart rate at the
21 time of my arrival."

22 Dr Davis is now a Consultant paediatrician and goes
23 on to explain:

24 "The total absence of a heart rate despite
25 effective airway management, chest compressions and
157

1 an event) and cold (held a few days or weeks after the
2 event) debriefs are much more embedded in practice in
3 the present day than I remember it being back in
4 2015-2016."

5 Dr Davis also says in her statement to the Inquiry:

6 "During my 6-month rotation at the [Countess of
7 Chester Hospital] in 2015, it became clear that we were
8 experiencing an above average range of death and
9 collapses. As a group of trainees, we discussed if we
10 felt we were missing something. Due to the small number
11 of middle grades and close working of the team it was,
12 and still is, common practice to debrief informally with
13 completion following a stressful event. As a result, we
14 all knew that other babies had collapsed unexpectedly
15 and in atypical ways. When we attended regional
16 teaching or local paediatric courses colleagues would
17 ask if we were doing okay as they had heard that we were
18 having a particularly bad run in the [Countess of
19 Chester Hospital]."

20 However, Dr Davis adds:

21 "I was not privy to any concerns being expressed as
22 to the collapses being unnatural in cause or because of
23 substandard care."

24 **LADY JUSTICE THIRLWALL:** Would that be a convenient
25 moment?

159

1 resuscitation medication were not something I had
2 experienced before, or indeed since."

3 Dr Davis does recall attending a debrief following
4 the death of Child C led by Dr Gibbs and focusing on the
5 care delivered.

6 Dr Davis says in her statement to the Inquiry:

7 "The collapse and subsequent death of Child C was
8 something I reflected on for a long time afterwards."

9 She adds:

10 "I have subsequently been involved with a case
11 where a child suffered from an air embolism (a known but
12 rare complication of a surgical procedure) which led to
13 cardiac arrest. The child's heart started beating again
14 after a period of time, presumably when the air from
15 within the circulation dissipated."

16 Dr Davis also addresses debriefs in her statements:

17 "The role of debriefs has become a lot more
18 embedded in practice in the intervening years since the
19 death of Child C. During my early training, including
20 during the time covered by the Inquiry, debrief sessions
21 were often fairly informal. They were 'are you okay?'
22 type discussions. Over time, debriefs have become more
23 formal in terms of that it is held at a pre-arranged
24 time with invites sent to all staff involved. The role
25 of both hot (which is held in the immediate aftermath of
158

1 **MS BROWN:** Yes.

2 **LADY JUSTICE THIRLWALL:** And I think we can see
3 that we are just over halfway through, so I think your
4 two-hour estimate was rather pessimistic.

5 **MS BROWN:** Yes.

6 **LADY JUSTICE THIRLWALL:** So we will break now and
7 come back at 20 past 3.

8 (3.01 pm)

(A short break)

9
10 (3.20 pm)

11 **LADY JUSTICE THIRLWALL:** Yes, Ms Brown.

12 **MS BROWN:** Dr Peter Fielding, now a Consultant in
13 paediatric emergency medicine, worked at the hospital at
14 the start of his specialist paediatric training between
15 September 2015 and March 2016. He says that:

16 "... the consultant team at the Countess of Chester
17 had (and continues to have) a strong reputation amongst
18 paediatric trainees in the Mersey Deanery for being
19 a committed highly professional and welcoming team who
20 care about their trainees and provide a good learning
21 experience for trainee doctors."

22 He describes the Consultant team as:

23 "... a very visible presence on the wards and
24 always accessible."

25 He adds:

160

1 "I can say that the Consultant team at the Countess
2 of Chester during my placement there were one of the
3 most supportive, passionate and caring teams that I have
4 worked in."

5 In his statement to the Inquiry Dr Fielding says:

6 "I do recall wondering whether the number of babies
7 who deteriorated or died during my time at the Countess
8 of Chester was high. I had no reference point to
9 compare this against as I had never worked in
10 neonatology before, and I remember voicing this question
11 to one of my registrars at the time Dr U. From what
12 I can recall, Dr U agreed the number of collapse
13 episodes seemed high, but that his overall feeling was
14 that this was a bad or unlucky run, which can happen at
15 times."

16 Dr Fielding says:

17 "... at no point during my six-month placement at
18 the Countess of Chester was I aware of the suspicions or
19 concerns of others about the conduct of Lucy Letby.
20 Nobody discussed any concerns about Lucy Letby directly
21 with me."

22 Dr Fielding was involved in the care of Child G,
23 being called to attend on 21 September 2015 following an
24 incident when Child G had vomited and oxygen levels had
25 fallen. Dr Fielding reflects as follows:

161

1 that the quality of care was always of the highest
2 standard."

3 She adds:

4 "I felt the nursing staff were highly skilled and
5 competent."

6 Dr Chang described the system of debriefs that
7 operated at the time as follows:

8 "With regard to debriefs, they do occur but not
9 always formally. If for instance there is a death of
10 a baby there will be an immediate debrief with anyone
11 who is present. After a couple of days a Consultant
12 would catch up with you and discuss what happened
13 possibly during a weekly ward round. There were formal
14 debriefs that would be instigated by Consultants. The
15 staff involved with a particular baby that died would
16 get an invite to a debrief."

17 Dr Chang was involved in the care of Child I. In
18 her statement to the police she says:

19 "Child I had almost regular events where she would
20 be really sick and then 'bounce back'. Matt Neame
21 [that's Dr Matthew Neame] had been resuscitating poor
22 Child I every night shift then every morning at handover
23 I would be like 'Oh my God, Poor Child I and poor you,'
24 and then would have a day shift of where we would say
25 "Oh, she's not been too bad' as she had seemingly

163

1 "Taken as an isolated episode this is not the sort
2 of incident that would lead to a debrief or any form of
3 clinical incident reporting. In the wider context of
4 a significant number of babies having unexpected
5 collapse episodes however, maybe a flagging up of each
6 unexpected collapse episode would have demonstrated
7 a pattern of repeated unexpected collapse and
8 deterioration on the unit."

9 In relation to safeguard training, Dr Fielding says
10 he does not recall being given specific training on what
11 to do where abuse on the part of a member of staff
12 towards babies or children in a hospital is suspected.

13 However, he says:

14 "... despite this, I am confident that had
15 I suspected such behaviour, I would have known how to
16 escalate my concerns to senior safeguarding figures at
17 the Trust."

18 Dr Rachel Chang worked at the hospital as
19 a paediatric Registrar between September 2015 and
20 April 2016. She says she:

21 "... never felt any hesitation in being able to
22 approach Consultants to escalate issues or concerns."

23 She goes on to say:

24 "I always felt supported and always felt that there
25 was a consistent consultant presence on the NNU. I felt

162

1 recovered quite quickly."

2 Dr Chang goes on to explain in her statement to the
3 Inquiry:

4 "I never questioned why Child I had been so unwell
5 on the night shifts compared to her relatively stability
6 during the days. During my previous neonatal placement
7 some babies were just repeatedly unwell, as they were
8 fragile and unpredictable at times."

9 Dr Chang goes on to say:

10 "... it had not entered my mind as a possibility
11 that incompetence or deliberate harm might be causative
12 of Child I's nighttime deteriorations."

13 Dr Chang was also involved in attempts to
14 resuscitate Child I on the night of 23 October when she
15 died. In relation to debriefs regarding Child I's
16 death, Dr Chang states she discussed her involvement
17 with Dr Gibbs the Consultant who was called to assist
18 the resuscitation but does not recall attending a formal
19 debrief. Dr Chang clarifies that:

20 "... this does not mean that formal debrief did not
21 occur."

22 She adds:

23 "I am sorry I do not have a clearer memory of
24 this."

25 In relation to debriefs generally Dr Chang says in

164

1 her evidence to the Inquiry:

2 "Ideally all staff involved in an episode where
3 a child dies should be at the debrief but this is very
4 difficult to coordinate in a timely fashion when the
5 multiple professionals involved are all working on
6 different shift patterns."

7 In relation to safeguard training, Dr Chang
8 confirms she has received safeguarding training but
9 that:

10 "I cannot recall having received specific training
11 on what to do if abuse is suspected by a member of staff
12 but I know that if I had such a concern I would be able
13 to raise this and immediately escalate to the doctor and
14 lead nurse for safeguarding."

15 Dr Chang recalls having formal training by the
16 Mersey Paediatric Deanery on Sudden Death in Infancy or
17 Childhood and how to report cases to the Coroner,
18 although cannot recall formal training about Child Death
19 Reviews.

20 Dr Rhiannon Austin worked as a paediatric Registrar
21 at the hospital between September 2015 and March 2016
22 and from September 2016 to March 2017. Dr Austin
23 comments on the fact that she felt that:

24 "There was generally a good relationship between
25 medical professionals (doctors, nurses, midwives and
165

1 hospital I was aware of colleagues who had very
2 difficult shifts on the NNU, but as I was a relatively
3 junior doctor and I wasn't sure if this was a natural
4 fluctuation in mortality, as can sometimes happen, or if
5 it was something to be concerned about. I recall having
6 informal conversations with consultant colleagues and
7 that they were reviewing the situation."

8 Doctor S worked at the hospital from March 2016
9 to September 2016 and comments:

10 "I always felt very well supported and happy with
11 the whole team."

12 Doctor S goes on to say:

13 "In terms of the culture at the Hospital, as
14 compared to other hospitals that I had worked at as part
15 of my training rotations, I would say the culture at the
16 Hospital was one of the most supportive, friendly and
17 approachable places to work within the region. Trainees
18 would, and still do, request to work at the Hospital due
19 to the positive culture within the paediatric and
20 neonatal departments."

21 Doctor S goes on to say in relation to concerns or
22 suspicions:

23 "I had not heard of any problem regarding the
24 quality of care, quality of management, supervision
25 and/or support for doctors at the Hospital in 2016.
167

1 others) at the hospital."

2 And that Consultants:

3 "... were always supportive and available for
4 advice."

5 She goes on to say:

6 "I would say that my consultant colleagues at the
7 Countess were more approachable and supportive than at
8 other hospitals I have worked at ..."

9 Noting also:

10 "... as a junior doctor in training, the paediatric
11 department at the Countess of Chester was known to be
12 a lovely place to work at and trainees enjoyed being
13 placed there due to the supportive and approachable
14 consultant body."

15 In her statement to the Inquiry, she says that she:
16 "... was aware that between junior colleagues there
17 were informal discussions about how sad it was that
18 there had been a number of sick babies and that it must
19 be difficult for the nursing staff of the NNU and the
20 doctors involved with those patients as well as their
21 families."

22 Dr Austin says in her statement to the Inquiry:

23 "I was worried about the number of deaths on the
24 unit. During the first few months as an ST3 [that's
25 a third year of specialist paediatric training] at the
166

1 I had heard that there were some unusual or complex
2 collapses/deaths, but there was nothing regarding the
3 quality of care/support for trainees."

4 In referring to knowledge of processes used to
5 review a child death, Dr S emphasises the difference in
6 training depending on a doctor's experience, noting
7 that:

8 "It is only since becoming a consultant that the
9 process of Child Death Review and Child Death Overview
10 Panels have been more understood. As a trainee, sudden
11 death is not a common experience that you see ... Trusts
12 have a Child Death Overview Panel representative ... you
13 may not know about that as a trainee unless you have
14 encountered a sudden death."

15 Doctor S was involved in the care of Child O and
16 describes the information that Child O and Child P had
17 died as being:

18 "... a total shock to me."

19 Doctor S was also involved in the care of Child Q
20 and she notes:

21 "I would not have been able to predict from
22 Child Q's presentation that they would deteriorate so
23 suddenly."

24 Doctor S's recollection is that she became aware
25 that others had concerns about Letby in the last couple
168

1 of months before she moved rotation, so in July
2 and August 2016, once Letby had been moved off the ward.
3 She describes:

4 "... general discussion within the team, that
5 Lucy Letby had been present at the time of many of the
6 collapses and resuscitations of the babies."

7 Dr James Smith worked as a locum Registrar at the
8 Countess of Chester Hospital for a three-week period
9 in February 2016. During that period, he was involved
10 in the care of Child K. One of the things that
11 Dr Smith, now a paediatric Consultant, recalled from
12 this brief period at the hospital was a conversation
13 with Dr Gibbs who told him that there had been a number
14 of deaths on the neonatal unit over the past year and
15 they were worried but were not sure why this was
16 happening. Dr Smith says of this conversation, that
17 whilst he was unable to remember the exact words:

18 "I remember being concerned by how worried Dr Gibbs
19 seemed and this has stayed in my memory long after
20 working there."

21 Dr Jessica Burke worked as a junior doctor at the
22 Countess of Chester Hospital at various points in her
23 training including from March 2016 to September 2016.

24 She describes the paediatric department as having:
25 "... a positive reputation in that it was busy but

169

1 and that she considers their presence enhanced the
2 educational opportunities and support for trainee
3 doctors and that this fed into improving care for
4 patients.

5 Dr Burke adds:

6 "In retrospect I now also wonder whether the
7 culture of having ANPs [Advanced Nurse Practitioners]
8 who are employed long term and do not rotate, benefits
9 the care in terms of another consistent clinician group
10 [in addition to neonatal nurses and consultants] who can
11 potentially recognise patterns or changes and identify
12 outlying events over a longer period than the 6 months
13 that most junior doctors spend on one placement."

14 In relation to training on safeguarding, Dr Burke
15 refers to the Royal College of Paediatrics and Child
16 Health guidance in the RCPCH Child Protection Companion.
17 This sets out that children in hospital can be abused by
18 health professionals and suspicions must be reported to
19 the consultant in charge and the named or designated
20 professional without delay.

21 In reflecting on events, Dr Burke suggests that if
22 concerns are raised that a member of hospital staff may
23 be harming patients, there should be:

24 "... a standardised pathway of escalation, high
25 alert and monitoring."

171

1 supportive, friendly and a well-run department so a good
2 placement."

3 Notably she comments on an:

4 "... environment that welcomed discussion of cases
5 that had confused or upset us."

6 Dr Burke acknowledges however that having assisted
7 in the resuscitation of Child P:

8 "I felt quite anxious and sad when I was on the
9 neonatal unit but I put this down to my own distress of
10 having been called to assist in the resuscitation for
11 a baby who did not survive."

12 Later in her statement Dr Burke says:

13 "In the years since, I have been part of
14 a resuscitation team for more paediatric and neonatal
15 cardiac arrests. In the monitored environment of an NNU
16 I have never again, since Child P, attended a neonatal
17 cardiac arrest where the cause was entirely unknown."

18 She describes the rapidity of Child P's
19 deterioration and his continued cardiac arrests despite
20 initial successful resuscitation as:

21 "... entirely unique for me now with my subsequent
22 8 years of experience."

23 Dr Burke comments that when she worked at the
24 Liverpool Women's Hospital on a much larger tertiary
25 neonatal unit, there were Advanced Nurse Practitioners,

170

1 With the clinical and safeguarding lead being
2 notified along with a management representative, as well
3 the Child Death Overview Panel and the Medical Examiner.
4 Dr Burke also expresses the view that:

5 "The potential for healthcare staff inflicted harm
6 on patients needs to be covered by medical and nursing
7 education programmes."

8 Dr Cooke worked at the hospital as a paediatric
9 senior house officer from December 2015 to January 2017.
10 She was involved in the care of Child O and states that
11 she:

12 "... would not have anticipated Child O's
13 collapse ... it was an unlikely event to happen."

14 Dr Cooke was urgently called to attend Child P and
15 assisted in the resuscitation attempt. She describes
16 Child P's death as "unexpected" saying that Child P "was
17 making good progress." She says however that she was
18 not aware of any concerns or suspicions of other doctors
19 or nurses in relation to the circumstances of Child O or
20 Child P's death.

21 Dr Anthony Ukoh worked at the hospital for a brief
22 period between April and August 2016 as a paediatric
23 registrar. He was involved in the care of twins Child L
24 and Child M. In the case of Child L he requested
25 a blood sample due to low blood sugar levels. His

172

1 evidence was that he did not see the results at the time
2 but that had he done so "he would have wondered if
3 Child L had received exogenous insulin". His evidence
4 to the Inquiry is:

5 "I would have repeated the blood tests, discussed
6 with the Consultant on duty, other team members and
7 possibly escalated to the case to the Paediatric
8 Endocrinology team for further advice."

9 In relation to Child M, Dr Ukoh says he examined
10 Child M on the morning of 9 April 2016 and:

11 "... did not note any clinical signs or symptoms
12 that caused me concern."

13 Dr Ukoh was called to Child M later in the
14 afternoon of 9 April 2016 and describes Child M's
15 collapse as "completely unexplained" noting also that:

16 "... even after resuscitation, various
17 investigations carried out (chest and abdominal x-rays
18 and blood tests), did not confirm any obvious detectable
19 cause."

20 Child M was successfully resuscitated and Dr Ukoh
21 says that for this reason there was no debrief; this
22 would only occur where a baby died.

23 Dr Ukoh was also involved in the care of Child N.
24 On examination of Child N on 15 June he noted concerns
25 about mottled skin and dried blood around the lips and

173

1 hospital, she did not have any concerns about Letby and
2 only became aware of suspicions after the police
3 investigation had commenced.

4 My Lady, I now turn to evidence from doctors who
5 did not work directly on the neonatal unit.

6 Dr Joanne Davies was the Consultant clinical lead
7 for obstetrics and gynaecology at the Countess of
8 Chester Hospital during 2015 and 2016. Her evidence is
9 that:

10 "Generally, relationships were good between the
11 different professional groups within the hospital."

12 Her observation of the NNU nursing staff was of
13 them:

14 "... working closely as a team with the doctors,
15 having good communication skills, and empathy and
16 support for the women who were our patients."

17 She adds:

18 "I observed relationships between obstetric and
19 neonatal staff to be good. I felt they worked well as
20 a team, to give the best care to both mother and baby."

21 Dr Davies was part of the Obstetric Review that
22 took place within 24 hours of the death of Child D. She
23 says of the death of Child D:

24 "This case was reviewed by the Obstetric Secondary
25 Review team immediately as this was a term baby that had

175

1 inside the oral cavity causing him to seek Consultant
2 advice.

3 Dr Ukoh was also involved in the care of siblings
4 Child O and Child P. Significantly he assisted in the
5 attempted resuscitation of Child P. However, Dr Ukoh
6 does not recall any debrief, beyond some discussion
7 about the similarity of circumstances of the deaths of
8 Child O and Child P.

9 Dr Bhowmik worked as a paediatric registrar at the
10 hospital from March 2016 to September 2016. Dr Bhowmik,
11 now a paediatric Consultant, was involved in the
12 attempted resuscitation of Child O. Dr Bhowmik recalls
13 discussing the sudden collapse of Child O and examining
14 Child P and Child R, following the death of Child O.
15 She states that when she learnt of the death of Child P
16 she was:

17 "... very surprised to hear this and had
18 discussions with fellow trainees, who were all surprised
19 as well."

20 She says that:

21 "At some point after this, I was informed by the
22 Consultant about the previous mortality concerns on the
23 unit (which I was not aware of before) and the decision
24 to invite the RCPCH to conduct an inquiry into this."

25 Dr Bhowmik states that when she was working at the

174

1 died unexpectedly, with no known fetal concerns in
2 labour. This is a rare event."

3 Dr Davies goes on to say:

4 "I considered the death of Child D to be
5 unexpected."

6 Dr Davies was a recipient of the email on
7 22 June 2015 that Dr Brearey sent to colleagues after
8 the death of Child D, referring to the fact that this
9 was the third death on the Neonatal unit within a short
10 time."

11 Dr Brearey's email, referring to the deaths of
12 Child A, C and D had stated:

13 "There does not seem to be any staff (medical or
14 nursing) members present at all three episodes other
15 than one nurse, who was not the nurse responsible for
16 Child D on that shift."

17 Dr Davies explains that this information did not
18 worry her as:

19 "Any concerns would have related to whether the
20 member of staff needed additional training or support,
21 which I would expect the Neonatal Nurse Manager to
22 follow up and act on. The wording of Stephen Brearey's
23 email reassured me that they had reviewed all possible
24 factors, including environment and staffing, and that
25 they had found nothing that related to the three

176

1 deaths."

2 Dr Davies refers in her statement to the fact that
3 the Obstetric Review and the Neonatal review in relation
4 to Child D were combined into one case review which
5 concluded that:

6 "No factor in either the obstetric or neonatal care
7 could be identified that accounted for the child's
8 death."

9 The post-mortem finding was that the cause of death
10 of Child D was pneumonia with acute lung injury likely
11 already present prior to birth. Dr Davies goes on to
12 say:

13 "I and other members of the obstetric team still
14 found it difficult to understand how a fetus could
15 develop acute pneumonia, where there had been no
16 clinical signs of infection during labour or the post
17 natal period of the mother and why there were not more
18 features in the baby and placenta of overwhelming
19 infection."

20 Dr Davies notes however that she respected the
21 expertise of the pathologist and the paediatricians.

22 Dr Davies says that it was in September 2015 that
23 she had been alerted to "possible higher than usual
24 mortality rates" and that she spoke to Dr Jim McCormack,
25 (the Lead for Obstetric and Gynaecology Risk),

177

1 including external representation from our tertiary
2 centre at the Liverpool Women's Hospital."

3 However, Dr Davies goes on to say this:

4 "Prior to the death of the triplets, there was
5 a general feeling that something was not right with the
6 NNU as we had previously had such low mortality rates.
7 There were rumours amongst the obstetric and midwifery
8 staff and there was an occasional unfounded comment that
9 we had another 'Beverley Allitt'. We were always quick
10 to stop this gossip as it felt completely unthinkable."

11 Dr Sara Brigham, like Joanne Davies was
12 a Consultant obstetrician and gynaecologist at the
13 hospital. She was the clinical risk lead for obstetrics
14 between 2013 and 2017. In her statement to the Inquiry
15 she explains that during the period 2015 to 2016 the
16 neonatal service and paediatric service sat within the
17 Urgent Care Division and maternity and obstetric
18 Services sat within the Planned Care division, which had
19 its own medical, nursing and operational leadership.
20 The two services were brought together through the
21 Women's and Children's care governance board chaired by
22 Dr McCormack, who was also a Consultant obstetrician and
23 gynaecologist.

24 During this period, maternity and neonatal services
25 would have investigated any incident separately.

179

1 Julie Fogarty (Head of Midwifery) and Stephen Brearey:

2 "... and informed them of the increased still birth
3 and neonatal deaths that I had identified."

4 Dr Davies explains that she personally did not
5 raise the concerns with the Executive team as at the
6 time she felt it was necessary to do a detailed review
7 of all the cases prior to further action. Dr Davies
8 says it was a joint decision between her, Jim McCormack
9 and Julie Fogarty that a review should take place and
10 that she discussed the need for a review with
11 Dr Brearey.

12 Dr Davies acknowledges that the report entitled
13 "Review of neonatal deaths and still births at the
14 Countess of Chester Hospital January 2015
15 to November 2015" was inaccurately titled and should
16 have been referred to as "Review of the Obstetric Care
17 of Neonatal Deaths and Stillbirths" because the report
18 was solely focused on obstetric care and did not
19 consider neonatal care.

20 Subsequently, in March 2016, Dr Davies was sent
21 Dr Brearey's thematic review of neonatal care. She says
22 that:

23 "The contents did not cause me any concern. If
24 anything I was reassured. I could see a thorough review
25 had been performed by specialists within neonatology,

178

1 Dr Brigham states that in the current system any review
2 would be planned jointly and if a death occurred in the
3 neonatal unit the maternity service would provide a full
4 review of care up to and including delivery.

5 Dr Brigham had time away from work between
6 June 2015 and October 2015, and on her return to work in
7 October 2015 she was advised 'that there had been
8 an increased number of baby deaths'. This led to
9 a review of the obstetric care of these babies and the
10 report written in November 2015.

11 Dr Brigham states that she:

12 "... believed that the neonatal team had already
13 looked at the neonatal care and had not found any
14 clinical themes."

15 The November Obstetric Review was of 18 stillbirths
16 and neonatal deaths which had been identified by the
17 risk team. Six of the 18 cases were neonatal deaths.
18 Dr Brigham confirms in her statement to the Inquiry that
19 this included the deaths of Child A, Child C, Child D
20 and Child E.

21 Dr Brigham explains that the neonatal team were not
22 involved in the review, although the patient safety lead
23 Debbie Peacock and Head of Midwifery Julie Fogarty were
24 involved. Dr Brigham says:

25 "... the external reviewer (Lesley Tomes, retired

180

1 Head of Midwifery and Supervisor of Midwives) felt that
2 our review process was extremely robust and open and
3 transparent. No new issues were identified from the
4 review."

5 Dr Brigham's recollection is that concerns were
6 raised about Letby "in the summer of 2016". She says:

7 "I remember the neonatal team raising the fact that
8 they had concerns that a member of staff was at the
9 centre of these deaths with the executive team at
10 a meeting that I was present at ... I recall the
11 executive team not being able to comprehend that these
12 deaths were due to a particular member of staff."

13 Dr Brigham says she:

14 "... became aware of the concerns regarding the
15 safety of babies on the neonatal unit in 2015/2016 and
16 suspicions about Letby, when the neonatal Consultants
17 came to discuss their concerns with us."

18 Dr Brigham is unable to recall the date of the
19 meeting or who attended. In her statement to the
20 Inquiry Dr Brigham sets out some of the changes that
21 have taken place at the hospital since 2015/16. She
22 notes that, in addition to the Women's and Children's
23 services now being one division:

24 "... there is now Board oversight for perinatal
25 services, with any neonatal death reported formally and

181

1 Stephen Brearey:

2 "... that there were serious concerns about excess
3 deaths on the NNU, and that Ian Harvey and Tony Chambers
4 were trying to silence the paediatricians and that
5 a member of staff was involved."

6 Dr Butcher did not have any direct discussions with
7 senior management but he wanted the Medical Staff
8 Committee to:

9 "... put on the record that the paediatricians
10 needed our support and I remained keen that the wider
11 Consultant membership should know what our paediatric
12 colleagues had been going through."

13 Dr Butler's perspective as a Consultant within the
14 hospital, who was not a paediatrician, was that:

15 "I don't think that relationships between
16 professional groups were particularly problematic at the
17 Countess generally."

18 Dr Butler is critical of the relationships between
19 senior management and Consultants, which he dates to the
20 appointment of Ian Harvey as Medical Director and
21 Tony Chambers as Chief Executive. He says senior
22 management viewed the Consultants as poorly motivated
23 and interested in personal gain.

24 He described the Consultants at the Countess as
25 "demoralised and disempowered". He says:

183

1 directly to the Board."

2 Dr Brigham also notes that a:

3 "... quality and safety dashboard and report is now
4 presented to the Women and Children's Governance
5 committee on a monthly basis, where death rates are
6 included, facilitating any increase in number to be
7 discussed by all the team and actions advised."

8 Dr Brigham says:

9 "... if we had had a perinatal dashboard in
10 2015/2016, the increase in neonatal deaths would have
11 been visualised month by month for all the team to
12 discuss and identify further investigations or actions."

13 Dr Butcher was a Consultant ophthalmic surgeon at
14 the Countess of Chester Hospital. He was also the
15 secretary to the Medical Staff Committee which acted to
16 represent interests of all the Consultants and permanent
17 medical staff at the Countess of Chester. During the
18 period of June 2015 to June 2016 he screened premature
19 babies for retinopathy of prematurity and says that he:

20 "... was therefore a regular visitor to the
21 neonatal unit."

22 Due to the nature of his work, he says he was:

23 "... close to paediatric colleagues at the
24 Countess, particularly Stephen Brearey."

25 Dr Butcher was told in "about 2016" by

182

1 "Tony Chambers' antipathy towards consultants may
2 have had something to do with his nursing background."

3 Dr Butcher says in his statement to the Inquiry
4 that if he had been a paediatrician he would have gone
5 to the police but expresses his view that:

6 "... this could have been a career ending move."

7 He goes on to say:

8 "I understand that there was a threat to report the
9 paediatricians to the GMC, and this was a very potent
10 threat, coming from the 'responsible officer'
11 Ian Harvey."

12 Dr Butcher's view is that Medical Directors should
13 not have both power over employment as an Executive
14 Director as well as being the responsible officer for
15 medical registration.

16 Dr Fiona MacRae was a Staff Grade Associate
17 Specialist and Specialty Doctor working as an
18 anaesthetist at the Countess of Chester. She had
19 concerns within the wider hospital about treatment of
20 her grade of anaesthetists that she considered "were
21 being sidelined and marginalised". She says that the
22 response of Ian Harvey and Tony Chambers and other
23 managers that they:

24 "... dismissed to our bullying concerns and pleas
25 for a respectful and fair working environment."

184

1 Professor Simon Kenny is a Consultant paediatric
2 surgeon at Alder Hey Children's Hospital. He was also
3 an attendee at some of the Cheshire and Merseyside
4 Neonatal Network board steering group and clinical
5 effectiveness meetings representing Alder Hey Children's
6 Hospital. Professor Kenny notes in his statement that:

7 "Dr Brearey was one of the most diligent attenders
8 of Neonatal Network meetings."

9 In his statement to the Inquiry Professor Kenny
10 addresses the issue of mortality data. He notes that,
11 with the benefit of hindsight, the annual mortality
12 figures at Chester were high but this was not
13 highlighted in the network meetings.

14 He notes that one of the issues around MBRRACE data
15 was timelines, commenting:

16 "... there was locally collected timely data which
17 was not benchmarked and nationally benchmarked data with
18 a significant time lag."

19 Professor Kenny states:

20 "I do not think that on the basis of the mortality
21 data presented at the meeting which I attended that
22 a discrete signal was visible for the Countess of
23 Chester."

24 Professor Kenny was involved in the table top
25 review of Child I's care. Professor Kenny notes in his
185

1 "... we discussed the possibility of foul play."

2 Professor Kenny continued regular clinics at the
3 Countess and notes:

4 "Given the subsequent events from 2016 to the
5 present day, I have witnessed remarkably professional
6 behaviour from all the paediatricians at the Countess of
7 Chester who have maintained a strong patient centred
8 focus despite the intense pressure that they have been
9 under."

10 Professor Kenny makes a number of suggested
11 recommendations in his statement, including a statutory
12 duty on board members to report allegations of
13 criminality to the police, child death oversight panels
14 having access to benchmarked mortality data, and
15 mandatory safeguarding training to include policies on
16 action to take if staff members have concerns about
17 criminality.

18 Professor Kenny also says:

19 "Parents are the best guardians of their children
20 and should have open access to the neonatal ward at all
21 times ... Any new neonatal unit that is being built
22 should be designed to allow parents to sleep by the
23 cots."

24 My Lady, full reflection on the evidence will only
25 be possible at the end of the oral hearings when all of
187

1 statement that this table top review was:

2 "... essentially a discussion around the decision
3 making to do with the transfers that had been involved."

4 Professor Kenny also carried out urology clinics at
5 the Countess of Chester Hospital and recalls that:

6 "... at some point in 2015-2016 during these
7 clinics Dr Brearey raised concerns with me over noted
8 increases in neonatal death rates and was struggling to
9 do you live a clear cause. I remember having several
10 conversations with him about this and during one of
11 those conversations he mentioned that he had mapped out
12 which staff had been on the unit at the time of sudden
13 collapses and that there was a single member of staff
14 who was always present when they occurred. I agreed
15 with him that this was both unusual and concerning and
16 I encouraged him to [discuss] these concerns with the
17 medical director. I am not sure whether it was by text
18 message, phone call or at the next clinic that I learned
19 that a Royal College review was being held. This
20 provided me with some assurance that matters were being
21 looked at. I was also aware that the individual was not
22 involved in direct patient care thereafter which was
23 reassuring pending the review outcome."

24 Later in his statement Professor Kenny states that
25 as part of the discussion with Dr Brearey:
186

1 the written evidence has been taken into account and
2 considered. However, it is apparent that a number of
3 themes emerge from the written statements of the doctors
4 who worked on the unit between June 2015 and June 2016.

5 First, that the view of the neonatal unit by the
6 doctors that worked there during this period were
7 predominantly positive. Many trainee doctors emphasised
8 the supportive working environment, noting that
9 Consultants were approachable and they felt able to
10 raise concerns and queries with them. A minority of
11 trainee GP doctors, it appears, did not feel so well
12 supported.

13 Whilst there is some suggestion that nursing staff
14 felt consultant rounds were too infrequent, occurring
15 twice a week during this period, the overwhelming tenor
16 the evidence from the doctors is of their perception
17 that there were good relationships with nursing staff
18 who they viewed as dedicated and competent.

19 It is apparent from a reading of the doctors'
20 evidence that whilst the neonatal nursing staff and the
21 Consultants were constant presences on the unit, there
22 was a very considerable turnover of junior doctors due
23 to the training scheme which placed doctors in different
24 hospitals on six-month rotating placements. One doctor
25 reflects on whether this meant that patterns or outlying
188

1 events were less readily identified, noting that in
 2 large tertiary neonatal units there were advanced nurse
 3 practitioners who were an additional constant presence
 4 alongside neonatal nurses and Consultants.

5 It is apparent that whilst some of the doctors
 6 undertaking paediatric training had an awareness of high
 7 mortality rates, none of them had made a clear
 8 connection between the deaths and Letby. The evidence
 9 of Dr Emily Thomas is perhaps representative of many:

10 "As a rotating trainee, I would not have known
 11 about the bigger picture."

12 It appears that whilst safeguarding training was
 13 undertaken by the doctors who worked on the neonatal
 14 unit, this training did not include consideration or
 15 case studies of situations where health professionals
 16 were harming children in a hospital setting. It is also
 17 notable that below Consultant level it appears that
 18 knowledge of the reporting procedures following a sudden
 19 child death in hospital, for example reporting to the
 20 Child Death Overview panels or use of the sudden death
 21 in childhood procedure, was limited.

22 The response of almost all of the then junior
 23 doctors was that had they had concerns they would have
 24 raised them with one of the Consultants on the unit.
 25 Some of the unit doctors spoke of their distress at the

1 indeed, Ms Brown. We will rise now until tomorrow
 2 morning at 10 o'clock.

3 (4.04 pm)

4 (The Inquiry adjourned until 10.00 am
 5 on Thursday, 10 October 2024)

6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

1 death of the babies and of the fact that they considered
 2 the deaths unusual or the mortality rate high. Others
 3 emphasised their relative inexperience at the time,
 4 noting that it was only from their current standpoint in
 5 many cases now as Consultant paediatricians or
 6 neonatologists that they viewed the deaths as unusual.

7 Few of the doctors have clear recollections of
 8 debriefs during the relevant period, yet most agree on
 9 the importance of such meetings both for learning and
 10 for the well-being of staff. The difficulties in terms
 11 of the practicalities of arranging debriefs within
 12 a shift working environment is also apparent from the
 13 evidence. Some witnesses refer to an improvement in the
 14 importance and regularity with which debriefs are now
 15 approached.

16 My Lady, that concludes a summary of the doctors'
 17 evidence. I emphasise again that it is a summary of
 18 evidence for the assistance of these oral hearings. It
 19 does not purport to be, and self-evidently as a summary,
 20 cannot be comprehensive. It is, however, intended to
 21 assist the oral hearings, insofar as it provides some
 22 indication of themes that run through the evidence from
 23 doctors who have provided written evidence to the
 24 Inquiry.

25 **LADY JUSTICE THIRLWALL:** Thank you very much
 190

I N D E X

1		
2		
3		
4	DR ANNA MILAN (sworn)	1
5	Questions by MR DE LA POER	1
6	KATHRYN ANN DE-BERGER (sworn)	40
7	Questions by MR BERSHADSKI	40
8	DR SHIRLEY BOWLES (affirmed)	66
9	Questions by MR DE LA POER	66
10	Questions by LADY JUSTICE THIRLWALL	123
11	Summary of Doctors' Evidence	126
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

LADY JUSTICE THIRLWALL: [40] 1/5 1/14 5/20 21/16 39/11 39/22 40/5 40/7 40/10 52/16 64/24 65/4 65/11 65/14 65/19 66/1 66/5 66/8 84/25 85/2 85/7 85/11 85/25 99/20 123/21 124/5 124/18 125/8 125/15 125/19 125/21 125/25 126/6 126/11 126/20 159/24 160/2 160/6 160/11 190/25	10 o'clock [1] 191/2 10 October 2016 [1] 139/19 10 October 2024 [1] 191/5 10 years [1] 106/18 10,000 [2] 32/6 93/20 10.00 [1] 191/4 10.00 am [1] 1/2 10.05 am [1] 1/4 10.57 [1] 40/2 11 [1] 40/1 11 April [1] 31/5 11.16 [1] 40/4 11.30 [1] 39/20 11.54 [1] 65/23 11th [2] 83/21 84/10 12 August [1] 9/16 12 August 2015 [1] 10/16 12 June 2015 [1] 133/16 12.15 pm [1] 45/23 12.59 pm [1] 65/25 12th [1] 9/13 13 [1] 3/16 13 June 2015 [1] 157/9 14 April [1] 87/20 14th [2] 45/3 48/8 15 [1] 85/8 15 June [1] 173/24 15 May [1] 1/20 15 months [1] 50/14 15.45 [2] 81/1 81/5 15.49 [1] 85/10 16 [3] 36/22 85/8 181/21 16.15 [2] 7/3 7/3 16.40 [1] 10/16 16.49 [1] 22/6 165 [1] 8/12 169 [2] 8/10 22/22 16th [2] 45/3 48/8 17 [1] 62/15 17 April 1997 [1] 67/14 17.56 [1] 6/25 18 [5] 51/7 85/8 85/9 180/15 180/17 18.26 [5] 82/3 85/6 85/10 85/11 85/25 18.29 [3] 85/15 85/19 86/1 19 [1] 51/10 1985 [1] 40/24 1995 [1] 40/25 1996 [3] 66/24 67/3 67/21 1997 [1] 67/14	2001 [1] 41/4 2002 [1] 117/8 2004 [1] 67/5 2008 [2] 2/3 2/7 2009 [4] 2/11 41/5 41/7 156/19 2010 [3] 41/9 58/25 59/4 2011 [6] 2/8 2/13 2/16 37/19 105/4 156/20 2013 [1] 179/14 2014 [3] 137/23 138/13 148/18 2015 [55] 10/16 27/21 37/19 37/22 127/4 128/3 128/25 128/25 129/18 130/11 132/6 133/16 134/23 134/23 135/11 136/14 136/25 137/24 138/23 138/23 140/6 140/23 141/17 141/17 142/13 143/7 144/23 146/16 147/11 149/9 149/17 152/3 152/4 155/21 156/21 156/22 157/9 159/7 160/15 161/23 162/19 165/21 172/9 175/8 176/7 177/22 178/14 178/15 179/15 180/6 180/6 180/7 180/10 182/18 188/4 2015-2016 [3] 144/18 159/4 186/6 2015/16 [2] 36/22 181/21 2015/2016 [4] 3/5 67/20 181/15 182/10 2016 [64] 3/5 42/7 44/3 45/14 46/3 46/10 46/24 47/5 48/6 48/14 49/3 49/16 49/17 67/20 67/23 68/2 68/20 70/23 81/1 104/12 105/2 118/7 127/5 132/7 132/10 135/11 136/25 139/19 139/22 141/18 144/18 146/23 147/11 148/18 155/21 155/23 159/4 160/15 162/20 165/21 165/22 167/8 167/9 167/25 169/2 169/9 169/23 169/23 172/22 173/10 173/14 174/10 174/10 175/8 178/20 179/15 181/6 181/15 182/10 182/18 182/25 186/6 187/4 188/4 2017 [13] 2/16 6/25 58/3 59/4 60/10 117/13 117/17 117/22 128/3 155/23 165/22	172/9 179/14 2018 [4] 117/24 117/25 118/3 118/21 2024 [2] 1/1 191/5 21 July [1] 44/7 21 September 2015 [1] 161/23 216 [1] 80/19 217 [1] 89/25 21st June 2014 [1] 138/13 22 June 2015 [1] 176/7 23 [1] 106/20 23 February 2016 [1] 139/22 23 October [1] 164/14 23 seconds [1] 89/1 24 [2] 48/20 52/12 24 hours [3] 7/12 151/11 175/22 24 May [1] 66/16 25 April [1] 59/25 26 November 2015 [1] 149/9 264 [3] 31/17 90/20 93/18 29 [2] 45/13 45/14 2916 [1] 44/2	5,000 [1] 32/5 50 [2] 120/10 120/11 52 [1] 126/25
MR BERSHADSKI: [4] 40/6 40/13 52/17 65/12 MR DE LA POER: [14] 1/9 1/16 5/24 21/17 39/8 39/18 66/2 66/12 85/1 85/20 86/2 123/18 125/20 126/3 MS BROWN: [6] 126/10 126/16 126/24 160/1 160/5 160/12	7 7 September 2015 [1] 143/7 750 [1] 50/12	7 7 September 2015 [1] 143/7 750 [1] 50/12	8 8 July 2016 [2] 45/14 46/3 8 years [1] 170/22 8A [1] 120/12	
'81 [2] 67/1 67/2 'are [1] 158/21 'Beverley [1] 179/9 'Beverley Allitt' [1] 179/9 'bounce [1] 163/20 'cold [1] 149/4 'hot [1] 149/3 'Oh [1] 163/23 'responsible [1] 184/10 'that [1] 180/7 'this [1] 153/3 'unusual' [1] 130/25 'why' [1] 157/13	8 8 July 2016 [2] 45/14 46/3 8 years [1] 170/22 8A [1] 120/12	8 8 July 2016 [2] 45/14 46/3 8 years [1] 170/22 8A [1] 120/12	9 9 April [2] 31/4 173/10 9 April 2016 [2] 81/1 173/14 9 October 2024 [1] 1/1 9.36 [5] 99/10 99/11 99/15 99/16 99/20 9.38 [6] 89/1 91/23 91/25 98/21 99/17 99/22 9.40 [1] 98/21 9th [1] 84/8	
0 0.0 [1] 22/19 0003174 [1] 45/12 0014604 [1] 48/20 0017911 [1] 56/24 0018046 [1] 42/11 0063777 [1] 59/22 0101342 [1] 50/3	9 9 April [2] 31/4 173/10 9 April 2016 [2] 81/1 173/14 9 October 2024 [1] 1/1 9.36 [5] 99/10 99/11 99/15 99/16 99/20 9.38 [6] 89/1 91/23 91/25 98/21 99/17 99/22 9.40 [1] 98/21 9th [1] 84/8	9 9 April [2] 31/4 173/10 9 April 2016 [2] 81/1 173/14 9 October 2024 [1] 1/1 9.36 [5] 99/10 99/11 99/15 99/16 99/20 9.38 [6] 89/1 91/23 91/25 98/21 99/17 99/22 9.40 [1] 98/21 9th [1] 84/8	A A's [6] 130/6 134/10 139/4 139/16 139/22 140/1 abdominal [1] 173/17 ability [2] 52/7 55/15 able [22] 31/22 33/4 36/11 38/2 53/4 69/11 70/23 71/22 72/22 76/14 97/7 101/7 117/11 119/19 120/16 143/17 157/2 162/21 165/12 168/21 181/11 188/9 abnormal [6] 29/2 30/19 30/21 33/22 69/18 70/12 about [185] 1/8 3/18 4/17 10/22 11/13 14/11 16/19 18/5 18/12 23/1 28/7 29/10 29/15 29/24 31/20 33/25 35/11 36/18 37/23 38/9 38/12 39/6 39/19 41/13 43/16 44/15 44/21 45/2 45/3 46/15 47/11 49/14	
1 1 o'clock [2] 65/20 65/22 1 September [1] 49/2 1 September 2016 [1] 49/3 1,099 [2] 31/25 90/5 1.40 pm [1] 45/22 10 [5] 11/13 23/11 32/3 39/10 48/1	1 1 o'clock [2] 65/20 65/22 1 September [1] 49/2 1 September 2016 [1] 49/3 1,099 [2] 31/25 90/5 1.40 pm [1] 45/22 10 [5] 11/13 23/11 32/3 39/10 48/1	1 1 o'clock [2] 65/20 65/22 1 September [1] 49/2 1 September 2016 [1] 49/3 1,099 [2] 31/25 90/5 1.40 pm [1] 45/22 10 [5] 11/13 23/11 32/3 39/10 48/1	A A's [6] 130/6 134/10 139/4 139/16 139/22 140/1 abdominal [1] 173/17 ability [2] 52/7 55/15 able [22] 31/22 33/4 36/11 38/2 53/4 69/11 70/23 71/22 72/22 76/14 97/7 101/7 117/11 119/19 120/16 143/17 157/2 162/21 165/12 168/21 181/11 188/9 abnormal [6] 29/2 30/19 30/21 33/22 69/18 70/12 about [185] 1/8 3/18 4/17 10/22 11/13 14/11 16/19 18/5 18/12 23/1 28/7 29/10 29/15 29/24 31/20 33/25 35/11 36/18 37/23 38/9 38/12 39/6 39/19 41/13 43/16 44/15 44/21 45/2 45/3 46/15 47/11 49/14	
2 2.8 [1] 86/8 20 [2] 51/13 160/7	2 2.8 [1] 86/8 20 [2] 51/13 160/7	2 2.8 [1] 86/8 20 [2] 51/13 160/7	5 5 August [1] 130/11 5 August 2015 [1] 142/13 5 August 2017 [1] 6/25	

A				
<p>about... [153] 50/1 50/14 51/11 51/11 51/14 51/16 52/9 52/11 54/25 55/20 57/3 57/21 57/24 57/25 59/19 61/19 62/17 62/20 62/22 63/1 64/3 64/7 64/13 64/16 64/23 70/5 70/8 70/8 70/13 71/12 71/20 72/24 74/17 74/19 74/22 75/13 77/4 77/25 80/6 80/25 82/17 83/20 88/22 89/12 91/23 91/24 92/11 92/19 94/7 95/25 96/5 96/17 96/20 96/23 96/25 97/4 97/5 97/12 97/13 98/5 98/11 99/2 102/2 102/17 102/23 103/22 104/5 106/1 107/3 107/13 107/16 107/25 108/1 108/11 108/15 109/3 110/13 111/1 111/7 112/13 112/16 114/4 114/10 115/11 115/21 116/21 116/25 117/10 117/23 120/3 120/20 121/4 121/17 121/21 122/22 123/1 123/17 124/7 124/10 126/16 127/20 127/22 127/23 127/23 130/5 131/3 131/5 132/3 133/6 133/17 133/20 134/21 135/21 136/9 136/11 136/21 137/11 137/17 140/4 143/22 146/14 147/12 147/18 147/22 148/4 148/9 153/21 154/7 155/15 156/14 156/23 157/13 160/20 161/19 161/20 165/18 166/17 166/23 167/5 168/13 168/25 173/25 174/7 174/22 175/1 181/6 181/16 182/25 183/2 184/19 186/10 187/16 189/11 above [7] 3/9 3/10 31/18 34/10 54/19 88/23 159/8 absence [1] 157/24 absolute [1] 109/3 absolutely [10] 6/22 11/25 12/3 26/4 28/14 32/4 33/3 79/15 103/21 105/17 abuse [8] 133/6 144/4 146/7 148/9 148/12 150/14 162/11</p>	<p>165/11 abused [1] 171/17 abusing [1] 131/16 accept [1] 123/25 accepted [1] 30/5 Accepting [1] 25/6 access [16] 25/8 37/1 37/11 94/19 97/20 97/22 98/4 98/7 109/2 111/19 114/19 115/24 116/16 155/16 187/14 187/20 accessible [2] 114/6 160/24 accidentally [2] 13/17 95/12 accord [1] 156/12 accordance [1] 9/20 accordingly [2] 36/11 148/15 account [2] 140/11 188/1 accounted [1] 177/7 accurate [2] 21/3 40/21 accurately [3] 8/10 22/17 83/17 accusations [1] 47/11 accused [2] 63/15 64/17 acknowledged [1] 29/19 acknowledges [2] 170/6 178/12 acknowledging [1] 107/6 across [5] 4/4 37/1 59/5 63/11 106/12 act [4] 54/25 91/14 92/25 176/22 acted [4] 26/22 64/19 70/1 182/15 action [8] 18/18 27/17 27/25 28/13 110/18 131/22 178/7 187/16 actions [3] 88/13 182/7 182/12 actively [1] 151/17 activity [1] 150/3 actual [3] 64/4 81/13 104/15 actually [46] 16/13 16/19 20/5 20/6 23/8 28/5 29/19 36/8 36/10 36/25 37/14 58/17 69/10 70/4 71/6 71/7 72/6 72/25 73/1 73/6 82/22 88/5 88/6 88/12 89/2 91/18 96/21 97/5 98/25 99/17 99/22 100/18 100/22 101/1 105/20 109/24 110/14</p>	<p>110/18 113/6 115/24 117/4 117/5 122/3 124/22 125/6 125/11 acute [2] 177/10 177/15 ad [1] 5/3 ad hoc [1] 5/3 adapting [1] 38/9 add [3] 69/23 100/14 113/18 added [1] 69/21 adding [2] 143/2 150/1 addition [4] 53/25 127/13 171/10 181/22 additional [9] 18/12 20/21 36/4 69/21 79/25 128/12 154/23 176/20 189/3 address [2] 18/19 63/3 addressed [4] 17/13 18/1 91/10 107/10 addresses [2] 158/16 185/10 addressing [1] 139/20 adds [13] 137/10 138/15 141/23 144/15 147/1 156/14 158/9 159/20 160/25 163/3 164/22 171/5 175/17 adjourned [1] 191/4 adjournment [1] 65/24 administered [6] 12/17 13/9 17/20 30/2 34/20 95/5 administration [4] 11/19 94/18 108/24 115/3 admit [1] 72/25 adult [1] 4/25 advance [1] 21/20 advanced [3] 170/25 171/7 189/2 adverse [1] 127/24 advice [18] 10/15 18/23 42/2 88/18 89/8 89/13 90/12 90/18 115/21 116/7 132/2 144/9 148/14 152/11 157/4 166/4 173/8 174/2 advice/information [1] 10/15 advise [1] 53/14 advised [3] 53/13 180/7 182/7 affairs [1] 26/13 affect [2] 129/13 132/20 affecting [1] 142/9 affirmed [2] 66/7</p>	<p>192/7 after [31] 18/7 18/17 22/12 44/14 48/2 49/9 58/21 69/5 75/5 92/15 98/25 101/11 112/14 117/14 117/18 130/25 132/7 132/10 138/20 143/15 147/6 149/4 153/7 158/14 159/1 163/11 169/19 173/16 174/21 175/2 176/7 after June 2016 [2] 132/7 132/10 aftermath [1] 158/25 afternoon [3] 7/11 125/22 173/14 afterthought [1] 141/25 afterwards [2] 88/9 158/8 again [42] 16/25 21/19 23/13 23/23 23/25 24/6 24/23 25/22 28/17 29/21 30/8 31/23 32/2 32/22 33/5 33/14 33/15 37/2 38/4 38/10 39/25 49/2 52/22 55/23 61/1 65/21 70/3 73/21 74/12 82/2 82/4 92/5 103/4 103/25 110/23 111/5 113/3 124/7 132/7 158/13 170/16 190/17 against [10] 47/6 55/1 58/6 60/11 60/24 62/9 83/9 99/9 100/3 161/9 agree [11] 26/25 27/7 27/16 75/15 95/7 95/21 96/12 96/13 103/21 105/10 190/8 agreed [6] 56/10 60/18 60/19 60/23 161/12 186/14 agreement [2] 4/5 9/20 ahead [2] 37/23 107/17 aim [1] 18/16 air [2] 158/11 158/14 airway [1] 157/25 alarm [2] 26/19 102/6 alarming [1] 107/17 albeit [1] 38/18 Alder [8] 5/1 60/1 60/5 60/8 60/15 61/4 185/2 185/5 Alder Hey [7] 5/1 60/1 60/5 60/8 60/15 61/4 185/2 alert [1] 171/25 alerted [1] 177/23 Alison [2] 61/18</p>	<p>141/14 Alison Kelly [1] 61/18 all [82] 2/19 4/3 4/4 8/24 12/11 13/17 16/8 19/17 25/20 27/12 27/15 27/18 36/23 38/3 39/1 41/13 41/14 43/19 50/1 50/15 51/19 52/8 52/21 52/25 58/9 59/7 59/15 61/5 61/10 61/15 61/19 62/25 63/22 68/25 71/7 77/19 86/6 88/14 93/1 95/14 97/18 98/2 98/4 99/17 99/23 106/22 110/7 111/7 115/12 118/10 120/22 121/7 123/18 126/20 128/11 128/16 142/4 142/14 143/16 146/5 147/16 148/2 148/3 153/8 155/9 155/12 156/10 158/24 159/14 165/2 165/5 174/18 176/14 176/23 178/7 182/7 182/11 182/16 187/6 187/20 187/25 189/22 allegation [12] 43/15 43/17 44/22 45/1 45/6 47/6 55/1 59/11 60/11 60/23 62/9 137/18 allegations [5] 45/4 58/6 64/4 64/7 187/12 allegedly [1] 58/10 Allitt [2] 37/21 104/21 Allitt' [1] 179/9 allow [3] 37/5 116/13 187/22 allowed [1] 61/23 allows [2] 77/21 77/22 almost [4] 95/10 106/3 163/19 189/22 alone [1] 105/21 along [9] 2/9 39/14 50/18 53/6 82/8 92/17 108/22 142/17 172/2 alongside [3] 68/15 151/15 189/4 already [7] 20/16 20/17 69/15 70/6 102/25 177/11 180/12 also [62] 3/8 4/3 13/20 17/1 36/1 36/20 38/4 52/24 53/25 56/12 68/9 68/14 70/7 77/21 79/6 79/7 83/19 88/7 105/3 120/11 120/13 121/11 121/14 127/22 130/7 130/12 132/7 132/15 135/10 136/12 136/23 138/2</p>

A	57/18	162/2 162/21 167/23 172/18 173/11 173/18 174/6 175/1 176/13 176/19 178/23 179/25 180/1 180/13 181/25 182/6 183/6 187/21	12/19 14/3 15/13 15/15 16/19 17/25 18/7 18/9 18/10 22/16 24/5 24/7 25/9 28/9 29/3 29/4 29/13 31/10 32/2 33/8 35/14 38/1 39/9 39/9 39/16 39/24 40/20 40/22 41/17 41/18 41/19 41/21 42/1 49/1 49/5 52/21 52/22 53/11 54/14 54/15 54/18 58/9 61/9 61/9 65/12 65/17 66/19 66/21 67/7 67/16 68/8 68/9 74/24 77/6 77/13 78/9 79/9 84/2 85/14 85/15 90/1 90/2 90/3 91/17 92/3 92/9 95/6 95/20 96/7 96/10 97/2 103/17 103/24 108/9 108/16 109/18 113/5 114/11 114/11 115/4 119/22 120/3 120/6 120/9 120/16 120/22 120/25 121/2 121/8 121/24 121/24 122/8 122/9 122/10 122/23 123/1 123/6 123/13 123/13 123/17 123/18 123/23 126/25 143/10 149/5 151/5 154/25 155/10 155/18 159/2 160/3 165/5 171/8 171/22 182/5 187/19 190/14	Arrowe Park Hospital [1] 120/11 as [265] aside [1] 109/19 ask [24] 3/18 32/21 35/11 36/6 42/9 48/20 56/9 56/23 57/3 57/6 57/9 57/14 59/21 70/19 74/6 74/10 79/18 80/11 82/17 83/20 102/17 124/7 152/14 159/17 asked [8] 42/6 58/2 70/11 77/3 101/10 127/20 127/22 153/15 asking [8] 56/9 59/25 60/2 74/2 74/24 78/1 78/18 152/11 aspect [1] 71/22 aspects [1] 90/1 aspire [1] 119/17 aspired [1] 119/17 assay [2] 4/23 77/22 assays [3] 35/18 77/13 77/23 assist [4] 128/10 164/17 170/10 190/21 assistance [1] 190/18 assisted [4] 157/10 170/6 172/15 174/4 Associate [1] 184/16 Association [1] 67/10 assume [7] 6/12 33/5 80/12 89/5 90/15 99/17 130/24 assumed [3] 60/17 60/19 99/22 assuming [1] 124/15 assumption [3] 6/9 6/17 13/3 assurance [3] 20/23 110/9 186/20 at [356] at 264 [1] 90/20 at 6 August [1] 7/3 atmosphere [3] 136/17 138/3 148/21 attached [1] 120/15 attempt [2] 93/22 172/15 attempted [3] 152/22 174/5 174/12 attempts [2] 135/3 164/13 attend [6] 143/17 146/1 149/8 157/11 161/23 172/14 attended [6] 55/18 157/9 159/15 170/16 181/19 185/21 attendeo [1] 185/3 attenders [1] 185/7
also... [30] 139/12 140/13 140/16 149/14 151/3 151/8 152/20 155/6 155/11 155/16 156/25 158/16 159/5 164/13 166/9 168/19 171/6 172/4 173/15 173/23 174/3 179/22 182/2 182/14 185/2 186/4 186/21 187/18 189/16 190/12 alternative [1] 55/13 alternatively [1] 91/9 although [6] 12/13 33/19 41/23 105/8 165/18 180/22 always [34] 5/10 5/11 6/12 14/4 17/6 29/17 30/12 31/20 36/18 36/19 52/17 61/16 63/23 71/1 71/2 72/4 73/15 98/17 105/11 136/4 143/16 156/1 157/2 157/6 157/13 160/24 162/24 162/24 163/1 163/9 166/3 167/10 179/9 186/14 am [18] 1/2 1/4 16/4 22/18 24/11 31/15 40/2 40/4 65/23 86/17 105/2 140/20 152/24 155/3 162/14 164/23 186/17 191/4 amended [1] 60/3 amongst [3] 142/7 160/17 179/7 amount [6] 17/25 25/11 50/7 51/1 55/10 113/4 anaesthetist [1] 184/18 anaesthetists [1] 184/20 analyse [3] 9/14 122/4 122/5 analysed [2] 9/15 28/1 analyser [1] 21/5 analysing [2] 73/6 97/14 analysis [4] 7/20 32/15 69/5 97/7 analytical [1] 119/10 Andrew [1] 144/20 ANN [3] 40/9 40/16 192/5 Anna [5] 1/11 1/12 1/14 1/18 192/3 Anna Milan [1] 1/14 Anne [1] 66/14 anniversaries [4] 57/6 57/10 57/15	anniversary [3] 57/23 59/7 59/14 annual [3] 71/6 154/23 185/11 anodyne [1] 115/7 anolytes [2] 25/20 39/5 anomalous [1] 117/16 another [21] 9/2 11/21 25/24 29/10 45/11 50/3 59/9 69/13 69/16 70/11 87/12 95/23 98/13 98/13 110/19 120/9 121/14 143/4 153/12 171/9 179/9 another's [1] 137/11 ANPs [1] 171/7 answer [4] 73/20 73/22 100/13 101/10 answered [9] 73/15 73/16 74/3 75/3 87/24 87/24 101/5 101/7 101/10 answers [2] 73/25 135/19 Anthony [1] 172/21 anticipated [3] 114/16 151/11 172/12 antipathy [1] 184/1 anxious [1] 170/8 any [115] 4/9 5/10 6/20 7/23 19/24 20/14 20/21 23/6 33/12 36/3 38/12 41/17 41/24 42/1 47/13 47/18 48/9 49/18 51/20 54/17 55/12 56/14 56/21 57/12 58/22 59/12 62/10 63/5 63/11 63/12 69/21 70/7 70/8 74/25 79/13 86/4 88/5 102/19 104/14 105/17 108/14 110/2 110/18 111/16 113/19 114/6 117/14 117/20 118/11 121/12 122/10 123/3 125/17 127/20 128/12 130/5 131/14 131/16 131/18 132/17 133/6 133/17 133/17 134/19 136/9 136/10 138/17 140/4 140/24 141/11 142/11 143/10 143/18 143/21 144/7 144/11 146/3 146/6 146/24 147/2 147/6 148/13 149/12 150/2 150/13 150/17 150/20 152/7 153/21 155/3 156/9 156/10 156/13 156/17 156/23 159/21 161/20	162/2 162/21 167/23 172/18 173/11 173/18 174/6 175/1 176/13 176/19 178/23 179/25 180/1 180/13 181/25 182/6 183/6 187/21 anybody [10] 3/8 20/5 23/2 37/12 55/15 56/2 56/5 87/11 107/2 114/6 anyone [4] 101/2 102/11 128/2 163/10 anyone's [1] 135/8 anything [13] 70/4 70/8 77/7 108/4 109/25 113/17 114/20 123/15 125/19 130/3 133/23 142/23 178/24 anywhere [2] 114/18 115/15 apart [1] 88/12 apparent [5] 15/18 188/2 188/19 189/5 190/12 appeared [2] 8/8 140/20 appearing [1] 90/3 appears [5] 24/2 90/9 188/11 189/12 189/17 application [1] 41/25 appointed [1] 2/17 appointment [6] 42/22 44/6 44/12 45/2 56/3 183/20 appreciate [5] 71/12 111/2 118/9 124/14 130/20 approach [3] 118/2 121/4 162/22 approachable [5] 145/4 166/7 166/13 167/17 188/9 approached [3] 140/24 146/17 190/15 appropriate [10] 9/25 10/5 31/20 36/3 37/4 37/13 39/6 68/25 69/20 151/16 appropriately [3] 21/6 31/13 63/7 appropriateness [1] 8/20 approximately [4] 7/12 57/9 129/16 147/5 April [13] 31/4 31/5 59/25 60/10 62/15 62/19 67/14 81/1 87/20 162/20 172/22 173/10 173/14 April 17 [1] 62/15 April 2016 [1] 162/20 are [124] 1/23 1/25 2/21 3/1 3/1 7/4 7/5		

A	127/21 128/1 130/2 132/21 133/7 142/14 143/11 143/18 147/24 148/10 148/13 150/15 154/11 156/24 159/14 161/6 162/4 162/12 164/7 166/18 169/6 180/9 181/15 182/19 190/1	137/13 143/23 159/7 168/24 175/2 181/14 because [90] 7/7 13/18 14/11 14/22 17/19 17/22 19/19 22/20 22/21 23/2 25/7 26/9 27/7 27/10 27/22 29/1 29/4 29/14 29/18 30/10 31/11 32/12 34/13 34/23 38/22 42/21 46/21 47/9 47/15 47/20 47/25 50/1 53/2 54/4 56/10 57/22 58/19 59/15 60/17 61/15 62/14 63/19 64/8 68/24 69/21 71/1 72/4 73/2 74/9 74/16 75/6 77/10 77/14 78/11 79/5 79/19 80/2 82/25 83/3 84/8 85/9 86/11 87/7 87/14 91/4 91/14 91/17 94/11 97/23 98/18 99/17 100/9 101/19 103/13 105/9 109/6 113/7 113/22 114/10 115/1 118/8 118/10 122/6 123/4 123/14 135/22 139/24 152/14 159/22 178/17 become [5] 9/9 78/22 108/19 158/17 158/22 becoming [3] 2/9 149/7 168/8 Beebe [6] 135/10 135/15 135/20 136/2 136/6 136/8 Beech [6] 132/4 132/17 132/24 133/9 133/17 134/2 been [186] 1/6 3/14 6/10 7/6 7/20 7/20 8/12 8/13 12/7 12/7 12/17 13/8 13/10 13/14 14/6 16/7 16/7 16/18 17/8 17/20 19/19 20/1 20/2 20/13 22/17 23/22 24/25 26/9 28/3 29/19 29/25 30/2 31/12 32/15 32/16 37/7 37/23 42/24 43/7 43/10 43/19 44/21 47/1 47/7 47/21 47/23 48/6 48/12 48/18 49/10 49/11 49/15 51/20 51/21 53/19 54/24 55/1 55/7 58/11 58/24 60/20 61/22 62/19 62/22 62/23 62/24 63/15 63/17 64/15 64/18 64/22 67/13 67/21 69/5 69/15 69/19 70/3 72/4 72/10	73/3 73/6 73/9 81/11 81/13 83/11 84/11 84/12 84/22 85/12 85/12 85/16 88/7 91/6 93/18 94/9 95/8 95/8 95/12 95/22 96/14 98/8 101/1 101/13 101/14 102/10 102/12 102/21 103/3 104/12 105/14 105/15 105/16 107/7 107/8 108/18 109/7 109/11 112/12 112/14 112/15 113/8 113/10 113/14 114/2 117/11 119/18 119/20 119/24 120/1 120/2 121/15 122/12 122/20 122/21 123/7 124/8 124/18 124/20 125/23 128/20 133/15 133/16 134/15 135/23 138/18 138/19 139/3 139/8 140/10 141/5 143/9 143/23 145/14 145/20 146/1 147/4 153/11 154/1 154/18 156/7 158/10 163/21 163/25 164/4 166/18 168/10 168/21 169/2 169/5 169/13 170/10 170/13 177/15 177/23 178/16 178/25 180/7 180/16 182/11 183/12 184/4 184/6 186/3 186/12 187/8 188/1 before [33] 6/20 21/8 21/23 25/14 33/20 34/17 37/15 37/20 44/11 44/12 51/22 53/5 84/25 86/3 88/9 92/18 100/11 101/8 103/2 106/12 107/12 112/13 118/6 126/18 130/3 132/12 144/19 149/19 149/25 158/2 161/10 169/1 174/23 beg [1] 67/2 Beger [8] 40/16 40/23 42/5 42/13 45/22 57/1 65/13 65/15 begin [3] 3/19 67/22 80/18 beginning [2] 46/14 62/19 behaviour [3] 145/13 162/15 187/6 behind [2] 78/17 137/11 being [86] 6/14 7/13 11/6 17/14 18/23 26/21 28/24 30/3 38/2 41/14 41/22 46/15 47/12 47/15 49/25	50/22 51/25 53/16 56/17 56/18 56/22 57/21 60/21 62/21 69/1 70/11 70/24 71/15 71/20 72/22 81/6 83/8 85/13 89/8 96/13 99/9 102/2 104/16 105/12 109/18 115/19 122/24 127/1 130/8 131/4 131/8 131/11 132/14 132/21 133/5 134/11 135/17 135/21 136/11 140/12 140/14 141/2 149/16 149/17 150/3 150/20 151/13 152/5 152/18 153/15 153/25 155/10 159/3 159/21 159/22 160/18 161/23 162/10 162/21 166/12 168/17 169/18 172/1 181/11 181/23 184/14 184/21 186/19 186/20 187/21 190/10 being sent [1] 69/1 beings [1] 107/16 belief [3] 1/24 40/21 66/20 believe [13] 3/21 41/5 42/21 42/21 43/4 44/9 44/11 48/17 62/15 138/13 138/16 138/17 141/1 believed [1] 180/12 believing [1] 110/5 bells [2] 26/19 102/7 belong [1] 61/12 below [11] 3/12 3/14 5/23 8/10 8/13 61/8 83/21 85/14 91/22 99/12 189/17 benchmarked [3] 185/17 185/17 187/14 beneficial [1] 149/5 benefit [12] 4/7 5/11 19/6 20/14 20/15 54/11 55/4 55/23 63/14 69/16 106/1 185/11 benefits [1] 171/8 BERGER [2] 40/9 192/5 Bershadski [4] 40/5 40/12 65/14 192/6 best [18] 1/24 14/14 17/4 30/14 40/21 52/3 52/6 52/17 55/15 66/20 96/14 97/10 103/6 107/9 128/10 138/16 175/20 187/19 better [4] 74/18 123/16 135/19 137/14 between [56] 19/20 28/23 43/7 47/14
B	B's [2] 130/6 139/17 babies [39] 49/21 57/10 57/15 57/18 58/7 59/11 60/12 62/4 62/10 63/16 64/13 102/12 105/15 127/1	batch [1] 10/5 batches [1] 7/19 be [284] bearing [3] 38/15 92/25 93/3 beating [1] 158/13 became [8] 9/12 67/2		

B	bleep [1] 74/11	brought [4] 36/1 44/18 45/9 179/20	93/11 98/3 101/5 107/1 113/13 145/11 157/11 186/18	care [62] 28/6 32/17 75/10 97/25 97/25 98/1 127/1 127/21 129/13 130/7 132/21 135/15 138/6 139/13 140/2 140/13 140/16 142/9 142/12 143/6 143/11 145/6 146/17 148/4 148/23 149/14 152/17 152/20 153/24 155/9 156/24 158/5 159/23 160/20 161/22 163/1 163/17 167/24 168/3 168/15 168/19 169/10 171/3 171/9 172/10 172/23 173/23 174/3 175/20 177/6 178/16 178/18 178/19 178/21 179/17 179/18 179/21 180/4 180/9 180/13 185/25 186/22
between... [52] 47/19 50/8 50/13 55/20 62/15 68/16 76/21 80/9 85/13 93/19 119/14 120/12 127/4 128/3 129/1 129/22 129/25 132/5 132/18 132/20 133/18 134/23 135/11 136/18 136/24 137/25 138/4 139/1 144/23 144/25 147/10 148/22 150/7 152/10 155/20 155/23 156/1 160/14 162/19 165/21 165/24 166/16 172/22 175/10 175/18 178/8 179/14 180/5 183/15 183/18 188/4 189/8	blood [29] 4/1 4/6 5/6 5/24 6/5 6/11 9/19 12/8 12/14 12/22 13/2 27/11 67/24 68/4 75/16 78/2 78/7 78/8 81/12 82/24 83/2 87/15 122/23 139/9 172/25 172/25 173/5 173/18 173/25	Brown [5] 126/4 126/9 126/22 160/11 191/1	called [16] 19/18 24/14 65/1 69/14 82/14 101/6 119/20 128/13 128/20 149/16 157/8 161/23 164/17 170/10 172/14 173/13	care/support [1] 168/3
blue [1] 139/5	board [5] 179/21 181/24 182/1 185/4 187/12	build [2] 30/7 88/15	calls [6] 29/4 56/14 56/21 70/7 113/19 121/12	cared [1] 154/11
body [8] 11/3 11/6 11/17 12/1 93/14 94/1 149/23 166/14	born [1] 143/11	building [2] 10/1 29/10	can [105] 1/19 5/20 6/24 8/1 8/5 10/7 10/10 11/14 11/21 16/11 18/18 20/7 22/2 22/3 23/2 25/3 25/10 26/9 29/12 29/20 30/7 30/12 30/13 31/3 35/15 36/2 39/23 42/15 42/23 43/24 44/6 45/12 45/14 45/16 45/17 47/17 48/19 49/4 51/10 52/16 56/3 56/3 56/4 56/5 56/5 57/20 58/15 59/23 65/1 66/15 76/24 78/16 79/6 79/6 79/7 80/5 80/18 80/25 81/5 81/7 81/8 81/19 82/2 82/17 83/19 84/2 84/5 84/24 85/24 86/6 86/24 88/17 90/5 90/8 91/18 91/22 92/2 95/7 98/21 100/10 101/8 101/25 102/17 107/25 108/2 110/10 116/22 116/22 123/22 124/9 124/11 125/11 125/16 129/24 130/16 130/17 143/12 155/7 160/2 161/1 161/12 161/14 167/4 171/10 171/17	career [4] 106/12 128/22 132/19 184/6
both [14] 5/5 46/24 79/2 103/8 104/6 129/4 130/2 139/19 145/8 158/25 175/20 184/13 186/15 190/9	bottom [11] 8/9 22/4 31/18 32/3 32/8 45/16 49/4 59/24 85/20 90/3 98/20	built [3] 27/24 35/19 187/21	can't [18] 15/14 22/23 44/10 48/11 52/9 52/15 59/9 81/5 96/16 97/16 99/21 100/14 104/19 108/13 110/10 111/11 113/11 142/11	careers [1] 127/10
between April [1] 172/22	Bowles [13] 66/3 66/5 66/7 66/9 66/14 66/15 67/22 80/22 118/24 123/18 123/22 125/21 192/7	bulk [1] 69/2	captured [1] 22/17	causalive [1] 164/11
between August 2015 [1] 135/11	box [3] 66/4 91/15 100/20	bullying [1] 184/24	cardiac [4] 158/13 170/15 170/17 170/19	cause [26] 5/13 12/9 20/19 34/12 59/12 62/11 63/5 69/24 78/14 78/16 79/5 79/8 80/13 87/7 104/10 125/16 139/16 139/17 142/19 151/10 159/22 170/17 173/19 177/9
between February [1] 144/23	brains [1] 107/24	Burke [8] 169/21 170/6 170/12 170/23 171/5 171/14 171/21 172/4		
between February 2015 [1] 134/23	brand [1] 20/8	Butcher [4] 182/13 182/25 183/6 184/3		
between September 2015 [1] 165/21	break [12] 39/19 39/21 39/23 40/3 60/8 65/21 126/15 126/18 126/18 126/21 160/6 160/9	Butcher's [1] 184/12		
Beverley [2] 37/21 104/21	Brearey [8] 176/7 178/1 178/11 182/24 183/1 185/7 186/7 186/25	Butler [1] 183/18		
Beverley Allitt [2] 37/21 104/21	Brearey's [3] 176/11 176/22 178/21	Butler's [1] 183/13		
beyond [3] 54/20 111/11 174/6	brief [4] 127/12 151/1 169/12 172/21			
Bhowmik [4] 174/9 174/10 174/12 174/25	Brigham [12] 179/11 180/1 180/5 180/11 180/18 180/21 180/24 181/13 181/18 181/20 182/2 182/8	C		
big [2] 25/7 109/8	Brigham's [1] 181/5	c peptide [1] 130/15		
bigger [4] 32/3 142/2 154/8 189/11	bring [11] 2/16 12/22 56/3 56/4 56/4 56/5 56/6 56/9 82/2 82/4 135/8	C's [2] 133/13 157/15		
bilirubins [1] 73/5	bringing [1] 3/19	C-pep [1] 90/20		
biochemist [17] 16/6 18/9 18/23 19/4 34/1 68/17 68/20 69/11 70/10 70/19 71/8 71/18 72/15 84/11 87/21 119/12 120/17	broad [1] 44/21	c-peptide [50] 4/12 5/6 7/2 8/2 8/7 8/12 8/20 9/1 10/16 11/2 11/7 11/10 11/13 11/16 12/1 16/20 22/21 23/3 24/14 24/15 24/15 24/21 26/17 30/18 31/11 31/19 34/22 34/23 35/2 35/6 35/21 36/4 39/6 76/20 78/3 78/23 79/3 80/1 80/4 80/11 84/19 93/15 94/14 106/19 111/10 120/19 120/24 123/7 123/25 143/1		
biochemistry [2] 3/2 18/11	broader [1] 134/18	C-peptides [2] 10/2 77/17		
biochemists [3] 108/8 120/3 121/8	broken [1] 62/16	calcium [2] 69/22 69/24		
biomedical [4] 73/9 73/24 91/6 91/16		calculate [1] 22/23		
birth [4] 102/10 130/8 177/11 178/2		calibrated [1] 83/16		
births [1] 178/13		call [30] 14/22 14/25 15/6 20/13 22/12 22/12 29/24 30/22 34/9 36/15 70/18 73/1 74/11 86/18 87/23 91/3 91/9 91/14 92/6 92/11 92/15 92/16		
bit [13] 10/21 21/16 52/18 54/24 71/9 74/5 74/17 95/24 96/19 97/3 99/16 112/13 114/9		can [105] 1/19 5/20 6/24 8/1 8/5 10/7 10/10 11/14 11/21 16/11 18/18 20/7 22/2 22/3 23/2 25/3 25/10 26/9 29/12 29/20 30/7 30/12 30/13 31/3 35/15 36/2 39/23 42/15 42/23 43/24 44/6 45/12 45/14 45/16 45/17 47/17 48/19 49/4 51/10 52/16 56/3 56/3 56/4 56/5 56/5 57/20 58/15 59/23 65/1 66/15 76/24 78/16 79/6 79/6 79/7 80/5 80/18 80/25 81/5 81/7 81/8 81/19 82/2 82/17 83/19 84/2 84/5 84/24 85/24 86/6 86/24 88/17 90/5 90/8 91/18 91/22 92/2 95/7 98/21 100/10 101/8 101/25 102/17 107/25 108/2 110/10 116/22 116/22 123/22 124/9 124/11 125/11 125/16 129/24 130/16 130/17 143/12 155/7 160/2 161/1 161/12 161/14 167/4 171/10 171/17		
blame [1] 62/4		can't [18] 15/14 22/23 44/10 48/11 52/9 52/15 59/9 81/5 96/16 97/16 99/21 100/14 104/19 108/13 110/10 111/11 113/11 142/11		
bleeding [1] 149/18		candid [1] 29/25		

C	42/25 112/22 146/4	58/15 94/15 94/17	132/8 132/11 132/13	121/13 130/18 143/24
commenced [1] 175/3	completely [7] 54/9	95/21 112/16	132/15 132/18 138/21	169/12 169/16
comment [22] 16/17	126/12 137/16 139/5	conclusions [1] 86/4	139/2 140/25 141/3	conversations [6]
18/12 20/4 21/11	145/17 173/15 179/10	concurrent [2] 32/10	141/14 142/15 144/20	63/22 114/15 121/9
37/14 37/15 89/3	completes [1] 39/15	88/19	145/11 146/10 147/9	167/6 186/10 186/11
100/10 100/10 100/15	completing [2]	conduct [5] 136/21	148/19 150/9 152/2	convey [1] 96/19
100/24 101/4 111/9	112/14 134/1	137/17 147/22 161/19	153/15 154/4 156/7	conveyed [2] 114/4
111/10 111/13 114/8	completion [1]	174/24	157/3 157/11 157/22	115/14
114/13 114/21 114/23	159/13	conducted [1] 49/21	160/12 160/16 160/22	convicted [1] 63/15
114/24 115/6 179/8	complex [3] 4/17	confident [3] 141/6	161/1 162/25 163/11	Cooke [2] 172/8
commented [2]	69/7 168/1	157/4 162/14	164/17 166/6 166/14	172/14
135/16 153/3	complication [1]	confidential [1]	167/6 168/8 169/11	cooking [1] 51/14
commenting [2]	158/12	118/15	171/19 173/6 174/1	Cooper [4] 50/19
25/24 185/15	comprehend [1]	configured [1]	174/11 174/22 175/6	53/6 53/12 61/18
comments [23]	181/11	116/11	179/12 179/22 182/13	coordinate [1] 165/4
69/12 114/10 115/7	comprehensive [3]	confirm [4] 1/19	183/11 183/13 185/1	cope [2] 70/23
128/25 129/7 129/19	149/13 150/24 190/20	66/15 78/23 173/18	188/14 189/17 190/5	153/13
129/22 132/21 134/7	compressions [1]	confirmation [2]	consultants [27]	coping [5] 46/17
135/12 149/10 151/8	157/25	109/3 121/12	63/25 127/6 129/3	46/20 52/9 57/25
152/9 152/11 153/1	computer [2] 97/24	confirmed [1] 87/14	129/9 131/9 134/8	58/12
153/23 154/20 156/5	116/10	confirms [2] 165/8	141/6 144/8 145/3	core [3] 128/11
156/22 165/23 167/9	computers [1]	180/18	147/16 152/15 156/10	128/17 150/25
170/3 170/23	113/23	confront [1] 59/8	157/1 162/22 163/14	Core Participants [2]
Commission [1]	Con [1] 22/4	confused [2] 62/22	166/2 171/10 181/16	128/11 128/17
146/18	Con Lewe [1] 22/4	170/5	182/16 183/19 183/22	corner [1] 6/25
commissioned [1]	conceive [2] 102/23	confusing [1] 104/9	183/24 184/1 188/9	Coroner [8] 139/18
25/9	105/9	confusion [3] 23/7	188/21 189/4 189/24	139/21 139/25 140/12
committed [3] 58/10	concentrating [1]	63/1 95/15	consuming [1] 4/17	146/22 147/2 155/10
137/20 160/19	54/18	congenital [1] 95/24	contact [11] 41/17	165/17
committee [3] 182/5	concern [14] 34/12	connected [1] 127/3	51/20 54/5 54/13	coroners [3] 144/14
182/15 183/8	59/13 62/11 102/6	connection [7] 47/13	55/10 56/12 72/16	151/5 151/16
common [7] 26/13	104/10 111/1 124/4	47/18 47/22 48/9	100/7 121/19 128/6	coronial [1] 150/22
72/10 144/2 148/5	136/6 140/4 148/12	118/9 127/14 189/8	141/13	correct [32] 2/24 3/4
149/7 159/12 168/11	150/4 165/12 173/12	connections [1]	contacted [3] 117/18	4/14 9/14 12/21 13/3
commonly [2] 79/9	178/23	133/18	127/18 146/21	15/8 17/11 22/14 24/3
150/16	concerned [9] 16/19	conscientious [1]	contacting [1]	24/11 24/23 25/11
communicate [1]	41/15 103/7 103/10	145/5	145/11	33/11 40/19 41/1 42/8
34/6	103/12 123/17 152/24	consider [8] 22/11	containing [1]	47/3 49/10 49/11
communicated [6]	167/5 169/18	25/4 28/17 90/23	153/16	49/19 50/10 50/20
21/9 26/22 28/20	concerning [3]	107/19 151/23 151/24	contains [1] 11/5	53/24 55/3 55/22 59/2
33/17 97/19 110/25	107/17 140/20 186/15	178/19	contaminated [1]	67/4 67/12 67/15
communicating [1]	concerns [56]	considerable [1]	131/12	102/25 119/7
27/2	122/17 122/23 127/23	188/22	contents [4] 1/23	correctly [2] 24/9
communication [6]	131/9 131/15 131/18	consideration [1]	40/20 66/19 178/23	75/23
27/24 29/22 54/2	131/21 131/24 136/10	189/14	context [9] 59/16	correspond [1] 81/10
123/16 152/9 175/15	136/21 137/16 140/25	considered [11]	79/24 92/19 102/20	corresponding [1]
Companion [1]	141/11 142/23 144/7	27/14 30/1 83/3 86/21	107/11 108/12 111/16	110/22
171/16	144/17 146/4 146/14	131/11 147/23 149/18	148/12 162/3	cortisol [8] 79/10
compare [2] 133/24	146/17 147/7 147/12	176/4 184/20 188/2	continue [1] 155/11	84/1 86/12 86/13
161/9	147/22 150/2 155/14	190/1	continued [3] 51/11	86/15 86/17 86/17
compared [6] 57/18	156/9 156/13 156/17	considering [2]	170/19 187/2	87/5
94/8 132/12 142/3	156/23 157/3 159/21	67/23 131/10	continues [2] 137/7	cot [1] 142/15
164/5 167/14	161/19 161/20 162/16	considers [2] 128/5	160/17	cots [1] 187/23
competencies [1]	162/22 167/21 168/25	171/1	contrast [2] 110/20	could [80] 1/16 8/9
47/10	171/22 172/18 173/24	consistent [2]	136/14	8/12 8/12 8/13 12/9
competent [3] 14/18	174/22 175/1 176/1	162/25 171/9	control [1] 21/7	13/22 14/1 28/2 28/3
163/5 188/18	176/19 178/5 181/5	constant [2] 188/21	convenient [2] 39/20	28/4 32/15 36/25
compiled [1] 128/9	181/8 181/14 181/17	189/3	159/24	39/21 40/15 41/11
complete [6] 111/25	183/2 184/19 184/24	consultant [68] 2/17	conversation [22]	42/9 45/11 49/10
112/2 112/6 112/18	186/7 186/16 187/16	3/10 28/20 29/25	16/1 16/5 28/22 33/24	49/12 49/19 50/2
112/25 157/20	188/10 189/23	67/16 68/11 68/14	43/7 59/19 87/25 89/6	50/15 52/3 55/16 56/9
completed [4] 2/12	concluded [1] 177/5	72/11 75/1 75/6 120/8	107/13 108/2 108/14	56/23 58/10 59/21
	concludes [1] 190/16	120/10 129/6 130/23	108/15 111/16 112/15	61/19 63/17 66/12
	conclusion [6] 58/14	131/19 131/24 131/25	114/3 114/14 115/11	69/9 69/11 69/21

C	134/25 145/2 167/13 167/15 167/19 171/7 current [7] 18/13 19/8 116/13 150/9 154/3 180/1 190/4 currently [3] 67/16 154/22 155/9 cut [4] 123/6 123/24 124/1 124/6	De [20] 1/8 1/13 1/15 39/12 40/9 40/16 40/23 42/5 42/13 45/22 57/1 65/13 65/15 66/1 66/11 123/21 126/6 192/4 192/5 192/8 De-Beger [2] 40/16 45/22 DE-BERGER [2] 40/9 192/5 deal [6] 37/24 39/20 55/21 63/7 66/22 118/24 dealing [4] 10/11 27/21 41/17 63/12 dealt [2] 34/9 84/14 Deanery [2] 160/18 165/16 death [78] 59/7 59/14 127/3 130/6 131/17 133/11 133/13 133/18 134/11 134/14 135/21 138/11 138/18 139/4 139/16 139/22 140/9 140/12 140/14 143/20 144/13 144/13 145/8 145/17 145/21 145/24 146/19 147/3 147/6 149/1 150/19 150/21 150/22 151/6 151/10 151/10 151/13 151/15 151/17 152/25 153/12 154/18 158/4 158/7 158/19 159/8 163/9 164/16 165/16 165/18 168/5 168/9 168/9 168/11 168/12 168/14 172/3 172/16 172/20 174/14 174/15 175/22 175/23 176/4 176/8 176/9 177/8 177/9 179/4 180/2 181/25 182/5 186/8 187/13 189/19 189/20 189/20 190/1 deaths [48] 46/21 46/25 47/7 47/15 47/20 48/4 48/10 48/16 49/20 57/7 57/10 57/15 57/23 64/13 127/24 131/6 133/1 133/21 140/19 140/22 141/7 143/15 144/13 147/19 151/11 154/5 154/17 155/6 155/10 166/23 168/2 169/14 174/7 176/11 177/1 178/3 178/13 178/17 180/16 180/17 180/19 181/9 181/12 182/10 183/3 189/8 190/2 190/6 deaths' [1] 180/8	Debbie [1] 180/23 debrief [21] 134/11 134/15 134/21 138/17 138/18 143/18 145/20 145/21 153/21 154/1 158/3 158/20 159/12 162/2 163/10 163/16 164/19 164/20 165/3 173/21 174/6 debriefs [20] 127/25 134/18 143/14 143/15 145/19 147/25 149/2 153/15 158/16 158/17 158/22 159/2 163/6 163/8 163/14 164/15 164/25 190/8 190/11 190/14 debriefs' [2] 149/3 149/4 decade [1] 119/18 December [2] 136/14 172/9 December 2015 [1] 136/14 decide [3] 18/18 70/17 97/7 decision [10] 27/10 41/25 77/4 77/6 89/15 91/21 110/13 174/23 178/8 186/2 decision-making [1] 41/25 dedicated [1] 188/18 deemed [1] 127/16 deep [1] 4/16 defaults [1] 22/24 defence [1] 132/2 deficiency [1] 87/4 definitely [1] 55/17 definition [1] 86/8 definitive [1] 33/6 definitively [1] 113/11 degree [2] 29/18 54/12 delay [3] 91/20 101/3 171/20 delayed [2] 1/3 1/6 deliberate [2] 106/8 164/11 deliberately [9] 13/24 30/2 34/20 58/7 59/11 62/9 95/16 102/12 102/24 delivered [1] 158/5 delivery [1] 180/4 demands [1] 70/24 demonstrated [1] 162/6 demonstrates [1] 92/6 demoralised [1] 183/25 denies [1] 137/21	department [21] 42/11 42/16 42/19 43/14 44/18 67/23 67/24 67/25 68/3 68/8 70/13 70/22 72/12 120/15 128/24 141/1 147/13 157/5 166/11 169/24 170/1 departments [3] 46/6 72/17 167/20 depend [1] 111/6 depending [6] 10/3 10/3 11/14 76/2 112/16 168/6 depends [3] 31/8 79/5 90/9 depth [1] 150/20 describe [2] 119/1 150/24 described [4] 71/15 136/16 163/6 183/24 describes [20] 134/24 137/24 145/2 145/8 145/10 147/13 148/18 148/20 148/25 149/15 152/4 152/8 152/18 160/22 168/16 169/3 169/24 170/18 172/15 173/14 describing [1] 123/23 description [1] 119/3 designated [1] 171/19 designed [1] 187/22 desk [1] 40/8 despite [6] 129/11 135/22 157/24 162/14 170/19 187/8 destroyed [4] 107/7 113/10 113/14 118/6 destruction [1] 117/12 detail [5] 8/1 58/22 58/22 98/10 98/13 detailed [1] 178/6 details [7] 6/13 27/12 27/15 83/10 90/3 98/11 142/11 detect [1] 39/1 detectable [4] 31/16 31/18 34/21 173/18 deteriorate [1] 168/22 deteriorated [2] 149/22 161/7 deterioration [5] 143/8 145/17 152/24 162/8 170/19 deteriorations [4] 135/5 143/10 143/20 164/12 determine [2] 27/19 69/24
----------	--	---	---	--

D	125/10 132/10 168/5	discussions [13]	113/4 113/6 113/9	56/25 59/21 60/3
determining [1]	differences [1]	51/11 51/16 64/3 64/7	113/18 115/18 116/13	116/2 121/11 121/11
20/10	119/11	129/25 131/5 141/5	116/15 116/17 116/18	documentary [1]
detract [1] 54/14	different [14] 19/15	151/18 151/20 158/22	118/16 121/20 121/22	88/13
develop [2] 77/22	33/19 39/5 41/20	166/17 174/18 183/6	121/23 122/2 122/24	documentation [1]
177/15	53/11 70/16 99/22	disempowered [1]	125/7 125/11 125/13	76/6
diagnosed [1] 95/24	121/5 134/5 144/18	183/25	125/16 126/13 126/14	documented [3] 54/1
diagnosis [1] 95/25	150/5 165/6 175/11	disliking [1] 137/5	131/15 132/20 134/13	130/10 130/24
diaries [1] 113/21	188/23	dismiss [1] 110/11	140/18 140/24 143/17	does [32] 12/25 13/6
diary [5] 113/15	differential [3] 11/18	dismissed [3] 30/3	148/7 149/3 150/20	19/14 23/11 27/20
114/2 114/5 117/15	11/20 19/22	58/16 184/24	154/25 161/6 162/11	28/13 36/5 38/19 39/2
118/6	differentials [1] 5/15	displaying [2] 59/6	163/8 164/23 165/11	50/14 58/17 77/17
did [92] 1/22 2/2 2/4	differently [1] 64/19	59/13	167/18 171/8 178/6	86/25 91/10 93/6
2/5 2/10 2/12 2/16	difficult [16] 29/1	dispose [1] 118/14	184/2 185/20 186/3	100/13 103/20 112/18
2/18 3/8 9/21 15/5	32/10 71/1 78/13	dispute [1] 56/1	186/9	125/18 131/14 131/16
16/11 20/16 33/12	88/19 105/8 108/9	dissatisfaction [1]	doctor [49] 3/1 3/2	133/17 134/11 146/5
42/21 46/5 47/13	122/18 123/4 129/21	142/10	28/21 66/24 72/22	154/25 158/3 162/10
47/18 49/20 52/6 53/3	143/16 153/13 165/4	dissemination [2]	73/23 74/6 74/7 74/14	164/18 164/20 174/6
53/5 53/10 53/25 57/6	166/19 167/2 177/14	18/16 38/20	74/18 74/23 74/24	176/13 190/19
57/9 57/12 57/14	difficulties [1] 190/10	dissipated [1] 158/15	74/25 75/1 75/4 96/6	doesn't [11] 22/22
59/12 60/6 60/14	difficulty [2] 29/18	distant [1] 28/17	101/11 107/13 109/9	30/7 34/15 63/20
61/13 62/10 63/24	114/9	distinguish [1] 19/20	109/15 110/12 110/25	78/20 86/15 92/6 95/5
63/25 66/18 67/20	diligent [1] 185/7	distress [5] 57/17	111/1 111/3 111/6	103/25 109/25 110/4
68/2 68/16 68/18 71/9	direct [6] 45/20 46/4	59/6 59/13 170/9	112/19 112/23 114/3	doing [15] 9/22 54/19
75/19 95/23 98/7	51/2 128/4 183/6	189/25	114/17 115/22 116/9	63/24 70/20 71/7 71/8
101/5 101/18 106/18	186/22	distressed [7] 57/8	116/21 128/23 132/4	71/21 74/9 76/22
111/8 111/9 111/9	directly [13] 28/5	57/22 59/17 59/17	132/25 150/10 154/14	77/13 101/13 102/24
111/10 111/19 112/1	42/16 42/18 56/13	62/17 62/21 63/21	165/13 166/10 167/3	113/7 135/24 159/17
112/9 112/24 113/3	70/18 75/9 76/7 91/22	distressing [1] 52/2	167/8 167/12 167/21	don't [52] 4/16 4/25
117/22 124/14 124/15	92/13 101/24 161/20	district [1] 4/18	168/15 168/19 168/24	19/15 20/4 20/6 20/24
130/5 133/23 135/7	175/5 182/1	disturbing [1] 103/16	169/21 184/17 188/24	25/21 27/10 27/15
136/6 136/9 136/15	director [6] 45/19	diurnal [1] 86/18	Doctor S [5] 167/8	27/18 30/11 33/5 38/2
137/3 137/5 137/8	68/4 132/2 183/20	division [3] 179/17	167/12 167/21 168/15	38/10 41/17 41/24
139/15 139/21 144/11	184/14 186/17	179/18 181/23	168/19	48/17 50/11 61/24
146/23 147/2 149/8	Directors [1] 184/12	do [143] 1/14 2/25	Doctor S's [1] 168/24	63/19 72/8 72/12
150/2 153/5 154/6	disagree [3] 75/16	2/25 4/19 9/11 15/3	doctor's [1] 168/6	72/25 88/5 90/15
156/13 164/20 170/11	95/7 95/21	15/21 18/6 18/14	doctors [60] 16/24	92/12 97/1 99/16
173/1 173/11 173/18	discharged [1]	19/18 19/24 20/6	28/25 75/9 108/7	103/1 104/14 105/12
175/1 175/5 176/17	135/25	25/18 25/25 27/7	112/17 117/15 126/25	106/6 106/17 107/1
178/4 178/18 178/23	discolouration [2]	27/16 27/21 28/18	127/5 127/7 127/9	107/14 108/12 109/12
183/6 188/11 189/14	149/23 150/5	28/21 28/25 30/10	127/13 127/15 127/20	109/17 112/21 113/21
didn't [44] 4/10 9/14	discovered [1] 32/25	30/19 30/21 32/17	128/20 129/14 133/25	113/25 115/8 115/19
13/25 19/25 25/2	discovering [1]	36/7 36/12 37/22	135/13 136/15 136/18	116/11 117/10 118/21
32/12 32/18 34/19	137/17	39/24 40/10 41/24	137/4 138/1 139/2	118/21 123/5 125/4
38/10 39/7 48/24	discrete [1] 185/22	42/12 42/14 43/16	141/20 141/25 142/4	125/9 138/16 183/15
49/23 55/12 62/14	discuss [10] 16/22	44/20 46/2 46/8 46/11	142/17 144/2 144/25	done [24] 16/8 25/18
63/11 63/12 64/3 72/5	49/20 65/7 108/6	46/16 48/4 48/22	148/5 151/15 151/17	32/15 32/16 32/24
91/4 102/18 103/14	132/1 148/2 163/12	50/24 52/6 53/4 54/2	151/21 151/25 152/8	62/4 63/20 63/24 64/8
103/14 105/20 105/24	181/17 182/12 186/16	54/11 55/4 55/6 55/9	152/10 153/20 155/17	64/10 70/4 73/3 73/6
105/24 106/6 106/7	discussed [16] 2/19	55/23 56/14 58/18	156/2 160/21 165/25	77/10 82/21 85/17
110/15 112/5 112/5	24/19 130/12 130/14	58/23 60/22 62/5 62/6	166/20 167/25 171/3	87/1 88/11 91/6
112/6 112/18 112/19	130/23 142/14 149/9	62/7 62/20 63/16	171/13 172/18 175/4	103/23 112/4 112/17
114/18 114/19 116/14	152/21 155/10 159/9	64/18 66/5 66/9 68/21	175/14 188/3 188/6	124/19 173/2
116/16 116/16 116/25	161/20 164/16 173/5	69/2 71/13 71/17	188/7 188/11 188/16	double [3] 16/9 21/7
118/8 122/16 129/12	178/10 182/7 187/1	71/22 72/1 77/2 77/9	188/22 188/23 189/5	90/16
130/19 142/8	discussing [5] 49/24	77/12 79/9 81/2 83/2	189/13 189/23 189/25	double-check [2]
die [2] 135/22 151/18	49/25 107/9 141/1	83/6 84/2 91/12 95/21	190/7 190/23	21/7 90/16
died [10] 133/10	174/13	96/5 96/5 96/13 97/3	doctors' [5] 98/2	double-checked [1]
138/8 147/1 152/19	discussion [14]	97/6 97/9 97/20 100/9	126/23 188/19 190/16	16/9
161/7 163/15 164/15	38/12 51/9 51/13	102/7 103/21 104/8	192/10	doubts [1] 137/20
168/17 173/22 176/1	97/13 130/25 133/17	104/10 105/10 105/25	document [17] 22/17	down [24] 1/14 10/1
dies [1] 165/3	151/14 153/18 153/21	106/3 107/12 108/6	42/9 42/12 42/14	12/23 24/3 24/18 25/3
difference [4] 20/21	169/4 170/4 174/6	109/17 111/21 112/5	42/15 45/12 48/20	40/10 45/10 62/16
	186/2 186/25	112/9 112/10 112/19	50/3 51/7 53/22 56/24	66/9 81/1 81/19 86/24

D	Dr Cooke [2] 172/8 172/14 Dr David Harkness [1] 148/17 Dr Davies [14] 115/6 175/21 176/3 176/6 176/17 177/2 177/11 177/20 177/22 178/4 178/7 178/12 178/20 179/3 Dr Davis [8] 156/22 157/8 157/11 157/22 158/3 158/16 159/5 159/20 Dr Emily Thomas [2] 152/2 189/9 Dr Emma Lewis [1] 22/9 Dr Fielding [5] 161/5 161/16 161/22 161/25 162/9 Dr Fiona MacRae [1] 184/16 Dr Gail Beech [1] 132/4 Dr Gibbs [5] 157/11 158/4 164/17 169/13 169/18 Dr Greaves [2] 136/20 136/25 Dr Harkness [8] 148/25 149/8 149/14 149/21 149/24 150/11 150/19 151/3 Dr Hor [3] 134/22 135/2 135/6 Dr James [1] 169/7 Dr Jayaram [1] 146/21 Dr Jessica Burke [1] 169/21 Dr Jim McCormack [1] 177/24 Dr Jiraskova [2] 137/13 137/15 Dr Joanne Davies [1] 175/6 Dr Katherine Davis [1] 156/18 Dr Katherine Lyddon [1] 128/22 Dr Lewis [5] 70/16 71/6 73/11 118/4 120/9 Dr Lidden [1] 128/25 Dr Lucy [1] 135/10 Dr Lyddon [12] 129/7 129/11 129/15 129/23 130/4 130/7 130/12 130/16 131/14 131/23 132/7 134/2 Dr Lyddon's [2] 129/16 131/2 Dr Matthew [1]	163/21 Dr McCormack [1] 179/22 Dr Milan [9] 1/19 21/1 24/7 35/11 39/8 39/10 39/13 75/12 93/13 Dr Newby [1] 153/16 Dr Ogden [10] 139/3 139/6 139/11 139/14 139/18 139/23 140/7 140/13 140/17 141/8 Dr Peter Fielding [1] 160/12 Dr Rachel Chang [1] 162/18 Dr Rhiannon Austin [1] 165/20 Dr Rylance [1] 138/6 Dr S [1] 168/5 Dr Sally Ogden [1] 138/21 Dr Sara Brigham [1] 179/11 Dr Sarah [1] 137/22 Dr Shirley Bowles [3] 66/3 66/7 192/7 Dr Simon Greaves [1] 136/12 Dr Smith [2] 169/11 169/16 Dr Soni [4] 147/9 147/11 147/25 148/11 Dr Soni's [2] 147/17 148/5 Dr Thomas [6] 152/17 153/1 153/14 153/20 154/20 155/4 Dr Thomas's [1] 154/3 Dr U [2] 161/11 161/12 Dr Ukoh [6] 173/9 173/13 173/20 173/23 174/3 174/5 Dr Ventress [8] 142/6 142/12 143/6 143/14 143/21 143/25 144/2 144/10 Dr Ventress' [1] 142/25 Dr Verghase [4] 155/19 155/25 156/5 156/13 Dr Veronika Jiraskova [1] 136/23 Dr Woods [3] 134/10 134/18 134/22 Dr ZA [6] 24/19 130/13 130/14 130/18 130/24 130/25 Dr ZA's [1] 131/1 draw [1] 80/24 drew [1] 117/16	dried [1] 173/25 Dropped [1] 49/5 drugs [2] 38/19 79/16 dubious [1] 95/25 due [12] 87/12 129/4 135/7 145/11 150/3 159/10 166/13 167/18 172/25 181/12 182/22 188/22 during [40] 52/4 58/18 58/21 117/25 127/14 132/5 133/6 134/9 135/5 136/9 136/13 141/10 141/16 141/17 143/24 144/21 150/23 155/20 156/20 158/19 158/20 159/6 161/2 161/7 161/17 163/13 164/6 164/6 166/24 169/9 175/8 177/16 179/15 179/24 182/17 186/6 186/10 188/6 188/15 190/8 duties [1] 71/18 duty [22] 68/17 68/20 69/10 70/10 70/19 70/21 71/8 71/17 72/15 84/11 87/21 108/7 119/11 120/3 120/16 121/8 132/15 133/11 138/8 145/25 173/6 187/12	either [14] 32/19 35/23 74/8 74/10 76/13 93/9 95/7 101/12 108/4 113/25 121/9 134/1 156/12 177/6 electronic [9] 21/9 30/11 30/15 97/21 100/10 101/23 119/14 121/6 122/13 elements [1] 3/23 eliminate [1] 19/24 else [8] 43/9 55/13 91/9 114/6 116/1 124/9 125/19 128/2 elsewhere [2] 77/5 135/9 email [10] 29/11 29/20 45/14 61/7 62/11 63/17 121/12 176/6 176/11 176/23 emails [3] 29/17 59/23 59/24 embedded [2] 158/18 159/2 embolism [1] 158/11 emerge [1] 188/3 emergencies [1] 135/23 emergency [1] 160/13 Emily [2] 152/2 189/9 Emma [1] 22/9 emotions [1] 62/25 empathy [1] 175/15 Empex [1] 119/20 emphasise [4] 26/8 88/4 128/2 190/17 emphasised [2] 188/7 190/3 emphasises [2] 153/20 168/5 employed [3] 41/18 154/22 171/8 employees [1] 41/14 employment [1] 184/13 enabled [1] 54/4 encompasses [1] 41/20 encountered [1] 168/14 encourage [1] 151/17 encouraged [2] 128/6 186/16 end [15] 7/8 9/4 21/10 28/4 28/13 35/23 54/22 74/15 75/13 87/22 88/16 113/16 118/20 138/12 187/25 ended [1] 87/25 ending [1] 184/6
		E		
		each [7] 76/5 76/6 113/15 113/16 140/23 141/21 162/5 earlier [4] 43/22 58/24 64/14 102/2 early [1] 158/19 earns [1] 156/11 easily [2] 78/11 155/15 easy [1] 152/5 economy [1] 77/21 edit [1] 100/17 edited [1] 114/24 education [1] 172/7 educational [1] 171/2 effect [3] 54/10 56/18 100/11 effective [1] 157/25 effectiveness [1] 185/5 effects [1] 41/16 efficiency [1] 4/22 effort [1] 134/20 efforts [2] 97/8 145/23 Eirian [3] 43/2 43/8 43/11 Eirian Powell [2] 43/2 43/8		

E	essential [1] 151/22 essentially [1] 186/2 established [4] 12/5 102/25 127/10 150/7 estimate [1] 160/4 estimated [1] 50/12 et [10] 62/13 69/8 69/12 70/9 73/5 74/2 98/12 100/21 119/10 119/12 et cetera [10] 62/13 69/8 69/12 70/9 73/5 74/2 98/12 100/21 119/10 119/12 even [16] 17/19 18/1 19/15 21/4 21/8 22/7 24/14 25/20 35/8 54/5 61/23 72/6 91/3 109/23 138/19 173/16 evening [1] 149/16 event [13] 60/7 72/17 93/13 115/11 133/14 136/7 149/4 152/25 159/1 159/2 159/13 172/13 176/2 events [21] 25/5 33/2 52/11 81/15 99/23 104/14 107/17 107/18 117/21 127/3 127/24 140/2 140/11 149/11 153/17 155/4 163/19 171/12 171/21 187/4 189/1 ever [6] 30/16 51/22 106/12 124/18 156/17 157/2 every [14] 4/8 28/11 28/12 35/20 71/22 73/4 76/16 77/11 90/13 129/16 132/14 154/21 163/22 163/22 everybody [5] 19/17 25/5 90/15 103/22 115/20 everyone [1] 1/5 everything [1] 100/17 evidence [44] 7/23 8/24 32/19 39/16 48/25 49/18 54/7 65/16 67/23 87/22 88/13 104/7 126/8 126/23 128/6 128/10 128/13 128/19 128/21 129/16 131/2 139/18 141/19 142/25 143/7 147/17 148/5 151/10 165/1 173/1 173/3 175/4 175/8 187/24 188/1 188/16 188/20 189/8 190/13 190/17 190/18 190/22 190/23 192/10 evidently [5] 43/15	43/17 44/22 45/1 190/19 Evolve [1] 98/3 exact [1] 169/17 exactly [3] 89/7 92/4 96/4 examination [2] 25/20 173/24 examine [1] 107/5 examined [1] 173/9 Examiner [1] 172/3 examining [1] 174/13 example [10] 35/21 51/7 69/22 70/1 70/15 71/5 115/1 117/1 154/17 189/19 exams [1] 25/19 excellent [2] 110/9 145/1 exception [1] 69/14 exceptional [2] 72/13 107/17 excess [1] 183/2 exchanged [1] 50/4 exclude [1] 96/10 excluding [1] 18/9 excuse [1] 126/4 execs [1] 61/10 executive [6] 45/19 178/5 181/9 181/11 183/21 184/13 Executives [1] 61/14 exercise [1] 15/15 exercised [1] 15/19 exist [2] 96/6 125/18 existence [1] 137/24 exogenous [8] 10/19 11/18 16/21 18/21 19/20 19/23 20/5 173/3 expect [24] 5/17 6/4 11/25 13/1 16/5 17/2 17/21 23/12 33/24 35/5 77/25 78/4 80/14 86/11 86/13 86/22 92/22 93/14 104/1 105/12 110/24 111/3 111/5 176/21 expected [11] 9/22 15/15 32/24 81/20 87/3 89/16 110/16 143/8 145/20 145/22 150/24 expecting [6] 5/8 21/18 32/2 79/2 87/12 135/22 expedite [2] 10/7 14/23 experience [19] 71/25 72/21 72/24 107/16 128/4 132/19 135/7 137/1 151/20 151/22 151/24 152/1 154/5 154/11 154/16	160/21 168/6 168/11 170/22 experienced [4] 16/1 16/2 151/6 158/2 experiencing [2] 102/3 159/8 expert [2] 10/24 17/1 expertise [9] 23/21 24/6 25/16 28/24 77/12 77/14 77/23 110/8 177/21 explain [8] 5/20 87/15 102/4 104/18 108/10 109/25 157/23 164/2 explains [5] 139/6 176/17 178/4 179/15 180/21 explanation [15] 62/25 78/20 79/14 79/20 87/2 96/11 100/5 103/10 103/15 104/17 106/10 106/14 110/5 157/15 157/18 explanations [4] 14/2 87/18 96/8 103/16 expressed [1] 159/21 expresses [3] 137/19 172/4 184/5 extensive [2] 54/2 150/11 extensively [1] 151/5 extent [1] 119/3 external [3] 94/17 179/1 180/25 externally [2] 94/5 95/5 extract [2] 50/3 57/1 extraneous [1] 51/16 extremely [6] 11/16 38/18 69/17 131/20 143/11 181/2 extremities [1] 96/5 eyesight [2] 21/14 99/18	factor [2] 112/20 177/6 factors [4] 80/17 93/23 93/23 176/24 facts [1] 97/5 factual [2] 139/25 140/10 failing [1] 115/18 fair [15] 46/23 47/4 50/6 53/7 53/9 53/10 60/22 61/2 63/8 63/9 64/6 97/15 97/16 119/2 184/25 fairly [1] 158/21 fall [1] 68/23 fallen [1] 161/25 falsely [1] 102/9 familial [1] 55/25 familiar [5] 3/21 23/25 30/25 80/21 155/17 familiarity [1] 77/15 families [1] 166/21 family [2] 51/11 135/25 far [7] 22/2 36/20 39/19 77/16 110/10 138/25 152/24 fashion [1] 165/4 fashioned [1] 36/8 fast [2] 9/22 28/2 father [3] 56/13 56/15 56/19 fault [2] 62/3 62/12 feasible [1] 77/11 features [1] 177/18 February [9] 134/23 135/11 136/25 137/23 139/22 144/23 146/23 147/11 169/9 February 2014 [1] 137/23 February 2016 [3] 136/25 146/23 147/11 fed [1] 171/3 feedback [1] 29/19 feeds [1] 98/12 feel [17] 25/23 45/25 55/9 55/12 61/13 62/3 62/12 64/11 71/2 71/9 72/3 134/19 136/15 137/3 143/18 151/9 188/11 feeling [8] 59/16 61/9 71/10 141/24 148/19 152/8 161/13 179/5 feelings [1] 57/25 feels [1] 9/18 feet [1] 137/8 fell [2] 52/5 69/18 fellow [2] 67/5 174/18 fellowship [1] 2/13 felt [33] 51/22 52/5
		F		
		face [4] 154/23 154/23 156/7 156/7 faced [2] 103/13 148/11 facilitating [1] 182/6 facilities [2] 35/14 35/17 fact [32] 11/17 14/18 23/4 24/3 24/25 34/21 47/14 47/19 72/5 81/4 82/16 82/17 91/7 91/22 93/6 93/11 99/4 99/8 100/5 100/24 102/9 107/7 112/8 112/18 135/12 152/12 153/10 165/23 176/8 177/2 181/7 190/1		

F	flaws [1] 122/8	170/1	Gibbs [5] 157/11	34/8 36/23 39/24
felt... [31] 54/19	fluctuation [1] 167/4	friends [1] 143/25	158/4 164/17 169/13	39/24 42/2 46/19 51/9
62/24 69/8 69/16 71/3	fluids [1] 150/6	friendship [1] 142/7	169/18	51/18 52/1 54/19
92/24 97/18 112/6	focus [1] 187/8	front [1] 28/4	give [17] 1/16 13/7	55/11 60/1 60/5 60/15
132/16 135/4 141/6	focused [4] 71/14	frozen [3] 7/20 76/4	25/2 42/1 59/12 60/8	62/23 64/14 65/20
148/22 152/9 152/10	76/20 146/7 178/18	76/14	62/10 66/12 73/25	71/14 79/2 84/18
157/2 157/4 159/10	focusing [3] 31/25	frustrated [1] 135/17	74/3 79/13 97/8 115/8	92/17 94/11 94/12
162/21 162/24 162/24	72/20 158/4	full [12] 1/16 2/13	128/13 128/20 139/17	96/7 102/1 117/21
162/25 163/4 165/23	Fogarty [3] 178/1	27/19 36/10 37/1	175/20	119/1 122/7 124/7
167/10 170/8 175/19	178/9 180/23	40/15 66/12 78/10	given [39] 12/19	126/4 126/7 126/8
178/6 179/10 181/1	follow [8] 12/25	88/22 115/8 180/3	13/10 13/14 13/17	183/12
188/9 188/14	59/23 61/6 65/11 97/9	187/24	13/24 18/23 24/25	gone [7] 26/10 46/16
fetal [1] 176/1	100/13 121/12 176/22	fully [1] 133/10	29/8 34/18 34/18	50/13 70/6 96/21
fetus [1] 177/14	followed [2] 85/25	function [1] 117/3	36/12 37/24 38/21	124/22 184/4
few [12] 17/15 41/11	97/8	functionality [4]	44/21 51/24 52/2	good [26] 1/5 40/6
77/2 77/13 80/24	following [16] 2/1	116/25 117/6 117/10	54/20 58/15 59/10	40/13 40/14 60/1 60/5
106/21 120/25 135/18	60/2 81/17 111/14	125/18	61/16 61/22 62/8	60/15 60/20 60/24
140/23 159/1 166/24	113/17 128/15 148/25	functioning [1] 70/23	86/16 95/8 95/9 95/13	89/13 129/1 138/25
190/7	150/18 151/12 153/2	fundamental [2]	95/16 98/15 108/19	141/20 152/10 155/7
field [2] 41/4 70/7	155/5 158/3 159/13	119/2 119/8	109/7 109/12 115/21	155/13 156/1 157/6
Fielding [6] 160/12	161/23 174/14 189/18	fundamentally [1]	116/7 116/18 132/21	160/20 165/24 170/1
161/5 161/16 161/22	follows [2] 161/25	119/4	142/9 151/7 162/10	172/17 175/10 175/15
161/25 162/9	163/7	further [17] 7/2 18/13	187/4	175/19 188/17
figure [1] 31/24	forever [1] 115/5	18/14 18/19 19/3 20/3	gives [2] 19/22 134/5	gossip [1] 179/10
figures [2] 162/16	Forgive [1] 119/6	37/23 77/24 92/17	giving [4] 13/19 14/6	got [27] 11/5 22/4
185/12	form [9] 2/22 24/11	104/17 104/17 110/18	35/14 65/16	23/8 24/17 24/19
filed [1] 69/5	36/9 44/14 44/16	112/2 113/1 173/8	glitch [1] 22/20	29/18 35/19 36/10
final [3] 66/2 86/3	122/1 139/19 150/25	178/7 182/12	glucose [32] 5/22	49/3 49/18 50/3 61/25
128/15	162/2	future [5] 35/12	5/23 16/9 32/11 32/13	65/8 65/15 71/24 76/1
finally [3] 23/18	forma [1] 90/25	36/24 36/24 116/23	32/14 32/17 32/18	82/10 83/22 84/17
117/12 122/10	formal [11] 2/2 53/23	136/1	34/3 36/2 78/2 78/7	85/3 88/25 90/20
find [7] 29/3 96/19	115/15 127/25 143/18	G	78/8 78/15 78/17 79/7	109/8 110/9 118/10
97/3 97/5 109/17	158/23 163/13 164/18	G's [1] 143/8	79/9 79/11 79/24	121/24 137/14
117/1 143/16	164/20 165/15 165/18	Gail [1] 132/4	82/25 83/4 83/6 86/7	governance [2]
finding [2] 140/18	formally [2] 163/9	gain [1] 183/23	86/12 86/13 88/19	179/21 182/4
177/9	181/25	gained [1] 154/15	89/22 90/9 94/19	GP [9] 123/10 127/6
findings [1] 139/15	formed [2] 11/3 11/4	gap [3] 99/5 99/24	94/25 121/17 122/3	134/6 134/23 135/10
Fiona [1] 184/16	forward [3] 65/10	100/25	GMC [3] 67/13	136/13 136/23 137/12
fire [1] 105/24	66/4 66/6	gave [2] 57/2 139/18	146/18 184/9	188/11
first [22] 1/10 8/16	foul [1] 187/1	general [9] 73/12	go [35] 4/16 11/24	grade [2] 184/16
10/11 11/21 16/8	found [7] 110/15	129/19 132/15 137/8	16/1 16/5 20/25 21/13	184/20
35/24 42/6 43/21	137/3 141/12 153/12	142/9 142/18 146/18	21/13 36/7 39/16	grades [1] 159/11
44/16 44/19 48/7	176/25 177/14 180/13	169/4 179/5	45/12 45/15 52/12	Grand [1] 142/13
66/22 75/17 84/15	foundation [4] 2/23	General Medical	52/22 59/22 60/7 60/7	grateful [1] 125/25
117/19 117/23 118/2	128/23 134/2 156/19	Council [1] 146/18	60/25 61/3 61/6 62/22	great [1] 137/19
131/22 131/25 134/14	four [6] 36/25 77/8	generally [13] 6/7	65/17 76/18 78/10	greater [1] 27/23
166/24 188/5	91/24 92/3 130/10	19/5 42/17 73/25	91/15 91/24 100/16	greatest [1] 28/23
firstly [3] 67/24 90/24	147/6	82/23 113/22 114/15	102/14 109/5 109/16	Greaves [3] 136/12
126/13	four hours [1] 77/8	125/4 137/12 164/25	109/24 126/1 126/21	136/20 136/25
fit [3] 19/25 20/2	four weeks [1] 147/6	165/24 175/10 183/17	132/3 135/18 156/3	green [1] 52/13
110/15	four/five years [1]	generate [2] 37/17	God [1] 163/23	grounded [1] 52/10
fitted [1] 20/3	36/25	153/18	goes [29] 29/11	group [9] 50/15
five [5] 36/25 71/8	fragile [1] 164/8	generic [1] 129/21	36/20 43/12 90/13	50/17 50/22 51/20
71/17 93/15 120/16	frame [2] 9/17 10/6	genuinely [1] 108/13	101/24 122/1 130/21	53/6 69/13 159/9
five days [1] 71/8	framed [1] 59/19	Germany [1] 20/7	131/7 134/12 135/6	171/9 185/4
five of [1] 120/16	fraud [1] 58/10	get [24] 2/16 4/3 4/3	141/8 144/6 145/15	groups [4] 69/4
five straight [1]	free [3] 39/16 65/17	4/25 10/7 10/8 11/7	146/8 149/21 154/12	142/7 175/11 183/16
71/17	126/1	27/4 32/5 35/22 37/11	155/2 157/17 157/22	growth [5] 79/10
flag [2] 105/16	frequently [2] 4/21	37/12 71/11 72/22	162/23 164/2 164/9	84/1 86/10 86/12 87/5
123/10	106/24	73/13 76/9 92/19 97/1	166/5 167/12 167/21	guard [1] 39/2
flagging [2] 104/1	Friday [1] 76/17	103/2 108/6 119/7	176/3 177/11 179/3	guardians [1] 187/19
162/5	fridge [1] 76/13	121/1 121/1 163/16	184/7	guess [4] 36/17 97/2
flags [1] 26/20	friendly [5] 138/4	getting [1] 55/25	going [39] 19/5 19/10	102/11 105/23
	148/20 152/5 167/16		21/11 21/13 23/6 25/4	guidance [11] 15/1

G	183/20 184/11 184/22 has [50] 4/8 11/9 11/10 11/13 13/8 13/11 13/14 13/17 13/23 14/15 15/19 17/24 19/6 19/10 24/8 26/9 30/9 34/22 37/7 55/1 63/15 63/20 63/23 64/10 78/1 83/11 86/17 88/17 89/8 94/4 95/16 96/14 97/10 108/18 109/11 124/18 128/4 137/20 138/7 150/11 150/12 153/3 153/4 153/14 154/20 154/24 158/17 165/8 169/19 188/1	184/4 184/7 185/2 185/10 185/14 186/11 186/11 Head [3] 178/1 180/23 181/1 headline [2] 20/25 119/1 health [28] 11/8 11/12 40/25 41/3 41/6 41/8 41/12 41/13 41/16 41/23 43/14 46/5 46/15 49/25 50/1 51/25 52/4 53/20 54/8 54/9 55/5 56/2 60/21 64/17 155/12 171/16 171/18 189/15 healthcare [1] 172/5 healthy [2] 79/12 137/9 hear [2] 34/8 174/17 heard [9] 64/1 75/12 93/13 104/21 104/23 104/23 159/17 167/23 168/1 hearings [5] 128/16 128/18 187/25 190/18 190/21 heart [3] 157/20 157/24 158/13 heel [4] 32/17 32/25 82/21 82/24 held [10] 49/2 69/10 143/15 145/20 145/22 149/4 158/23 158/25 159/1 186/19 help [13] 4/15 5/15 9/17 9/23 15/25 34/10 42/15 69/24 76/24 77/24 81/25 113/13 152/11 helped [1] 65/9 helpful [8] 69/12 114/2 122/7 122/14 122/21 123/17 154/2 155/11 helps [1] 19/21 hence [1] 63/12 her [103] 43/22 44/19 44/19 45/2 45/9 47/10 47/12 48/11 50/9 51/24 51/25 51/25 52/3 52/3 52/4 52/10 52/10 52/13 52/20 53/12 53/13 53/14 53/16 54/2 54/21 55/19 55/20 56/10 56/10 57/24 57/25 57/25 60/21 60/25 61/3 61/7 61/20 62/17 62/18 63/1 63/1 63/17 63/25 63/25 64/11 70/18 128/22 129/18 130/9 132/18 132/19 133/22 135/16 135/20	135/22 135/22 135/25 136/2 136/6 136/6 136/11 136/25 137/19 137/19 138/9 139/4 139/6 139/21 140/17 141/8 141/16 141/19 143/7 153/1 153/20 154/3 154/11 155/4 156/18 156/20 157/12 158/6 158/16 159/5 163/18 164/2 164/5 164/16 165/1 166/15 166/22 169/22 170/12 175/8 175/12 176/18 177/2 178/8 179/14 180/6 180/18 181/19 184/20 here [21] 4/16 6/23 10/10 15/18 25/25 26/5 30/1 30/6 31/1 31/15 31/24 45/14 60/9 75/15 80/20 99/9 106/5 107/22 109/21 110/3 112/1 herself [1] 78/22 hesitation [1] 162/21 Hey [8] 5/1 60/1 60/5 60/8 60/15 61/4 185/2 185/5 hierarchy [1] 68/3 high [29] 6/5 8/22 8/25 11/1 11/16 16/20 24/13 24/21 25/16 26/17 51/1 69/22 69/24 70/2 79/3 79/3 79/24 80/4 86/10 86/18 87/12 130/14 131/5 161/8 161/13 171/24 185/12 189/6 190/2 higher [4] 86/22 93/15 155/8 177/23 highest [2] 86/19 163/1 highlight [2] 92/2 115/8 highlighted [7] 81/6 83/21 88/10 95/22 99/9 123/7 185/13 highly [4] 29/16 94/3 160/19 163/4 Hill [4] 37/18 38/13 105/6 106/2 him [8] 78/22 133/16 147/4 169/13 174/1 186/10 186/15 186/16 hindsight [6] 54/12 55/4 55/24 63/14 106/1 185/11 hindsight's [1] 39/3 his [30] 133/11 134/9 136/13 140/14 144/22 144/24 145/7 147/1 148/25 149/15 149/23	150/9 151/3 151/4 155/20 160/14 161/5 161/13 170/19 172/25 173/3 182/22 184/2 184/3 184/5 185/6 185/9 185/25 186/24 187/11 historically [1] 121/18 hit [1] 75/8 hm [1] 38/17 hoc [1] 5/3 Hodkinson [4] 45/17 45/19 45/22 61/18 hold [5] 67/20 72/22 73/13 100/8 100/22 Holstrum [1] 45/23 home [2] 56/9 135/25 hope [6] 6/13 6/15 17/16 32/5 71/24 71/25 hoped [3] 72/14 119/22 122/2 hoping [1] 106/9 Hor [3] 134/22 135/2 135/6 hormonal [3] 87/5 87/17 106/13 hormone [7] 69/23 78/15 79/10 84/1 86/10 86/12 87/5 hormones [4] 69/7 79/7 79/8 79/11 horrifying [1] 102/13 hospital [85] 2/23 4/6 4/8 4/18 5/1 41/3 46/6 67/17 116/10 116/20 120/11 127/10 128/1 128/1 128/23 129/17 129/20 132/5 132/6 132/9 133/8 134/3 134/22 135/8 136/24 137/23 138/1 138/12 138/22 141/15 143/4 143/23 144/17 144/21 145/1 146/10 147/10 147/13 150/15 154/10 154/22 155/20 155/23 156/3 156/4 156/9 156/21 157/6 159/7 159/19 160/13 162/12 162/18 165/21 166/1 167/1 167/8 167/13 167/16 167/18 167/25 169/8 169/12 169/22 170/24 171/17 171/22 172/8 172/21 174/10 175/1 175/8 175/11 178/14 179/2 179/13 181/21 182/14 183/14 184/19 185/2 185/6 186/5 189/16 189/19 Hospital January 2015 [1] 178/14	
H	had [222] hadn't [6] 20/1 101/1 114/23 118/8 119/5 119/10 half [5] 11/9 11/10 24/18 34/25 85/20 half-life [3] 11/9 11/10 34/25 halfway [1] 160/3 hand [1] 6/24 handover [2] 140/15 163/22 hands [2] 7/13 126/19 handwritten [1] 24/2 hangs [1] 11/10 happen [9] 30/7 101/9 103/20 103/25 111/4 143/12 161/14 167/4 172/13 happened [13] 87/10 88/6 103/20 105/10 108/25 109/13 111/11 119/25 142/24 153/4 153/4 157/14 163/12 happening [2] 63/2 169/16 happens [2] 28/9 136/4 happy [1] 167/10 harassed [2] 56/18 56/22 hard [1] 145/4 harder [1] 90/2 Harkness [9] 148/17 148/25 149/8 149/14 149/21 149/24 150/11 150/19 151/3 harm [10] 14/16 17/5 34/20 102/12 102/24 103/23 106/8 148/9 164/11 172/5 harming [5] 146/15 147/24 155/1 171/23 189/16 Harvey [4] 183/3	183/20 184/11 184/22 has [50] 4/8 11/9 11/10 11/13 13/8 13/11 13/14 13/17 13/23 14/15 15/19 17/24 19/6 19/10 24/8 26/9 30/9 34/22 37/7 55/1 63/15 63/20 63/23 64/10 78/1 83/11 86/17 88/17 89/8 94/4 95/16 96/14 97/10 108/18 109/11 124/18 128/4 137/20 138/7 150/11 150/12 153/3 153/4 153/14 154/20 154/24 158/17 165/8 169/19 188/1 hasn't [2] 120/2 120/2 hate [1] 63/25 have [390] haven't [12] 8/7 21/22 29/14 49/18 50/11 61/25 100/5 119/18 121/24 122/11 125/13 125/16 having [30] 7/22 11/1 39/6 47/10 51/15 54/12 60/1 80/18 86/23 101/22 102/21 105/19 107/2 107/21 117/10 128/8 129/20 151/21 159/18 162/4 165/10 165/15 167/5 169/24 170/6 170/10 171/7 175/15 186/9 187/14 Hayley [4] 50/19 53/6 53/12 61/18 Hayley Cooper [3] 53/6 53/12 61/18 he [74] 133/14 133/16 134/6 134/7 134/11 136/15 136/16 136/20 144/22 145/2 145/8 145/15 146/3 146/4 146/4 146/5 146/8 146/13 146/15 146/21 146/23 146/24 146/25 147/1 147/2 147/5 148/18 148/21 148/25 149/2 149/10 149/15 149/18 149/19 149/24 150/12 150/12 151/8 155/22 156/13 156/14 160/15 160/22 160/25 162/10 162/13 169/9 169/17 172/23 172/24 173/1 173/2 173/2 173/9 173/24 174/4 182/14 182/18 182/19 182/22 182/22 183/7 183/19 183/21 183/24 183/25 184/4	184/4 184/7 185/2 185/10 185/14 186/11 186/11 Head [3] 178/1 180/23 181/1 headline [2] 20/25 119/1 health [28] 11/8 11/12 40/25 41/3 41/6 41/8 41/12 41/13 41/16 41/23 43/14 46/5 46/15 49/25 50/1 51/25 52/4 53/20 54/8 54/9 55/5 56/2 60/21 64/17 155/12 171/16 171/18 189/15 healthcare [1] 172/5 healthy [2] 79/12 137/9 hear [2] 34/8 174/17 heard [9] 64/1 75/12 93/13 104/21 104/23 104/23 159/17 167/23 168/1 hearings [5] 128/16 128/18 187/25 190/18 190/21 heart [3] 157/20 157/24 158/13 heel [4] 32/17 32/25 82/21 82/24 held [10] 49/2 69/10 143/15 145/20 145/22 149/4 158/23 158/25 159/1 186/19 help [13] 4/15 5/15 9/17 9/23 15/25 34/10 42/15 69/24 76/24 77/24 81/25 113/13 152/11 helped [1] 65/9 helpful [8] 69/12 114/2 122/7 122/14 122/21 123/17 154/2 155/11 helps [1] 19/21 hence [1] 63/12 her [103] 43/22 44/19 44/19 45/2 45/9 47/10 47/12 48/11 50/9 51/24 51/25 51/25 52/3 52/3 52/4 52/10 52/10 52/13 52/20 53/12 53/13 53/14 53/16 54/2 54/21 55/19 55/20 56/10 56/10 57/24 57/25 57/25 60/21 60/25 61/3 61/7 61/20 62/17 62/18 63/1 63/1 63/17 63/25 63/25 64/11 70/18 128/22 129/18 130/9 132/18 132/19 133/22 135/16 135/20	135/22 135/22 135/25 136/2 136/6 136/6 136/11 136/25 137/19 137/19 138/9 139/4 139/6 139/21 140/17 141/8 141/16 141/19 143/7 153/1 153/20 154/3 154/11 155/4 156/18 156/20 157/12 158/6 158/16 159/5 163/18 164/2 164/5 164/16 165/1 166/15 166/22 169/22 170/12 175/8 175/12 176/18 177/2 178/8 179/14 180/6 180/18 181/19 184/20 here [21] 4/16 6/23 10/10 15/18 25/25 26/5 30/1 30/6 31/1 31/15 31/24 45/14 60/9 75/15 80/20 99/9 106/5 107/22 109/21 110/3 112/1 herself [1] 78/22 hesitation [1] 162/21 Hey [8] 5/1 60/1 60/5 60/8 60/15 61/4 185/2 185/5 hierarchy [1] 68/3 high [29] 6/5 8/22 8/25 11/1 11/16 16/20 24/13 24/21 25/16 26/17 51/1 69/22 69/24 70/2 79/3 79/3 79/24 80/4 86/10 86/18 87/12 130/14 131/5 161/8 161/13 171/24 185/12 189/6 190/2 higher [4] 86/22 93/15 155/8 177/23 highest [2] 86/19 163/1 highlight [2] 92/2 115/8 highlighted [7] 81/6 83/21 88/10 95/22 99/9 123/7 185/13 highly [4] 29/16 94/3 160/19 163/4 Hill [4] 37/18 38/13 105/6 106/2 him [8] 78/22 133/16 147/4 169/13 174/1 186/10 186/15 186/16 hindsight [6] 54/12 55/4 55/24 63/14 106/1 185/11 hindsight's [1] 39/3 his [30] 133/11 134/9 136/13 140/14 144/22 144/24 145/7 147/1 148/25 149/15 149/23	150/9 151/3 151/4 155/20 160/14 161/5 161/13 170/19 172/25 173/3 182/22 184/2 184/3 184/5 185/6 185/9 185/25 186/24 187/11 historically [1] 121/18 hit [1] 75/8 hm [1] 38/17 hoc [1] 5/3 Hodkinson [4] 45/17 45/19 45/22 61/18 hold [5] 67/20 72/22 73/13 100/8 100/22 Holstrum [1] 45/23 home [2] 56/9 135/25 hope [6] 6/13 6/15 17/16 32/5 71/24 71/25 hoped [3] 72/14 119/22 122/2 hoping [1] 106/9 Hor [3] 134/22 135/2 135/6 hormonal [3] 87/5 87/17 106/13 hormone [7] 69/23 78/15 79/10 84/1 86/10 86/12 87/5 hormones [4] 69/7 79/7 79/8 79/11 horrifying [1] 102/13 hospital [85] 2/23 4/6 4/8 4/18 5/1 41/3 46/6 67/17 116/10 116/20 120/11 127/10 128/1 128/1 128/23 129/17 129/20 132/5 132/6 132/9 133/8 134/3 134/22 135/8 136/24 137/23 138/1 138/12 138/22 141/15 143/4 143/23 144/17 144/21 145/1 146/10 147/10 147/13 150/15 154/10 154/22 155/20 155/23 156/3 156/4 156/9 156/21 157/6 159/7 159/19 160/13 162/12 162/18 165/21 166/1 167/1 167/8 167/13 167/16 167/18 167/25 169/8 169/12 169/22 170/24 171/17 171/22 172/8 172/21 174/10 175/1 175/8 175/11 178/14 179/2 179/13 181/21 182/14 183/14 184/19 185/2 185/6 186/5 189/16 189/19 Hospital January 2015 [1] 178/14

H	16/15 17/15 17/21 20/1 26/16 33/1 33/9 34/11 34/16 78/2 78/22 79/22 83/1 83/8 86/11 88/20 95/2 106/3 108/20 109/22 hospitals [10] 4/1 72/9 77/19 127/16 129/15 135/18 144/19 166/8 167/14 188/24 hot [1] 158/25 hour [1] 160/4 hours [6] 7/12 54/6 77/8 126/17 151/11 175/22 house [14] 25/15 27/2 76/22 76/25 77/9 84/3 84/14 85/17 86/2 86/5 87/1 106/14 155/21 172/9 how [50] 16/4 17/17 21/12 26/3 28/8 37/24 39/24 46/16 46/20 49/5 54/25 55/7 55/20 57/9 59/4 59/17 59/18 60/6 61/19 64/11 64/16 70/8 70/22 73/14 77/6 80/6 93/22 94/1 94/14 102/23 102/23 108/15 108/25 109/12 119/9 119/11 121/4 126/13 130/16 133/1 134/8 153/6 154/16 155/14 155/15 162/15 165/17 166/17 169/18 177/14 however [29] 19/21 44/21 129/2 131/23 133/13 135/6 137/13 141/4 141/23 142/2 143/9 145/24 146/25 149/10 150/12 153/6 154/24 156/8 156/14 159/20 162/5 162/13 170/6 172/17 174/5 177/20 179/3 188/2 190/20 HR [6] 41/22 41/24 42/1 45/19 51/18 54/17 huge [1] 105/16 human [3] 94/1 107/15 107/16 hyperglycaemic [4] 6/6 12/20 13/10 95/9 hyperinsulinism [1] 95/24 hypo [1] 130/11 hypoglycaemia [19] 5/12 5/16 20/19 24/22 25/1 33/5 79/8 82/17 83/9 86/9 86/23 87/2 87/8 95/10 106/15 106/15 122/6 130/11 130/15 hypoglycaemic [27] 5/13 5/18 6/10 12/8 12/16 13/2 13/11	112/5 112/6 114/18 114/19 118/8 130/19 142/8 I discussed [1] 130/23 I do [19] 42/14 46/11 55/9 56/14 58/18 58/23 62/7 62/20 125/13 134/13 140/18 140/24 143/17 148/7 149/3 150/20 161/6 164/23 185/20 I documented [1] 130/24 I don't [25] 20/4 48/17 50/11 61/24 72/8 72/12 72/25 88/5 92/12 97/1 99/16 104/14 106/6 106/17 107/14 108/12 109/12 109/17 113/21 116/11 117/10 118/21 118/21 138/16 183/15 I emphasise [1] 190/17 I encouraged [1] 186/16 I entered [1] 91/8 I ever [1] 156/17 I expect [1] 111/5 I feel [4] 62/3 62/12 134/19 151/9 I felt [10] 51/22 52/5 54/19 62/24 141/6 157/4 162/25 163/4 170/8 175/19 I first [2] 44/16 44/19 I follow [1] 65/11 I found [1] 137/3 I genuinely [1] 108/13 I get [2] 32/5 119/7 I got [2] 76/1 118/10 I guess [4] 36/17 97/2 102/11 105/23 I had [30] 53/10 55/14 57/21 73/12 75/8 89/6 91/3 100/25 102/18 105/14 105/17 112/23 122/2 131/24 133/15 134/15 138/20 140/5 144/7 147/23 153/25 156/9 158/1 161/8 161/9 165/12 167/14 167/23 168/1 178/3 I hadn't [1] 114/23 I have [27] 46/4 56/21 56/22 62/4 63/19 72/25 74/19 88/4 88/10 95/22 104/22 108/13 113/16 117/9 124/22 144/18 154/15 154/18 156/6	156/15 157/2 158/10 161/3 166/8 170/13 170/16 187/5 I haven't [5] 21/22 49/18 61/25 125/13 125/16 I heard [1] 64/1 I hope [1] 32/5 I hoped [1] 72/14 I impart [1] 116/20 I instigated [1] 69/14 I interrupted [1] 8/23 I just [10] 14/24 16/11 28/16 35/11 57/3 85/2 92/18 102/17 104/4 105/23 I knew [4] 94/8 117/23 117/24 117/25 I know [9] 63/20 65/1 91/13 94/8 97/18 111/8 122/17 125/22 165/12 I learned [2] 138/11 186/18 I left [1] 138/12 I lived [1] 146/1 I looked [1] 84/12 I managed [1] 72/14 I may [3] 96/20 96/21 112/4 I mean [44] 16/23 26/7 26/7 33/3 35/17 36/8 39/3 54/16 71/20 71/24 72/9 74/1 76/2 76/5 76/7 78/7 87/4 87/17 95/22 96/16 97/1 101/9 103/8 105/2 105/3 105/14 106/6 106/18 107/24 108/6 108/7 109/15 109/17 112/24 116/12 116/24 117/24 120/25 122/15 122/17 123/1 124/5 124/23 125/13 I mentioned [1] 43/6 I met [2] 43/22 48/7 I might [4] 91/11 96/22 124/25 125/1 I need [3] 96/19 96/22 113/18 I needed [2] 101/8 113/20 I never [2] 117/9 164/4 I normally [1] 74/16 I noted [1] 149/22 I now [2] 171/6 175/4 I observed [1] 175/18 I obviously [1] 97/18 I offer [1] 58/11 I omitted [1] 83/20 I only [2] 45/7 141/12 I overlooked [1] 82/16	I personally [1] 130/5 I pick [1] 123/22 I possibly [1] 96/18 I probably [7] 44/15 91/8 106/7 109/10 112/6 114/16 118/8 I provided [1] 140/10 I put [2] 92/14 170/9 I realised [2] 117/25 118/11 I really [2] 26/21 97/11 I recall [5] 38/14 131/8 153/2 167/5 181/10 I reflected [1] 158/8 I remained [1] 183/10 I remember [12] 108/4 131/11 135/17 135/21 135/23 142/9 153/25 159/3 161/10 169/18 181/7 186/9 I reply [1] 63/1 I requested [3] 43/13 156/3 156/12 I returned [1] 132/9 I right [1] 31/15 I said [5] 17/6 46/14 58/19 101/8 119/8 I saw [3] 44/9 45/2 72/12 I say [14] 51/19 54/16 72/4 76/12 97/16 102/18 104/13 112/5 115/24 118/20 120/23 120/25 122/13 125/5 I see [3] 58/8 82/10 125/14 I should [3] 91/11 128/2 138/19 I sort [1] 72/7 I speak [1] 97/12 I specifically [1] 140/24 I spoke [1] 111/6 I start [1] 2/1 I started [1] 72/5 I suggest [1] 65/20 I suppose [16] 38/4 41/21 68/7 97/6 102/8 102/13 103/9 103/13 105/11 105/13 106/9 111/24 112/4 112/15 113/3 117/8 I suspect [1] 21/15 I suspected [1] 162/15 I then [1] 124/9 I think [76] 15/5 22/19 24/17 28/1 29/17 30/9 36/20 37/25 39/22 41/2 43/5 44/2 47/25 48/5 49/1
----------	---	--	---	--

I	73/23 74/5 74/10 74/11 74/22 75/4 81/17 84/11 88/11 89/2 91/10 91/20 92/12 100/8 100/8 101/16 102/1 103/9 103/12 104/15 104/17 106/21 107/5 112/21 113/19 114/7 114/12 118/13 118/21 124/20 125/10 132/1 141/4 144/7 145/20 145/22 146/10 150/23 150/24 154/7 162/15 163/23 165/12 166/6 167/15 168/21 173/5 176/21 189/10	34/10 35/8 37/11 37/12 42/9 45/11 45/12 45/15 46/9 50/2 51/6 51/7 52/12 52/24 54/5 59/21 59/22 59/25 60/18 61/6 63/4 64/18 64/21 66/3 66/22 68/25 69/20 69/20 69/22 69/23 70/1 70/11 71/5 73/12 73/22 75/19 75/20 76/10 76/11 77/13 78/1 78/8 78/13 79/1 79/12 80/4 86/4 86/22 87/4 88/20 89/11 91/24 92/2 93/8 93/18 95/7 97/9 98/6 98/20 98/25 100/9 100/13 101/18 102/25 103/4 103/20 105/14 107/7 107/19 108/15 109/6 109/7 109/17 110/14 110/24 113/17 114/3 114/10 114/13 114/16 114/23 115/1 115/4 119/7 121/13 121/13 121/14 122/6 122/18 122/23 124/24 126/4 131/11 131/15 131/24 138/19 144/7 145/21 145/24 146/9 148/11 154/25 156/9 156/12 156/17 159/9 159/17 163/9 165/11 165/12 167/3 167/4 171/21 173/2 178/23 180/2 182/9 184/4 187/16	28/8 39/1 72/1 114/4 115/21 116/20 119/6 122/24 134/15 153/22 impossible [1] 105/9 improve [4] 36/18 37/2 122/9 155/8 improved [1] 35/25 improvement [2] 36/19 190/13 improving [2] 138/13 171/3 inaccurately [1] 178/15 inappropriate [2] 33/10 88/20 inappropriately [1] 31/23 inbox [1] 29/20 inch [1] 91/23 incident [5] 153/22 161/24 162/2 162/3 179/25 incidents [1] 147/4 include [4] 73/20 139/21 187/15 189/14 included [5] 127/5 139/24 150/16 180/19 182/6 includes [1] 154/23 including [12] 50/15 127/6 127/25 140/2 141/16 146/17 158/19 169/23 176/24 179/1 180/4 187/11 incompetence [1] 164/11 incorrect [1] 56/19 increase [8] 46/21 46/25 48/9 48/16 49/20 79/7 182/6 182/10 increased [4] 47/20 86/14 178/2 180/8 increases [1] 186/8 indeed [9] 21/18 24/5 39/9 39/12 39/13 66/9 81/8 158/2 191/1 independence [4] 54/15 54/16 54/16 54/17 independent [5] 41/23 42/3 54/10 58/20 138/7 indicate [3] 93/6 95/1 108/23 indicated [3] 88/22 95/13 95/17 indicates [3] 93/7 93/17 108/18 indicating [1] 23/9 indication [3] 74/18 139/17 190/22 indictment [3] 127/2 127/21 143/19	individual [4] 41/15 54/18 140/4 186/21 individuals [1] 79/12 inevitably [1] 77/14 inexperience [1] 190/3 infancy [3] 36/22 144/14 165/16 infection [2] 177/16 177/19 infer [1] 25/1 inflicted [1] 172/5 influence [2] 41/25 58/17 influenced [2] 102/8 154/12 informal [6] 54/2 54/13 127/25 158/21 166/17 167/6 informally [2] 141/2 159/12 information [38] 10/10 10/15 14/23 16/12 17/1 17/3 20/16 20/17 27/11 27/19 38/21 43/19 44/21 61/15 61/16 63/5 63/11 74/5 80/1 82/20 89/21 93/1 97/3 98/5 104/18 111/25 112/1 112/9 112/10 112/13 113/5 113/8 114/4 116/20 148/15 151/7 168/16 176/17 informed [9] 12/12 13/6 23/7 23/13 28/3 140/14 148/4 174/21 178/2 infrequent [3] 73/12 143/10 188/14 initial [3] 139/15 142/18 170/20 initially [2] 144/8 146/10 initiate [1] 63/12 injected [1] 108/18 injury [1] 177/10 input [1] 90/24 INQ [1] 23/22 INQ0000859 [1] 21/13 INQ0000861 [1] 3/20 INQ0000862 [1] 9/3 INQ0001169 [2] 80/18 89/25 INQ0001175 [1] 30/25 INQ0001176 [1] 88/15 Inquest [2] 139/18 146/20 inquiry [42] 1/20 21/22 40/17 45/17 48/25 66/16 126/24
I think... [61] 50/18 50/21 51/10 52/13 54/22 55/18 56/16 58/3 58/24 60/5 60/7 61/21 63/3 63/10 64/2 64/21 65/19 71/2 71/10 77/16 80/21 80/25 83/22 83/22 83/25 85/6 85/9 85/10 86/6 90/2 90/13 90/22 91/13 99/10 102/14 102/15 102/24 104/15 106/9 109/5 109/10 110/18 110/21 112/12 113/23 117/7 117/23 117/25 118/3 119/8 121/24 122/15 123/24 126/16 141/20 142/2 148/1 153/6 154/1 160/2 160/3 I thought [6] 52/1 96/17 119/4 125/3 135/24 147/19 I took [1] 2/7 I tried [2] 99/6 100/7 I understand [5] 42/10 61/9 90/18 126/7 184/8 I understood [1] 139/25 I usually [2] 73/22 92/13 I was [54] 3/7 21/17 41/10 45/3 45/3 48/8 48/11 48/24 51/23 51/24 52/21 53/2 53/15 54/19 55/15 68/4 68/13 71/7 72/6 73/22 74/4 74/4 74/19 88/9 95/24 102/8 103/13 104/22 104/22 105/1 106/9 106/23 130/22 133/1 135/22 138/11 138/16 138/25 140/3 141/11 143/19 145/23 145/25 147/18 159/21 166/23 167/1 167/2 170/8 174/21 174/23 178/24 181/10 186/21 I wasn't [4] 29/23 101/7 102/20 167/3 I will [1] 128/19 I won't [1] 93/22 I wonder [2] 66/3 92/2 I would [65] 30/14 43/21 47/8 47/22 58/21 60/13 60/17 64/22 67/22 69/25 70/2 71/24 71/24 71/25 71/25 73/14	I wouldn't [2] 91/4 131/21 I write [1] 113/16 I'd [7] 3/13 3/18 64/21 72/4 73/1 118/11 119/4 I'll [4] 1/7 52/18 66/22 126/11 I'm [28] 1/6 16/3 25/23 25/25 28/7 30/1 30/8 47/25 48/7 50/11 60/13 75/14 76/7 87/10 88/6 88/10 89/4 94/6 102/25 105/1 107/18 110/9 115/10 119/1 124/7 124/15 124/19 126/19 I's [5] 135/21 149/9 164/12 164/15 185/25 I've [10] 50/12 51/20 51/21 65/15 67/21 71/24 88/7 91/20 107/24 110/7 I've made [1] 91/20 lan [4] 183/3 183/20 184/11 184/22 lan Harvey [4] 183/3 183/20 184/11 184/22 idea [7] 27/16 60/5 60/16 60/20 60/25 102/11 147/21 Ideally [1] 165/2 identified [8] 24/9 116/19 126/25 177/7 178/3 180/16 181/3 189/1 identify [4] 139/16 149/12 171/11 182/12 identifying [1] 4/12 if [149] 5/12 6/5 6/23 8/1 9/2 10/7 10/8 11/12 12/1 12/7 12/11 16/7 17/19 18/1 19/5 19/9 19/24 20/1 20/13 21/4 21/13 22/2 22/3 22/11 25/11 25/14 27/13 27/17 33/4 33/8	imp [1] 119/19 impaction [1] 95/19 importance [3] 28/11 190/9 190/14 important [15] 9/19 9/19 19/9 26/3 26/11	immediately [5] 17/13 149/3 153/7 165/13 175/25 immunoassay [1] 19/18 impact [2] 19/10 148/23 impacted [1] 28/5 impacting [2] 58/23 132/22 impart [1] 116/20 impartial [3] 41/24 42/3 58/20 imperative [1] 103/21 implement [1] 119/19 implication [1] 95/19 importance [3] 28/11 190/9 190/14 important [15] 9/19 9/19 19/9 26/3 26/11	

I	109/4 109/6 109/12 111/10 115/2 117/16 118/2 120/18 120/24 123/6 123/25 130/14 143/1 173/3 insulin's [1] 11/3 insulins [2] 24/12 106/19 intended [1] 190/20 intense [1] 187/8 intensive [2] 74/21 143/11 interactions [1] 127/17 interested [1] 183/23 interests [1] 182/16 interference [1] 19/24 international [1] 8/17 interpret [8] 22/3 31/3 31/22 32/10 33/4 36/11 83/5 88/19 interpretation [11] 6/21 24/23 25/17 33/7 34/6 36/3 37/4 90/8 94/2 131/1 136/7 interpreting [4] 23/2 94/7 96/7 130/23 interrupted [1] 8/23 intervene [1] 73/11 intervening [1] 158/18 interview [1] 49/1 into [18] 4/16 4/24 9/8 20/25 21/15 22/22 27/24 63/5 82/15 90/25 90/25 109/14 110/11 117/21 171/3 174/24 177/4 188/1 intra [1] 55/25 intra-familial [1] 55/25 intriguing [1] 104/9 introduce [3] 3/23 117/11 126/12 introduced [3] 117/2 117/9 121/7 introducing [1] 2/1 investigate [2] 5/13 70/8 investigated [3] 20/3 133/2 179/25 investigating [3] 17/17 118/17 141/3 investigation [21] 17/9 17/22 18/20 27/25 45/8 46/22 47/11 47/23 48/4 54/21 58/9 58/13 58/18 58/21 78/10 112/2 113/2 113/7 117/21 128/5 175/3 investigations [5] 18/13 18/15 69/21	173/17 182/12 investigators [1] 48/22 invite [3] 28/16 163/16 174/24 invited [3] 134/11 134/21 145/23 invites [1] 158/24 invites sent [1] 158/24 inviting [1] 107/19 involved [57] 41/12 47/12 55/25 74/14 75/9 76/8 113/6 127/1 129/23 130/7 134/19 135/15 138/17 138/19 139/3 139/11 139/12 140/13 140/16 141/5 142/12 143/6 143/17 143/19 144/12 145/6 145/23 148/3 149/14 151/19 152/17 152/20 152/22 153/24 158/10 158/24 161/22 163/15 163/17 164/13 165/2 165/5 166/20 168/15 168/19 169/9 172/10 172/23 173/23 174/3 174/11 180/22 180/24 183/5 185/24 186/3 186/22 involvement [7] 33/12 118/12 127/20 138/6 140/1 140/11 164/16 involves [1] 121/25 irrespective [1] 124/5 is [339] isn't [13] 17/11 26/13 28/11 43/21 93/23 94/15 103/18 103/25 110/6 110/11 110/21 119/15 119/16 isolated [2] 105/21 162/1 isolation [2] 31/21 123/13 issue [7] 27/8 27/14 120/18 122/18 132/8 139/20 185/10 issued [1] 15/1 issues [9] 19/19 30/6 113/1 116/25 123/3 131/13 162/22 181/3 185/14 it [438] it fitted [1] 20/3 IT system [1] 36/24 it's [120] 2/12 4/21 5/3 6/7 7/13 8/15 8/19 8/22 8/24 8/25 10/1 11/3 11/4 11/5 11/6 11/8 11/24 14/5 14/14	15/8 15/10 16/21 17/8 17/8 18/13 19/9 19/14 19/23 21/7 21/16 22/20 23/8 23/8 23/9 23/10 24/3 24/18 26/9 26/10 27/3 27/3 27/5 27/11 27/11 28/17 29/1 29/7 29/24 30/12 30/15 31/17 31/20 31/20 31/23 36/8 36/18 38/7 38/9 38/25 39/6 41/16 55/18 58/19 58/20 58/20 64/15 65/1 65/6 68/6 68/6 68/7 71/1 72/7 72/8 77/5 77/10 78/7 78/13 81/4 81/6 83/21 86/20 88/6 93/9 94/3 96/14 99/2 99/13 99/20 100/11 100/16 100/17 103/11 104/4 104/6 105/13 105/22 108/9 108/19 109/22 110/8 110/14 111/5 111/7 113/25 115/6 119/25 121/10 121/13 121/13 121/22 121/22 122/5 122/7 122/17 122/18 123/3 124/15 126/17 136/4 items [1] 80/25 its [5] 31/21 34/22 36/22 37/23 179/19	178/1 178/9 180/23 July [16] 42/7 44/7 45/3 45/14 46/3 46/24 47/5 48/6 48/8 48/14 49/16 58/3 59/4 137/24 144/23 169/1 July 2015 [2] 137/24 144/23 July 2016 [4] 46/24 47/5 48/14 49/16 July 2017 [2] 58/3 59/4 jump [1] 103/2 June [19] 43/25 44/3 117/13 117/17 127/4 127/5 132/7 132/10 133/16 138/13 140/23 157/9 173/24 176/7 180/6 182/18 182/18 188/4 188/4 June 2015 [4] 127/4 140/23 180/6 188/4 June 2016 [1] 127/5 junior [20] 28/20 28/25 127/6 129/2 130/19 131/20 132/4 132/24 133/25 139/1 142/17 155/12 155/17 166/10 166/16 167/3 169/21 171/13 188/22 189/22 just [139] 3/23 4/15 5/20 8/5 9/3 9/17 10/9 10/21 11/24 12/11 14/11 14/22 14/24 15/20 15/25 16/8 16/11 17/8 17/17 18/5 18/19 21/10 21/11 21/14 21/22 22/15 23/18 23/20 23/23 24/6 24/10 24/15 25/4 28/16 29/8 29/24 30/8 31/8 32/20 33/21 34/10 34/13 35/11 35/15 37/19 38/15 39/5 41/11 42/15 45/15 45/17 47/25 48/19 48/19 48/20 49/4 50/2 52/5 54/18 57/3 57/24 59/21 61/8 62/2 64/14 66/22 68/19 70/18 70/19 71/10 71/13 73/25 74/3 74/24 75/11 75/14 76/4 76/11 76/24 77/24 80/16 80/24 81/23 83/21 84/25 85/2 87/11 88/15 89/11 89/12 90/3 90/23 91/22 91/24 92/2 92/18 92/19 93/4 96/18 96/22 97/1 98/23 99/1 99/3 100/3 100/5
			J	
			James [1] 169/7 January [5] 128/25 132/5 141/18 172/9 178/14 January 2015 [1] 128/25 Jayaram [1] 146/21 Jessica [1] 169/21 jigsaw [2] 105/19 105/20 Jim [2] 177/24 178/8 Jim McCormack [1] 178/8 Jiraskova [3] 136/23 137/13 137/15 Joanne [2] 175/6 179/11 job [3] 54/20 54/20 71/23 joint [2] 153/18 178/8 jointly [1] 180/2 judge [1] 19/2 judgment [2] 15/16 15/19 judgmental [2] 42/4 58/20 Julie [3] 178/1 178/9 180/23 Julie Fogarty [3]	

J	102/20 105/3 105/20 105/21 106/6 107/14 107/24 108/10 108/12 108/13 108/24 109/16 109/17 111/7 111/8 111/8 111/11 115/1 115/2 116/11 117/10 117/13 117/22 118/21 122/17 122/22 123/12 124/3 124/21 124/23 125/2 125/22 137/14 155/14 165/12 168/13 183/11	177/16 labs [1] 119/14 lack [5] 79/6 101/4 157/18 157/19 157/20 Lady [18] 1/9 39/9 39/18 39/21 40/6 65/12 66/2 85/1 123/20 125/20 126/3 126/24 128/2 128/18 175/4 187/24 190/16 192/9 lag [1] 185/18 language [2] 35/16 104/11 large [4] 4/2 4/19 4/25 189/2 largely [1] 4/25 larger [1] 170/24 last [5] 104/4 119/25 133/15 154/19 168/25 later [16] 17/16 34/9 48/2 48/10 73/21 74/12 86/21 93/5 98/4 101/17 118/9 118/13 141/13 170/12 173/13 186/24 lead [10] 3/11 23/6 29/11 162/2 165/14 172/1 175/6 177/25 179/13 180/22 leader [1] 45/24 leadership [2] 116/18 179/19 lean [1] 71/3 learn [1] 5/9 learned [2] 138/11 186/18 learning [6] 55/16 134/16 149/12 152/19 160/20 190/9 learnt [3] 39/4 155/8 174/15 least [6] 25/7 49/16 94/3 99/23 100/1 102/13 leave [4] 1/8 71/6 95/5 126/11 leaving [2] 29/5 71/15 led [5] 132/11 143/20 158/4 158/12 180/8 left [7] 6/24 72/2 80/25 99/10 138/12 138/20 147/5 left-hand [1] 6/24 legitimately [2] 95/8 96/6 Lesley [1] 180/25 Lesley Tomes [1] 180/25 less [7] 22/22 24/16 93/23 106/10 126/17 137/1 189/1 lessons [2] 39/4	155/7 Let [1] 95/6 let's [15] 3/23 10/9 18/5 18/19 21/10 22/2 23/20 75/11 80/16 88/15 89/24 90/23 92/19 93/12 98/18 Letby [67] 42/7 43/22 44/9 44/16 44/18 47/1 47/6 47/15 47/20 47/23 48/3 48/8 50/5 50/8 50/19 51/23 52/24 53/2 53/9 53/19 54/4 55/19 55/20 56/8 57/9 57/21 58/6 59/11 59/24 60/11 60/24 61/14 61/17 62/9 62/12 62/16 63/12 63/15 64/3 64/20 127/23 131/3 136/3 136/7 136/9 136/22 137/17 137/20 141/12 143/22 143/23 146/4 147/23 149/16 153/2 153/7 153/9 156/14 161/19 161/20 168/25 169/2 169/5 175/1 181/6 181/16 189/8 Letby's [4] 56/13 56/15 56/18 57/17 level [39] 4/12 5/6 5/6 8/13 11/1 11/2 13/5 17/24 23/3 23/3 23/4 25/16 28/21 31/16 31/19 31/21 34/3 79/3 79/3 79/19 87/12 89/22 90/9 93/15 93/16 94/20 94/25 97/8 106/16 107/15 109/1 120/19 133/22 141/4 150/16 154/10 154/15 154/19 189/17 Level 2 [1] 154/15 levels [6] 78/16 86/13 86/13 142/4 161/24 172/25 Lewe [1] 22/4 Lewis [6] 22/9 70/16 71/6 73/11 118/4 120/9 liaison [1] 26/12 Lidden [1] 128/25 life [5] 6/2 6/3 11/9 11/10 34/25 light [5] 43/15 43/17 44/23 45/1 48/15 like [45] 3/18 4/19 9/18 14/20 17/1 17/6 26/1 30/17 33/6 35/21 37/13 37/16 40/7 61/9 65/6 67/22 68/23 69/7 73/4 81/17 86/20 87/8 89/18 90/18 91/19 94/17 98/11 102/1	105/19 106/16 107/5 115/6 124/20 125/10 132/7 132/16 134/2 134/22 136/25 137/3 143/12 152/7 153/19 163/23 179/11 likelihood [2] 95/25 123/3 likely [17] 6/10 11/22 12/7 12/13 12/16 13/7 14/2 26/5 58/8 94/3 96/3 96/14 104/12 127/16 135/25 140/21 177/10 limit [1] 31/18 limitations [1] 117/7 limited [5] 97/22 113/4 135/7 154/4 189/21 limits [1] 79/12 line [5] 31/23 45/20 90/19 99/12 142/22 lines [5] 49/4 88/22 91/25 92/3 108/22 link [1] 150/6 linked [1] 147/5 links [1] 147/2 lips [1] 173/25 list [5] 69/18 106/8 128/9 128/11 128/14 lists [1] 68/24 litre [4] 8/11 8/19 9/1 31/17 little [14] 10/21 21/15 25/23 60/8 74/5 74/17 77/24 78/13 81/4 100/20 114/9 114/25 122/24 151/21 live [2] 66/2 186/9 lived [1] 146/1 Liverpool [44] 2/18 2/20 2/22 2/23 3/25 4/3 4/10 4/13 5/1 5/2 5/7 7/6 7/14 7/19 9/4 9/13 21/25 51/9 75/13 75/21 75/24 76/16 77/17 84/18 84/23 86/4 87/22 88/3 88/16 89/17 90/12 90/19 92/4 92/7 92/10 92/22 110/8 121/18 122/1 129/17 146/2 154/10 170/24 179/2 local [5] 6/15 38/22 38/25 146/19 159/16 locally [2] 105/4 185/16 locum [2] 127/12 169/7 locums [1] 127/8 log [3] 114/18 121/4 121/6 logs [1] 113/24 long [9] 9/18 23/16
K	knowing [5] 58/22 63/14 87/11 106/1 106/2 knowledge [14] 1/24 28/9 28/23 40/21 60/15 66/20 72/23 102/18 105/17 128/4 140/8 150/16 168/4 189/18 knowledgeable [2] 16/2 16/3 known [17] 44/15 44/25 45/5 46/24 47/5 58/5 60/10 60/13 61/21 122/19 152/14 154/7 158/11 162/15 166/11 176/1 189/10	lab [25] 12/12 13/6 14/25 19/13 22/12 22/16 24/7 27/2 32/12 32/18 35/22 37/22 38/12 38/23 70/7 70/16 75/17 75/19 75/20 75/21 77/5 88/8 97/20 110/8 120/20 lab-based [1] 32/18 laboratories [6] 2/20 2/22 3/25 4/24 77/2 77/10 laboratory [38] 6/9 6/16 7/7 7/14 9/13 15/12 18/15 20/24 21/2 22/13 23/20 25/15 27/6 30/10 31/5 35/20 37/25 37/25 38/21 67/10 70/11 76/8 76/11 77/11 81/21 82/3 82/15 83/3 83/11 109/19 113/4 113/23 118/2 118/11 119/9 121/15 122/25 124/25 laboratory's [2] 83/12 118/18 labour [2] 176/2	La [10] 1/8 1/13 1/15 39/12 66/1 66/11 123/21 126/6 192/4 192/8 lab [25] 12/12 13/6 14/25 19/13 22/12 22/16 24/7 27/2 32/12 32/18 35/22 37/22 38/12 38/23 70/7 70/16 75/17 75/19 75/20 75/21 77/5 88/8 97/20 110/8 120/20 lab-based [1] 32/18 laboratories [6] 2/20 2/22 3/25 4/24 77/2 77/10 laboratory [38] 6/9 6/16 7/7 7/14 9/13 15/12 18/15 20/24 21/2 22/13 23/20 25/15 27/6 30/10 31/5 35/20 37/25 37/25 38/21 67/10 70/11 76/8 76/11 77/11 81/21 82/3 82/15 83/3 83/11 109/19 113/4 113/23 118/2 118/11 119/9 121/15 122/25 124/25 laboratory's [2] 83/12 118/18 labour [2] 176/2	
Karen [4] 50/19 53/6 53/13 61/18 Karen Rees [2] 50/19 61/18 Katherine [2] 128/22 156/18 KATHRYN [4] 40/9 40/16 45/22 192/5 Katie [1] 45/23 keen [1] 183/10 keep [7] 52/3 52/10 52/10 79/11 113/21 113/25 118/13 Kelly [1] 61/18 Kenny [11] 185/1 185/6 185/9 185/19 185/24 185/25 186/4 186/24 187/2 187/10 187/18 kept [4] 30/15 35/18 118/18 133/4 key [1] 115/13 kill [3] 14/16 37/18 105/5 killed [4] 58/7 59/11 60/11 62/10 killing [1] 63/15 kind [4] 26/5 51/3 59/6 95/14 knew [12] 13/24 20/17 20/18 45/7 59/10 62/8 94/8 103/22 117/23 117/24 117/25 159/14 knocked [1] 10/1 know [69] 5/12 9/11 10/14 19/7 20/4 24/24 29/24 36/15 37/17 37/21 38/2 50/11 61/24 63/20 65/1 69/10 70/16 72/1 74/1 74/5 74/17 74/22 78/16 78/20 91/13 92/4 92/12 94/8 96/20 97/1 97/18 102/12	L La [10] 1/8 1/13 1/15 39/12 66/1 66/11 123/21 126/6 192/4 192/8 lab [25] 12/12 13/6 14/25 19/13 22/12 22/16 24/7 27/2 32/12 32/18 35/22 37/22 38/12 38/23 70/7 70/16 75/17 75/19 75/20 75/21 77/5 88/8 97/20 110/8 120/20 lab-based [1] 32/18 laboratories [6] 2/20 2/22 3/25 4/24 77/2 77/10 laboratory [38] 6/9 6/16 7/7 7/14 9/13 15/12 18/15 20/24 21/2 22/13 23/20 25/15 27/6 30/10 31/5 35/20 37/25 37/25 38/21 67/10 70/11 76/8 76/11 77/11 81/21 82/3 82/15 83/3 83/11 109/19 113/4 113/23 118/2 118/11 119/9 121/15 122/25 124/25 laboratory's [2] 83/12 118/18 labour [2] 176/2	level [39] 4/12 5/6 5/6 8/13 11/1 11/2 13/5 17/24 23/3 23/3 23/4 25/16 28/21 31/16 31/19 31/21 34/3 79/3 79/3 79/19 87/12 89/22 90/9 93/15 93/16 94/20 94/25 97/8 106/16 107/15 109/1 120/19 133/22 141/4 150/16 154/10 154/15 154/19 189/17 Level 2 [1] 154/15 levels [6] 78/16 86/13 86/13 142/4 161/24 172/25 Lewe [1] 22/4 Lewis [6] 22/9 70/16 71/6 73/11 118/4 120/9 liaison [1] 26/12 Lidden [1] 128/25 life [5] 6/2 6/3 11/9 11/10 34/25 light [5] 43/15 43/17 44/23 45/1 48/15 like [45] 3/18 4/19 9/18 14/20 17/1 17/6 26/1 30/17 33/6 35/21 37/13 37/16 40/7 61/9 65/6 67/22 68/23 69/7 73/4 81/17 86/20 87/8 89/18 90/18 91/19 94/17 98/11 102/1		

L	51/23 53/2 54/4 56/8 57/6 57/21 60/15 61/17 62/16 135/10 161/19 161/20 169/5	management [15] 19/11 20/22 41/22 61/22 69/9 77/8 142/11 146/12 155/14 157/25 167/24 172/2 183/7 183/19 183/22	112/4 112/15 113/8 114/8 140/9 145/25 155/17 157/13 157/15 168/13 171/22 184/1 maybe [6] 38/9 53/15 62/3 63/19 122/2 162/5	26/5 66/24 73/3 97/21 129/2 129/22 130/19 132/1 135/23 138/4 142/19 146/18 150/7 152/22 156/1 165/25 172/3 172/6 176/13 179/19 182/15 182/17 183/7 183/20 184/12 184/15 186/17
long... [7] 91/18 113/25 126/13 142/21 158/8 169/19 171/8	Lucy Letby [20] 43/22 44/9 44/16 44/18 47/1 47/6 47/23 48/8 50/5 50/19 51/23 53/2 54/4 56/8 57/21 61/17 62/16 161/19 161/20 169/5	manager [7] 41/8 44/19 45/20 54/9 56/5 148/14 176/21	MBRRACE [1] 185/14	medication [12] 13/13 94/4 95/14 96/14 97/11 98/15 103/3 103/6 103/17 104/1 107/9 158/1
longer [8] 9/21 11/10 11/11 34/24 35/3 109/21 137/14 171/12	lunch [1] 65/21 luncheon [1] 65/24 lung [1] 177/10 luxury [1] 38/2	managers [3] 60/18 68/9 184/23	McCormack [3] 177/24 178/8 179/22	medications [1] 150/6
look [37] 6/23 8/20 9/2 10/9 14/24 17/11 21/10 21/11 22/3 23/18 25/20 29/12 34/16 37/14 38/21 51/6 58/21 69/6 70/2 79/9 80/16 80/18 86/15 87/8 89/24 92/25 93/12 94/11 94/12 98/18 98/20 104/17 106/17 107/22 107/22 108/8 110/11	Lyddon [13] 128/22 129/7 129/11 129/15 129/23 130/4 130/7 130/12 130/16 131/14 131/23 132/7 134/2	mandate [1] 37/10 mandatory [2] 148/8 187/15	me [48] 31/15 34/3 45/10 52/2 52/5 54/5 54/20 56/8 56/9 57/6 63/23 64/10 68/15 74/11 88/10 91/2 91/8 91/10 91/14 95/6 99/5 100/25 101/12 102/25 115/15 118/22 119/6 119/7 122/16 126/5 133/14 136/4 140/21 146/1 153/4 153/5 153/6 154/6 156/16 157/5 161/21 168/18 170/21 173/12 176/23 178/23 186/7 186/20	medicine [5] 30/10 38/1 67/11 122/25 160/13
looked [11] 7/22 24/10 30/1 33/16 81/23 84/12 98/6 104/16 137/12 180/13 186/21	Lyddon's [2] 129/16 131/2	manner [1] 42/3 manually [1] 90/24 many [21] 39/5 52/7 57/9 59/4 64/1 88/9 91/17 93/23 93/23 119/21 119/21 120/1 120/1 133/25 141/25 144/18 152/7 169/5 188/7 189/9 190/5	mean [66] 7/18 14/4 16/23 17/6 17/14 18/6 25/18 26/7 26/7 29/5 33/3 35/17 36/5 36/8 39/3 54/16 65/2 68/6 71/20 71/24 72/9 73/24 74/1 76/2 76/5 76/7 78/7 82/23 87/4 87/17 88/4 89/2 89/14 91/2 94/6 95/22 96/4 96/16 97/1 97/14 101/9 103/8 104/22 105/2 105/3 105/14 106/6 106/18 107/24 108/6 108/7 109/15 109/17 112/24 116/12 116/24 117/24 120/25 122/15 122/17 123/1 123/6 124/5 124/23 125/13 164/20	medicines [1] 150/6
looking [31] 9/12 18/7 18/17 20/9 22/15 25/14 25/25 30/6 38/15 44/10 47/24 69/2 75/4 75/5 78/6 79/23 80/12 80/20 87/11 90/6 90/21 94/6 98/20 100/4 101/11 104/8 105/22 106/23 109/14 123/12 124/2	M	March [13] 138/23 141/17 141/18 152/3 155/23 156/21 160/15 165/21 165/22 167/8 169/23 174/10 178/20	meetings [13] 48/11 53/20 57/6 57/10 57/14 61/17 61/17 61/19 149/11 185/5 185/8 185/13 190/9	medications [1] 150/6
looks [3] 86/20 90/18 94/17	M's [1] 173/14	March 2015 [4] 138/23 141/17 152/3 156/21	meeting [10] 55/19 57/20 57/24 58/2 142/15 149/8 153/19 181/10 181/19 185/21	Meditech [2] 116/25 119/22
loop [1] 27/5	machines [1] 73/9	Margaret [1] 1/18	meetings [13] 48/11 53/20 57/6 57/10 57/14 61/17 61/17 61/19 149/11 185/5 185/8 185/13 190/9	member [34] 50/18 50/23 51/4 51/17 51/21 53/8 53/14 54/10 54/13 54/18 55/1 55/7 58/19 59/5 67/3 67/10 130/19 131/15 131/20 133/7 134/19 140/5 144/5 146/7 148/12 155/1 162/11 165/11 171/22 176/20 181/8 181/12 183/5 186/13
loss [1] 59/18	MacRae [1] 184/16	marginalised [1] 184/21	members [16] 41/18 42/2 52/25 53/3 57/12 58/8 58/25 64/17 148/3 148/9 155/12 173/6 176/14 177/13 187/12 187/16	members [16] 41/18 42/2 52/25 53/3 57/12 58/8 58/25 64/17 148/3 148/9 155/12 173/6 176/14 177/13 187/12 187/16
lot [15] 13/11 29/2 74/22 76/5 78/9 80/6 98/11 106/17 113/7 114/11 116/24 117/7 123/14 147/15 158/17	made [26] 6/4 6/21 13/11 20/21 34/22 47/22 48/3 55/1 64/11 64/14 81/12 81/13 85/10 87/23 91/2 91/20 92/12 97/10 99/5 101/16 119/5 122/11 122/12 122/12 125/23 189/7	marked [1] 82/18	membership [2] 2/10 183/11	memory [10] 30/13 104/15 106/25 107/2 107/20 129/8 129/21 138/16 164/23 169/19
looks [3] 86/20 90/18 94/17	main [4] 69/1 69/4 78/15 79/11	markers [1] 69/7	mentality [3] 179/17 179/24 180/3	mentality [3] 179/17 179/24 180/3
loop [1] 27/5	mainly [1] 142/2	match [1] 90/10	maths [1] 32/5	maths [1] 32/5
loss [1] 59/18	maintain [2] 52/4 54/15	maternity [3] 179/17 179/24 180/3	Matt [1] 163/20	Matt [1] 163/20
lot [15] 13/11 29/2 74/22 76/5 78/9 80/6 98/11 106/17 113/7 114/11 116/24 117/7 123/14 147/15 158/17	maintained [1] 187/7	matter [2] 82/16 83/20	Matt Neame [1] 163/20	Matt Neame [1] 163/20
lots [1] 129/20	make [29] 26/21 27/4 27/24 29/8 29/12 29/13 33/6 36/3 36/15 37/2 47/13 47/18 52/8 69/19 77/4 90/2 91/20 97/11 103/11 103/23 103/23 103/24 103/24 113/20 121/23 122/5 124/12 147/2 156/16	matters [8] 51/12 51/16 53/13 53/15 53/15 118/17 128/4 186/20	means [7] 4/18 5/21 34/22 35/15 49/7 101/4 121/7	means [7] 4/18 5/21 34/22 35/15 49/7 101/4 121/7
lovely [1] 166/12	makes [4] 26/4 100/25 125/10 187/10	Matthew [1] 163/21	meant [5] 106/22 116/6 124/7 142/3 188/25	meant [5] 106/22 116/6 124/7 142/3 188/25
low [29] 5/22 5/24 10/16 12/8 12/14 13/2 16/9 23/9 23/14 24/16 24/21 26/17 31/19 31/23 78/2 78/7 78/8 78/17 79/24 83/6 86/7 86/9 87/16 111/10 130/15 142/19 143/1 172/25 179/6	making [10] 20/13 24/20 39/14 41/25 71/13 75/2 92/10 133/15 172/17 186/3	may [45] 1/20 9/18 14/7 17/4 21/14 27/17 28/5 34/17 34/18 34/19 39/20 40/18 47/7 50/13 56/16 66/16 66/23 74/7 78/10 78/11 78/23 87/17 88/20 96/20 96/21 99/18 101/9 101/20 108/3 108/3 109/2 109/2 111/23	measured [2] 21/4 28/2	measured [2] 21/4 28/2
lower [4] 24/3 31/25 81/4 81/6	malicious [1] 150/3	may [45] 1/20 9/18 14/7 17/4 21/14 27/17 28/5 34/17 34/18 34/19 39/20 40/18 47/7 50/13 56/16 66/16 66/23 74/7 78/10 78/11 78/23 87/17 88/20 96/20 96/21 99/18 101/9 101/20 108/3 108/3 109/2 109/2 111/23	measures [1] 19/17	measures [1] 19/17
lowest [3] 8/9 28/18 86/19	manage [5] 55/7 71/11 78/13 80/7 100/9	managed [5] 41/22 72/14 78/12 119/22 151/12	measuring [1] 8/9	measuring [1] 8/9
lowness [1] 24/18	management [15] 19/11 20/22 41/22 61/22 69/9 77/8 142/11 146/12 155/14 157/25 167/24 172/2 183/7 183/19 183/22	managed [5] 41/22 72/14 78/12 119/22 151/12	mechanism [2] 5/15 30/14	mechanism [2] 5/15 30/14
Lucy [25] 43/13 43/22 44/9 44/16 44/18 45/8 47/1 47/6 47/23 48/8 50/5 50/19	managing [2] 46/17 57/24	managed [5] 41/22 72/14 78/12 119/22 151/12	mechanisms [1] 32/16	mechanisms [1] 32/16
	mandate [1] 37/10	managed [5] 41/22 72/14 78/12 119/22 151/12	media [1] 137/18	media [1] 137/18
	mandatory [2] 148/8 187/15	managed [5] 41/22 72/14 78/12 119/22 151/12	mediation [1] 62/15	mediation [1] 62/15
	manner [1] 42/3	managed [5] 41/22 72/14 78/12 119/22 151/12	medical [32] 3/2 13/20 14/7 14/14 24/2	medical [32] 3/2 13/20 14/7 14/14 24/2
	manually [1] 90/24	managed [5] 41/22 72/14 78/12 119/22 151/12		
	many [21] 39/5 52/7 57/9 59/4 64/1 88/9 91/17 93/23 93/23 119/21 119/21 120/1 120/1 133/25 141/25 144/18 152/7 169/5 188/7 189/9 190/5	managed [5] 41/22 72/14 78/12 119/22 151/12		
	mapped [1] 186/11	managed [5] 41/22 72/14 78/12 119/22 151/12		
	March [13] 138/23 141/17 141/18 152/3 155/23 156/21 160/15 165/21 165/22 167/8 169/23 174/10 178/20	managed [5] 41/22 72/14 78/12 119/22 151/12		
	March 2015 [4] 138/23 141/17 152/3 156/21	managed [5] 41/22 72/14 78/12 119/22 151/12		
	Margaret [1] 1/18	managed [5] 41/22 72/14 78/12 119/22 151/12		
	marginalised [1] 184/21	managed [5] 41/22 72/14 78/12 119/22 151/12		
	marked [1] 82/18	managed [5] 41/22 72/14 78/12 119/22 151/12		
	markers [1] 69/7	managed [5] 41/22 72/14 78/12 119/22 151/12		
	match [1] 90/10	managed [5] 41/22 72/14 78/12 119/22 151/12		
	maternity [3] 179/17 179/24 180/3	managed [5] 41/22 72/14 78/12 119/22 151/12		
	maths [1] 32/5	managed [5] 41/22 72/14 78/12 119/22 151/12		
	Matt [1] 163/20	managed [5] 41/22 72/14 78/12 119/22 151/12		
	Matt Neame [1] 163/20	managed [5] 41/22 72/14 78/12 119/22 151/12		
	matter [2] 82/16 83/20	managed [5] 41/22 72/14 78/12 119/22 151/12		
	matters [8] 51/12 51/16 53/13 53/15 53/15 118/17 128/4 186/20	managed [5] 41/22 72/14 78/12 119/22 151/12		
	Matthew [1] 163/21	managed [5] 41/22 72/14 78/12 119/22 151/12		
	may [45] 1/20 9/18 14/7 17/4 21/14 27/17 28/5 34/17 34/18 34/19 39/20 40/18 47/7 50/13 56/16 66/16 66/23 74/7 78/10 78/11 78/23 87/17 88/20 96/20 96/21 99/18 101/9 101/20 108/3 108/3 109/2 109/2 111/23	managed [5] 41/22 72/14 78/12 119/22 151/12		
	measured [2] 21/4 28/2	managed [5] 41/22 72/14 78/12 119/22 151/12		
	measures [1] 19/17	managed [5] 41/22 72/14 78/12 119/22 151/12		
	measuring [1] 8/9	managed [5] 41/22 72/14 78/12 119/22 151/12		
	mechanism [2] 5/15 30/14	managed [5] 41/22 72/14 78/12 119/22 151/12		
	mechanisms [1] 32/16	managed [5] 41/22 72/14 78/12 119/22 151/12		
	media [1] 137/18	managed [5] 41/22 72/14 78/12 119/22 151/12		
	mediation [1] 62/15	managed [5] 41/22 72/14 78/12 119/22 151/12		
	medical [32] 3/2 13/20 14/7 14/14 24/2	managed [5] 41/22 72/14 78/12 119/22 151/12		

M	minutes [4] 22/12 60/3 99/8 126/21	174/22 177/24 179/6 185/10 185/11 185/20 187/14 189/7 190/2	42/21 44/10 45/20 48/10 52/7 52/22 53/16 54/6 54/20 54/20 55/15 56/10 57/11 58/18 61/5 62/3 62/12 65/12 65/12 66/2 71/7 72/6 77/16 77/18 82/5 85/1 85/2 85/7 88/13 91/23 96/1 97/17 99/6 99/18 102/15 104/4 104/19 106/8 107/24 113/15 113/16 113/23 114/18 115/10 118/1 118/4 118/9 119/13 123/18 125/14 125/20 126/3 126/12 126/24 128/2 128/18 130/25 132/2 135/5 135/7 136/10 137/5 138/12 138/16 139/25 140/1 140/9 140/11 141/4 141/10 146/9 146/10 148/7 148/8 148/19 150/15 150/23 156/11 156/17 157/3 157/21 158/19 159/6 161/2 161/7 161/11 161/17 162/16 163/23 164/6 164/10 166/6 167/15 169/19 170/9 170/21 175/4 187/24 190/16	necessarily [4] 98/15 112/21 115/3 117/1 necessary [2] 112/12 178/6 need [29] 4/16 10/21 13/25 18/1 18/14 20/24 21/15 26/21 28/19 34/15 34/19 39/1 53/25 73/11 77/9 80/6 83/5 83/6 96/19 96/22 97/11 97/18 107/22 109/5 110/11 113/18 122/4 122/11 178/10 needed [17] 13/20 15/6 27/23 47/19 54/5 74/14 76/3 76/25 92/25 101/8 113/1 113/20 121/19 143/18 153/9 176/20 183/10 needs [8] 12/13 17/9 17/12 77/7 107/10 109/14 116/21 172/6 negative [2] 132/17 152/7 neighbouring [1] 127/16 Neither [2] 52/16 133/11 neonatal [101] 45/8 46/2 46/8 46/13 46/19 46/25 46/25 47/2 47/14 47/19 48/4 48/14 49/13 52/25 53/4 57/13 58/7 59/12 60/12 62/10 62/18 63/16 72/21 73/1 94/10 102/10 102/19 117/22 127/4 127/14 127/17 127/24 128/24 129/4 129/6 129/12 134/7 134/14 135/11 142/8 142/16 143/10 145/3 146/11 147/7 148/2 149/8 151/6 151/22 151/24 151/25 152/4 152/6 154/15 154/19 155/6 155/9 156/24 164/6 167/20 169/14 170/9 170/14 170/16 170/25 171/10 175/5 175/19 176/9 176/21 177/3 177/6 178/3 178/13 178/17 178/19 178/21 179/16 179/24 180/3 180/12 180/13 180/16 180/17 180/21 181/7 181/15 181/16 181/25 182/10 182/21 185/4 185/8 186/8 187/20 187/21 188/5 188/20 189/2 189/4 189/13 neonate [2] 156/10
merited [2] 111/21 111/23	misconduct [1] 64/18	mortem [3] 139/12 139/15 177/9	my God [1] 163/23	
Mersey [2] 160/18 165/16	misidentified [1] 13/19	most [23] 18/16 29/4 29/7 53/18 73/2 73/4 95/18 96/3 96/7 97/23 100/1 113/23 127/5 127/6 132/10 136/14 141/20 157/1 161/3 167/16 171/13 185/7 190/8	my Lady [16] 1/9 39/9 39/18 39/21 40/6 65/12 66/2 85/1 125/20 126/3 126/24 128/2 128/18 175/4 187/24 190/16	
Mersey Paediatric Deanery [1] 165/16	misleading [1] 23/1	mother [3] 56/10 175/20 177/17	myself [7] 16/7 61/19 62/5 73/11 91/5 91/21 120/8	
Merseyside [4] 36/23 37/1 77/20 185/3	misremembering [1] 119/13	motivated [1] 183/22	N	
message [6] 26/9 26/11 50/7 52/14 64/20 186/18	missed [1] 153/25	mottled [1] 173/25	name [7] 1/17 40/15 66/13 83/23 88/22 92/1 104/23	
messages [7] 50/4 50/12 50/16 51/6 52/7 52/9 52/13	missing [3] 24/18 89/20 159/10	move [2] 8/1 184/6	named [9] 127/21 132/13 143/19 150/10 151/14 151/16 151/21 151/25 171/19	
messaging [2] 50/8 51/2	mistake [1] 82/5	moved [4] 47/9 129/17 169/1 169/2	narrated [1] 26/11	
met [4] 43/21 43/22 44/5 48/7	mistaking [1] 42/25	moving [1] 129/15	natal [1] 177/17	
metabolism [1] 11/14	Mm [1] 38/17	Mr [14] 1/8 1/13 1/15 39/12 40/5 40/12 65/14 66/1 66/11 123/21 126/6 192/4 192/6 192/8	nationally [1] 185/17	
meters [2] 82/25 83/4	Mm-hm [1] 38/17	Mr De La Poer [10] 1/8 1/13 1/15 39/12 66/1 66/11 123/21 126/6 192/4 192/8	natural [2] 14/11 167/3	
middle [3] 57/5 61/8 159/11	moderate [1] 139/9	Ms [11] 40/23 42/5 42/13 57/1 65/13 65/15 126/4 126/9 126/22 160/11 191/1	naturally [3] 12/2 20/10 93/19	
midnight [1] 86/19	modules [1] 146/6	Ms Brown [5] 126/4 126/9 126/22 160/11 191/1	nature [3] 19/22 27/22 182/22	
midwifery [4] 178/1 179/7 180/23 181/1	molecule [2] 11/4 20/9	Ms De-Beger [6] 40/23 42/5 42/13 57/1 65/13 65/15	Neame [2] 163/20 163/21	
midwives [6] 138/1 139/1 145/1 156/2 165/25 181/1	moment [8] 52/11 88/14 89/4 89/12 92/18 94/13 120/13 159/25	much [34] 10/24 13/8 13/13 14/6 17/19 21/18 24/5 27/10 34/18 39/8 39/11 39/13 39/14 39/15 39/17 59/17 64/1 65/16 66/8 71/21 78/16 78/21 81/8 85/13 86/1 95/9 100/17 109/7 122/20 125/22 153/8 159/2 170/24 190/25	near [1] 87/2	
might [39] 14/9 14/10 19/8 29/5 48/12 54/14 63/5 64/19 64/22 65/7 66/3 69/23 70/16 70/17 70/17 78/14 78/21 79/19 81/25 86/22 87/6 87/6 91/11 93/1 96/22 97/14 98/16 98/17 100/4 101/13 101/14 103/5 108/10 109/7 110/5 110/17 124/25 125/1 164/11	Monday [4] 52/22 76/17 84/10 84/22	multiple [1] 165/5	nearly [1] 95/1	
midwifery [4] 178/1 179/7 180/23 181/1	monitor [1] 82/23	must [11] 22/8 62/3 62/12 64/6 85/9 85/12 121/15 151/17 151/19 166/18 171/18		
midwives [6] 138/1 139/1 145/1 156/2 165/25 181/1	monitored [1] 170/15	mutual [1] 135/14		
might [39] 14/9 14/10 19/8 29/5 48/12 54/14 63/5 64/19 64/22 65/7 66/3 69/23 70/16 70/17 70/17 78/14 78/21 79/19 81/25 86/22 87/6 87/6 91/11 93/1 96/22 97/14 98/16 98/17 100/4 101/13 101/14 103/5 108/10 109/7 110/5 110/17 124/25 125/1 164/11	monitoring [1] 171/25	my [108] 1/9 21/14 22/8 33/14 39/9 39/9 39/18 39/21 40/6		
Milan [14] 1/11 1/12 1/14 1/18 1/19 21/1 24/7 35/11 39/8 39/10 39/13 75/12 93/13 192/3	month [7] 119/25 134/3 159/6 161/17 182/11 182/11 188/24			
miles [1] 38/22	monthly [1] 182/5			
mill [1] 107/18	months [6] 50/14 127/11 129/16 166/24 169/1 171/12			
milli [1] 8/17	morbidity [2] 151/19 153/19			
milli-international [1] 8/17	more [47] 3/14 10/22 11/25 18/13 29/5 42/16 47/11 54/24 59/17 59/21 64/16 65/15 69/6 69/7 72/20 74/5 74/17 74/20 74/21 77/9 78/13 83/3 96/19 97/3 100/18 104/9 108/1 108/1 112/13 113/7 113/21 120/6 120/7 121/3 122/20 129/9 142/4 153/13 154/14 157/19 158/17 158/22 159/2 166/7 168/10 170/14 177/17			
million [1] 38/22	morning [14] 1/5 35/24 39/14 40/6 40/13 40/14 73/20 75/12 86/19 140/14 142/13 163/22 173/10 191/2			
mind [12] 14/3 14/9 38/15 47/13 47/18 80/10 80/18 93/1 93/3 96/1 101/4 164/10	mortality [13] 149/8 151/19 153/19 167/4			
mindfulness [1] 52/9				
minds [2] 12/12 32/20				
minority [1] 188/10				
minute [2] 99/5 99/23				

N	39/7 39/10 39/22 43/19 44/24 45/4 45/7 45/24 46/4 47/8 47/11 47/12 49/12 49/23 51/5 51/19 55/14 56/21 56/22 57/16 59/9 59/15 59/19 62/14 63/19 65/15 67/1 76/23 83/13 87/1 87/3 89/4 91/20 100/24 101/9 102/18 103/23 105/17 106/14 106/25 106/25 107/4 109/21 110/2 110/4 110/7 110/22 111/5 111/18 112/21 115/24 117/23 118/8 119/15 121/6 121/20 124/11 124/17 125/20 130/2 131/2 135/19 138/7 142/23 147/12 147/21 148/9 150/3 150/6 151/9 157/14 161/8 161/17 173/21 176/1 177/6 177/15 181/3 nobody [5] 20/7 55/13 73/20 101/5 161/20 Nods [8] 10/20 23/17 30/4 43/1 53/21 58/4 64/5 94/24 non [6] 42/4 47/9 58/20 87/17 92/23 157/4 non-clinical [1] 157/4 non-hormonal [1] 87/17 non-judgmental [2] 42/4 58/20 none [3] 44/24 143/19 189/7 nor [2] 130/17 131/16 normal [11] 11/12 23/16 51/2 51/19 59/8 62/5 86/7 86/14 87/8 91/15 154/12 normally [6] 52/11 74/5 74/16 75/6 91/4 91/5 not [213] notable [1] 189/17 notably [3] 144/22 155/20 170/3 note [12] 32/8 85/3 89/25 101/16 109/24 110/20 110/22 114/17 121/14 125/6 154/16 173/11 noted [5] 110/17 149/22 156/25 173/24 186/7 notes [58] 21/25 23/19 24/2 24/8 25/8 26/10 30/12 37/5	44/10 49/1 97/23 97/24 97/25 98/1 98/2 98/6 98/14 101/24 107/6 111/9 113/10 113/13 114/20 115/17 116/1 124/12 125/2 125/5 125/9 125/11 125/12 125/14 129/3 130/12 133/13 135/3 137/13 137/15 138/2 138/9 138/24 142/18 142/21 143/7 146/4 147/25 149/12 154/9 154/24 168/20 177/20 181/22 182/2 185/6 185/10 185/14 185/25 187/3 nothing [9] 23/1 63/24 64/8 64/10 64/13 99/2 144/4 168/2 176/25 noticeable [1] 132/10 notified [1] 172/2 noting [12] 133/21 144/3 146/25 147/5 147/14 148/21 166/9 168/6 173/15 188/8 189/1 190/4 notorious [1] 37/21 November [4] 149/9 178/15 180/10 180/15 now [92] 3/5 3/18 9/2 10/1 10/10 10/21 12/19 14/24 15/5 16/21 18/2 18/5 18/23 20/1 21/14 23/18 25/4 30/9 30/11 31/15 32/8 35/11 35/14 35/19 36/1 36/21 36/23 39/2 39/21 39/23 42/9 42/15 42/24 48/5 50/11 50/21 51/1 56/8 58/15 58/17 63/14 65/21 81/7 82/16 88/16 89/24 90/1 90/23 91/13 94/8 97/20 102/1 105/2 105/22 116/13 118/24 119/14 119/23 120/7 120/16 120/16 121/7 124/2 125/6 125/11 126/1 126/7 128/19 131/24 132/18 138/21 140/8 141/14 144/20 147/9 149/6 152/2 155/6 157/22 160/6 160/12 169/11 170/21 171/6 174/11 175/4 181/23 181/24 182/3 190/5 190/14 191/1 nowhere [2] 116/1 149/19 number [34] 22/22 32/2 32/3 70/18 74/11	82/8 90/6 90/21 93/18 95/16 118/25 120/3 120/4 127/15 131/5 133/21 135/4 140/18 141/16 144/21 147/18 154/5 154/16 159/10 161/6 161/12 162/4 166/18 166/23 169/13 180/8 182/6 187/10 188/2 number 3 [1] 95/16 numbers [1] 34/16 nurse [19] 37/17 40/24 40/25 41/12 42/22 54/8 55/5 97/25 97/25 105/4 142/16 143/25 165/14 170/25 171/7 176/15 176/15 176/21 189/2 Nurse T [1] 143/25 nurses [18] 57/13 57/19 74/19 135/13 136/19 138/1 139/1 141/20 141/24 142/8 144/25 152/6 152/10 156/2 165/25 171/10 172/19 189/4 nursing [21] 41/4 98/6 129/2 129/9 129/22 130/1 138/5 142/10 145/4 146/11 148/20 163/4 166/19 172/6 175/12 176/14 179/19 184/2 188/13 188/17 188/20 nutrition [1] 131/12 nutshell [1] 68/19	97/2 105/22 123/13 123/14 123/24 157/14 173/18 obviously [42] 6/14 6/20 9/7 14/4 16/1 17/15 18/12 19/19 23/19 24/24 27/9 27/18 28/8 29/1 30/9 30/18 39/4 76/7 83/19 87/4 91/3 91/13 91/19 94/6 95/18 97/18 103/8 103/12 104/13 105/15 105/22 106/21 109/13 114/1 114/9 114/11 116/12 117/24 121/2 122/14 123/6 123/10 occasion [3] 124/15 124/16 136/3 occasional [1] 179/8 occasionally [2] 70/14 124/22 occasions [1] 74/13 occupational [16] 40/25 41/3 41/6 41/8 41/12 41/13 41/23 43/13 46/5 50/1 53/20 54/8 54/9 55/5 56/2 64/17 occupied [1] 126/4 occur [3] 163/8 164/21 173/22 occurred [14] 17/18 27/25 118/22 118/25 129/6 134/13 136/5 138/19 140/2 140/8 140/22 145/25 180/2 186/14 occurring [2] 93/19 188/14 occurs [1] 155/7 October [8] 1/1 118/3 139/19 141/17 164/14 180/6 180/7 191/5 October 2015 [2] 180/6 180/7 October 2018 [1] 118/3 odd [1] 49/3 off [6] 36/25 73/8 84/5 84/18 122/1 169/2 offer [5] 4/10 4/23 5/2 25/21 58/11 offered [1] 157/5 offers [1] 20/7 offhand [1] 109/16 Office [1] 144/14 officer [3] 155/22 172/9 184/14 officer' [1] 184/10 offline [1] 35/19 offload [1] 65/1 offs [1] 105/12
----------	--	--	--	---

O
often [7] 69/17 73/2
 109/19 113/6 123/5
 155/7 158/21
Ogden [11] 138/21
 139/3 139/6 139/11
 139/14 139/18 139/23
 140/7 140/13 140/17
 141/8
oh [6] 71/1 81/5
 91/11 99/11 99/13
 163/25
okay [12] 23/24
 41/13 44/17 45/5
 45/11 48/13 52/8 62/1
 99/14 103/24 158/21
 159/17
old [4] 35/17 36/8
 36/13 117/8
old-fashioned [1]
 36/8
older [1] 10/1
omitted [1] 83/20
on [381]
on-call [2] 145/11
 157/11
once [10] 9/9 11/6
 24/1 28/1 28/9 37/10
 57/11 100/14 118/16
 169/2
one [71] 3/6 4/12
 5/14 8/16 8/18 11/7
 11/7 13/7 14/10 19/14
 28/18 31/6 31/25
 33/14 33/25 36/24
 38/1 38/5 38/6 38/7
 41/21 52/14 53/19
 53/19 55/18 57/3
 57/23 59/21 71/21
 74/21 74/21 75/9
 76/12 76/13 79/15
 84/12 91/6 92/9 93/14
 96/13 98/12 98/13
 103/1 105/12 110/1
 113/12 117/15 119/23
 122/2 122/15 123/7
 126/13 130/2 131/10
 136/18 137/11 144/8
 154/18 161/2 161/11
 167/16 169/10 171/13
 176/15 177/4 181/23
 185/7 185/14 186/10
 188/24 189/24
one but [1] 31/6
one-offs [1] 105/12
ones [7] 25/8 25/9
 84/5 88/12 97/21
 121/9 121/9
ongoing [1] 147/7
only [35] 12/6 12/7
 19/14 21/22 33/3
 36/14 45/7 51/23 53/2
 53/8 53/15 57/11

57/20 68/13 71/5
 72/10 77/13 85/10
 95/5 97/24 106/20
 106/20 118/10 121/1
 126/12 137/18 141/12
 143/23 154/14 154/18
 168/8 173/22 175/2
 187/24 190/4
onward [1] 58/12
open [3] 91/10 181/2
 187/20
operate [1] 14/25
operated [2] 115/19
 163/7
operation [1] 118/18
operational [1]
 179/19
ophthalmic [1]
 182/13
opinion [2] 140/3
 140/9
opinions [1] 151/23
opportunities [1]
 171/2
opportunity [2] 21/20
 35/14
opposed [6] 19/4
 28/20 28/24 102/5
 104/10 114/5
opposite [1] 79/6
option [1] 95/16
or [184] 4/17 5/3 5/12
 6/5 6/5 8/16 9/19
 10/25 12/7 13/2 13/16
 13/23 14/16 17/23
 18/10 19/7 20/10
 20/15 24/25 29/19
 30/2 32/3 32/5 32/18
 34/9 34/19 35/24 36/7
 37/7 39/21 41/25
 42/16 43/8 45/3 46/2
 48/8 48/9 56/24 58/16
 58/22 64/13 65/6 70/3
 70/12 70/24 71/21
 72/16 73/5 73/11
 73/16 73/17 73/21
 74/7 74/9 74/11 74/25
 75/1 75/15 76/11
 76/13 77/5 78/9 78/22
 79/24 82/22 83/11
 85/3 85/8 87/5 87/24
 91/9 92/15 93/9 93/9
 93/15 95/7 95/16
 95/21 96/5 98/7 98/8
 98/13 101/13 102/2
 102/6 102/6 102/13
 103/7 104/14 106/15
 108/4 108/8 108/10
 108/10 108/18 109/16
 109/23 112/10 112/15
 112/19 112/23 113/12
 117/11 118/5 118/14
 120/6 121/1 121/5
 121/9 122/12 124/25

126/18 127/2 127/2
 127/3 127/11 127/13
 127/17 128/13 130/1
 131/12 133/7 133/18
 134/2 134/20 135/8
 136/21 137/16 139/16
 140/3 140/18 144/14
 146/3 146/14 148/2
 148/9 148/12 148/13
 149/5 149/20 150/15
 150/21 150/22 151/10
 151/12 151/15 153/21
 156/12 156/13 158/2
 159/1 159/16 159/22
 161/7 161/14 161/18
 162/2 162/12 162/22
 164/11 165/16 167/4
 167/21 167/25 168/1
 170/5 171/11 171/19
 172/18 172/19 172/19
 173/11 176/13 176/20
 177/6 177/16 181/19
 182/12 186/18 188/25
 189/14 189/20 190/2
 190/5
oral [10] 104/7
 128/10 128/13 128/16
 128/18 128/20 174/1
 187/25 190/18 190/21
orally [1] 139/19
order [5] 1/7 39/24
 52/6 83/5 104/18
Ordered [1] 82/10
ordinarily [1] 13/1
ordinary [9] 6/2 6/3
 21/24 33/2 33/20
 35/16 39/19 107/15
 107/18
organisation [2]
 25/24 144/12
organisations [1]
 146/16
originally [1] 13/10
other [51] 4/1 9/3
 11/15 13/9 13/18
 19/24 20/9 21/10
 48/11 51/21 53/3
 53/14 55/12 57/12
 57/19 59/19 68/8
 70/18 71/18 74/14
 79/7 83/20 87/17
 89/24 95/13 107/9
 113/12 114/18 115/16
 122/10 125/17 129/14
 131/25 135/18 136/14
 140/23 144/2 148/5
 150/25 151/25 153/19
 154/15 156/6 159/14
 166/8 167/14 172/18
 173/6 176/14 177/13
 184/22
other's [1] 141/21
others [11] 71/12
 136/21 137/2 137/5

137/17 147/22 156/2
 161/19 166/1 168/25
 190/2
otherwise [2] 92/23
 93/4
ought [1] 94/22
our [30] 1/10 8/9 10/5
 15/17 27/3 29/21
 30/19 34/5 35/17 36/3
 36/10 37/12 39/18
 39/19 41/19 46/14
 61/17 66/2 69/18
 80/24 90/3 91/14
 119/23 150/25 175/16
 179/1 181/2 183/10
 183/11 184/24
ourselves [3] 4/24
 7/7 27/4
out [34] 30/19 38/8
 39/23 51/9 52/18 70/6
 89/11 90/2 96/19 97/3
 97/5 102/9 115/16
 121/10 122/15 126/8
 127/7 128/19 130/9
 134/6 135/18 139/5
 141/12 146/21 149/19
 151/3 153/6 154/6
 155/5 171/17 173/17
 181/20 186/4 186/11
outcome [4] 79/2
 138/14 148/4 186/23
outgrown [1] 35/18
outlying [2] 171/12
 188/25
outside [5] 23/16
 33/20 54/5 131/21
 143/25
outsource [1] 76/25
over [20] 7/9 11/24
 45/15 50/13 51/2
 51/10 51/13 106/19
 117/14 119/18 124/13
 149/4 149/23 156/15
 158/22 160/3 169/14
 171/12 184/13 186/7
overall [3] 116/3
 133/15 161/13
overdoses [1] 39/5
overlooked [2] 29/14
 82/16
overshot [1] 14/6
oversight [2] 181/24
 187/13
overview [7] 146/19
 150/21 151/1 168/9
 168/12 172/3 189/20
overwhelming [2]
 177/18 188/15
own [14] 25/22 31/21
 34/23 71/7 72/7 97/6
 102/4 105/13 114/18
 125/14 146/9 156/12
 170/9 179/19
oxygen [1] 161/24

P
P's [3] 170/18 172/16
 172/20
pack [1] 75/23
paediatric [46] 5/2
 72/20 127/7 128/24
 129/25 132/15 134/4
 134/7 136/24 137/22
 138/23 141/6 141/15
 142/5 144/22 144/23
 147/13 148/17 153/18
 155/21 156/20 157/5
 157/7 159/16 160/13
 160/14 160/18 162/19
 165/16 165/20 166/10
 166/25 167/19 169/11
 169/24 170/14 172/8
 172/22 173/7 174/9
 174/11 179/16 182/23
 183/11 185/1 189/6
paediatrician [7]
 147/9 150/9 150/17
 152/2 157/22 183/14
 184/4
paediatricians [7]
 122/16 177/21 183/4
 183/9 184/9 187/6
 190/5
paediatrics [6] 48/23
 129/5 129/15 142/1
 142/3 171/15
page [24] 21/14
 23/22 24/3 45/13
 45/13 45/14 45/15
 48/20 48/21 51/7
 51/10 51/10 51/13
 51/13 52/12 56/24
 57/5 59/23 61/6 61/7
 61/8 62/2 80/19 89/25
page 1 [1] 61/7
page 18 [1] 51/7
page 19 [1] 51/10
page 2 [1] 59/23
page 20 [1] 51/13
page 216 [1] 80/19
page 217 [1] 89/25
page 24 [2] 48/20
 52/12
page 29 [2] 45/13
 45/14
page 30 [1] 45/13
page 31 [1] 45/15
page 334 [1] 21/14
page 39 [1] 23/22
page 7 [1] 56/24
pages [1] 45/15
Panel [4] 146/19
 150/21 168/12 172/3
Panel representative
 [1] 168/12
panels [3] 168/10
 187/13 189/20
paper [5] 30/12 91/17

P	pathology [2] 36/20 67/14	perfect [1] 121/23	8/18 8/19 9/1 31/17	135/16 136/2 139/4
paper... [3] 97/23 98/2 113/24	pathway [1] 171/24	perfectly [1] 87/8	picture [6] 36/14	141/13 151/16 163/18
paper-based [2] 97/23 113/24	patient [48] 5/11 6/5 6/10 7/13 16/23 17/5 18/14 18/17 19/6 19/9 20/15 20/22 28/5 30/11 30/15 38/1 41/17 59/7 69/9 70/2 74/17 74/22 75/1 75/5 86/11 86/22 88/20 94/10 97/21 98/1 98/5 98/8 98/13 103/23 109/21 112/13 114/5 114/19 115/20 116/7 116/21 124/12 125/17 148/13 155/1 180/22 186/22 187/7	performed [1] 178/25	88/15 112/6 115/9 154/8 189/11	175/2 184/5 187/13
paragraph [1] 48/1	patients [19] 12/19 30/10 37/18 41/19 70/9 105/5 113/5 125/14 129/13 131/16 146/15 148/24 150/14 156/8 166/20 171/4 171/23 172/6 175/16	performing [3] 5/14 21/5 77/23	piece [5] 79/25 89/20 89/21 105/19 119/25	policies [6] 41/22 41/22 42/1 42/2 54/17 187/15
paragraph 10 [1] 48/1	patient's [4] 19/11 74/25 75/10 77/8	perhaps [12] 6/17 13/18 17/22 17/24 38/3 70/15 87/7 102/6 102/8 114/17 122/16 189/9	pieces [2] 91/17 92/5	poor [3] 163/21 163/23 163/23
paraphrasing [1] 30/1	patients [19] 12/19 30/10 37/18 41/19 70/9 105/5 113/5 125/14 129/13 131/16 146/15 148/24 150/14 156/8 166/20 171/4 171/23 172/6 175/16	perinatal [3] 151/19 181/24 182/9	pinpoint [1] 48/11	poorly [2] 156/16 183/22
parathyroid [1] 69/23	pattern [2] 145/13 162/7	period [23] 2/2 49/12 49/13 50/8 50/13 52/4 59/3 127/15 132/5 136/13 158/14 169/8 169/9 169/12 171/12 172/22 177/17 179/15 179/24 182/18 188/6 188/15 190/8	place [18] 4/19 38/11 39/7 45/25 60/18 64/19 112/3 113/19 115/20 116/17 125/7 127/4 142/1 147/14 166/12 175/22 178/9 181/21	popular [1] 147/14
pardon [1] 67/2	patterns [3] 165/6 171/11 188/25	periods [4] 113/25 127/12 141/17 144/21	placed [3] 70/24 166/13 188/23	populated [1] 9/8
parenteral [1] 131/12	pause [1] 25/4	permanent [2] 121/10 182/16	placement [8] 134/3 134/7 134/9 161/2 161/17 164/6 170/2 171/13	portions [1] 11/9
parents [5] 55/19 55/20 59/18 187/19 187/22	paused [2] 62/19 62/23	persistently [1] 156/16	placenta [1] 177/18	poses [1] 96/24
Park [1] 120/11	Peacock [1] 180/23	person [20] 23/7 23/13 24/8 24/20 26/3 26/21 27/1 28/12 28/22 28/23 29/7 42/25 53/2 53/15 70/11 71/21 73/16 88/17 89/7 101/7	plan [2] 62/18 142/21	position [7] 2/15 15/4 28/18 30/22 67/20 67/21 154/3
part [38] 2/23 5/7 18/10 25/19 28/8 30/19 37/12 47/23 50/22 50/24 51/2 53/5 53/19 53/23 54/8 57/2 72/15 76/12 79/15 84/18 86/3 110/11 126/18 129/18 133/6 134/3 136/12 137/22 148/8 150/25 151/1 151/18 152/22 162/11 167/14 170/13 175/21 186/25	pending [1] 186/23	person's [1] 58/15	planned [4] 46/7 62/23 179/18 180/2	positive [13] 60/6 60/16 107/2 132/16 132/22 137/1 137/25 138/14 148/23 152/15 167/19 169/25 188/7
part-time [1] 137/22	people [11] 4/22 9/18 63/24 73/6 73/13 77/14 109/23 114/12 121/7 137/11 137/15	personal [4] 51/16 54/13 137/19 183/23	play [1] 187/1	positively [3] 129/1 132/22 134/7
Participants [2] 128/11 128/17	pep [1] 90/20	personally [4] 60/23 130/5 133/14 178/4	pleas [1] 184/24	possession [1] 63/5
particular [24] 7/23 10/12 46/5 47/16 57/14 63/22 65/7 65/10 71/6 72/17 76/6 76/16 76/19 78/18 84/13 98/14 108/5 118/12 120/18 123/15 140/25 153/23 163/15 181/12	peptide [55] 4/12 5/6 5/14 7/2 8/2 8/7 8/12 8/20 9/1 10/16 11/2 11/7 11/10 11/13 11/16 12/1 16/20 19/21 22/21 23/3 24/14 24/15 24/15 24/21 26/17 30/18 31/11 31/16 31/19 34/22 34/23 35/2 35/6 35/21 36/4 39/6 76/20 78/3 78/23 79/3 80/1 80/4 80/11 84/19 93/15 94/14 106/16 106/19 111/10 120/19 120/24 123/7 123/25 130/15 143/1	perspective [3] 134/6 154/3 183/13	please [34] 1/11 1/16 1/19 3/18 3/19 7/4 8/5 9/23 10/25 21/14 23/22 24/4 24/6 30/25 35/12 40/8 40/15 45/11 45/13 50/3 51/8 52/12 56/23 56/25 66/4 66/12 66/15 68/19 80/16 80/19 80/24 81/19 89/25 102/4	possibilities [6] 14/10 17/3 95/6 95/20 103/1 120/23
particularly [17] 4/17 13/5 57/7 57/21 59/16 73/19 74/20 114/1 121/13 124/24 136/15 136/18 147/18 153/5 159/18 182/24 183/16	Peter [1] 160/12	phD [1] 3/4	planned [4] 46/7 62/23 179/18 180/2	possibility [7] 95/11 95/12 103/5 122/23 147/23 164/10 187/1
partner [1] 56/4	phone [30] 14/22 15/6 15/22 22/11 22/12 30/16 30/19 36/15 43/6 43/8 56/13 70/7 70/17 73/21 73/22 74/1 74/3 75/2 91/3 91/9 91/13 92/15 92/16 100/25 101/15 103/11 113/19 121/12 121/15 186/18	PhD [1] 3/4	play [1] 187/1	possibility 1 [1] 95/11
parts [3] 2/12 11/5 24/9	phoned [10] 21/2 22/8 22/10 73/2 73/9 100/20 100/21 100/22 107/21 121/15	PhD [1] 3/4	pleas [1] 184/24	possible [8] 95/18 96/18 103/10 133/18 142/20 176/23 177/23 187/25
pass [2] 18/25 63/7	phoning [1] 74/4	phone [30] 14/22 15/6 15/22 22/11 22/12 30/16 30/19 36/15 43/6 43/8 56/13 70/7 70/17 73/21 73/22 74/1 74/3 75/2 91/3 91/9 91/13 92/15 92/16 100/25 101/15 103/11 113/19 121/12 121/15 186/18	please [34] 1/11 1/16 1/19 3/18 3/19 7/4 8/5 9/23 10/25 21/14 23/22 24/4 24/6 30/25 35/12 40/8 40/15 45/11 45/13 50/3 51/8 52/12 56/23 56/25 66/4 66/12 66/15 68/19 80/16 80/19 80/24 81/19 89/25 102/4	possibly [7] 92/25 96/18 99/15 105/1 126/17 163/13 173/7
passage [1] 57/4	physical [1] 41/14	phoned [10] 21/2 22/8 22/10 73/2 73/9 100/20 100/21 100/22 107/21 121/15	planned [4] 46/7 62/23 179/18 180/2	post [9] 15/20 31/8 33/21 91/10 93/4 139/12 139/15 177/9 177/16
passed [2] 6/16 28/25	pick [1] 123/22	phoned [10] 21/2 22/8 22/10 73/2 73/9 100/20 100/21 100/22 107/21 121/15	play [1] 187/1	post-mortem [2] 139/12 177/9
passionate [1] 161/3	picked [3] 15/22 17/24 87/6	phoned [10] 21/2 22/8 22/10 73/2 73/9 100/20 100/21 100/22 107/21 121/15	pleas [1] 184/24	posted [1] 101/22
past [4] 39/19 40/1 160/7 169/14	picking [1] 47/25	phoned [10] 21/2 22/8 22/10 73/2 73/9 100/20 100/21 100/22 107/21 121/15	please [34] 1/11 1/16 1/19 3/18 3/19 7/4 8/5 9/23 10/25 21/14 23/22 24/4 24/6 30/25 35/12 40/8 40/15 45/11 45/13 50/3 51/8 52/12 56/23 56/25 66/4 66/12 66/15 68/19 80/16 80/19 80/24 81/19 89/25 102/4	posts [1] 2/19
pathologist [6] 67/17 68/12 68/13 96/6 120/10 177/21	per [5] 8/11 8/18 9/1 31/17 132/12	phoned [10] 21/2 22/8 22/10 73/2 73/9 100/20 100/21 100/22 107/21 121/15	planned [4] 46/7 62/23 179/18 180/2	potassium [1] 70/2
pathologists [4] 2/11 15/1 67/3 72/11	perception [1] 188/16	phoned [10] 21/2 22/8 22/10 73/2 73/9 100/20 100/21 100/22 107/21 121/15	play [1] 187/1	potassiums [1] 73/5

P	154/9 179/6 prick [4] 32/18 32/25 82/21 82/24 primary [3] 11/18 11/20 29/21 principal [5] 2/5 2/8 2/10 2/15 3/6 principles [1] 63/4 printout [2] 24/9 91/1 printouts [1] 118/10 prior [4] 133/22 177/11 178/7 179/4 prioritise [1] 71/25 priority [4] 52/23 52/24 97/8 142/1 privy [1] 159/21 pro [1] 90/25 probably [24] 7/8 44/15 73/12 81/11 87/18 91/3 91/8 96/3 102/8 102/15 105/7 106/7 106/17 109/10 112/6 114/12 114/16 118/8 118/13 119/18 121/1 122/5 122/7 154/12 problem [9] 26/5 36/16 103/17 106/5 106/7 107/22 109/8 124/23 167/23 problematic [1] 183/16 problems [9] 18/1 49/9 68/8 102/19 102/21 105/15 105/17 118/1 122/19 procedure [6] 21/8 74/9 98/24 101/13 158/12 189/21 procedures [6] 54/17 88/8 144/17 150/18 150/22 189/18 proceedings [2] 1/3 57/3 process [25] 9/4 20/24 35/25 36/1 51/18 55/21 75/11 75/13 77/25 91/15 96/21 97/17 99/3 100/17 102/15 102/22 107/8 110/9 128/15 134/17 144/16 148/1 155/16 168/9 181/2 processed [1] 31/13 processes [10] 37/2 38/7 38/10 39/7 97/17 104/19 119/9 131/17 144/12 168/4 produce [1] 153/16 produced [5] 11/8 11/17 12/1 20/11 35/8 produces [1] 90/25 producing [2] 78/21 80/6	professional [14] 16/2 16/3 25/19 25/25 27/1 34/17 141/21 146/16 155/12 160/19 171/20 175/11 183/16 187/5 professionals [5] 156/2 165/5 165/25 171/18 189/15 Professor [11] 185/1 185/6 185/9 185/19 185/24 185/25 186/4 186/24 187/2 187/10 187/18 Professor Kenny [10] 185/6 185/9 185/19 185/24 185/25 186/4 186/24 187/2 187/10 187/18 Professor Simon [1] 185/1 profile [2] 36/11 106/13 programmes [1] 172/7 progress [2] 133/15 172/17 prolonged [1] 49/11 prompt [1] 94/22 prompted [1] 91/14 prompting [1] 123/5 proper [2] 6/21 97/12 proportion [1] 106/22 proposed [6] 18/20 43/15 43/17 44/22 45/1 128/15 Protection [1] 171/16 protocol [6] 15/6 33/21 37/10 73/7 74/1 151/14 protocols [2] 25/23 151/12 proved [1] 115/4 provide [12] 42/6 48/15 50/22 51/3 54/9 64/16 79/19 127/19 128/6 155/8 160/20 180/3 provided [12] 1/20 6/13 20/18 40/17 48/24 66/16 82/20 121/18 140/10 156/24 186/20 190/23 provides [1] 190/21 providing [4] 48/2 50/9 54/1 146/22 proving [1] 78/13 provisional [3] 128/9 128/11 128/14 PRUDIC [2] 151/12 151/12 published [1] 1/10 purely [1] 88/6	purport [1] 190/19 purpose [5] 12/22 20/15 35/19 46/12 128/18 put [35] 11/21 12/11 16/18 18/12 20/4 22/22 24/16 25/1 37/13 45/25 56/17 56/24 59/22 70/20 76/13 85/16 87/24 92/14 93/4 100/10 100/19 100/19 101/4 110/1 114/7 114/8 114/10 114/12 114/12 114/25 115/6 115/16 130/12 170/9 183/9 putting [8] 15/20 32/20 33/21 37/15 38/7 55/10 92/5 110/23 puzzle [4] 86/4 89/21 102/2 104/5 puzzled [3] 103/4 103/9 103/13 puzzlement [2] 102/3 104/6 puzzling [5] 94/9 94/12 97/2 102/5 102/7	76/5 86/8 91/18 98/4 99/16 108/7 110/16 120/14 121/24 123/4 135/17 164/1 170/8
			R	
			Rachel [1] 162/18 racist [1] 58/11 racked [1] 107/24 raise [10] 86/12 125/6 140/25 146/14 148/13 150/4 156/17 165/13 178/5 188/10 raised [8] 86/15 131/9 136/11 143/1 171/22 181/6 186/7 189/24 raising [4] 127/23 141/3 144/17 181/7 ran [1] 7/19 rang [3] 16/6 26/8 56/8 range [10] 5/23 8/9 23/9 23/16 34/11 34/16 86/16 86/21 95/2 159/8 rapidity [1] 170/18 rapidly [1] 97/19 rare [3] 38/18 158/12 176/2 rash [4] 145/12 146/24 146/24 152/21 rashes [1] 130/1 rate [3] 157/20 157/24 190/2 rates [5] 177/24 179/6 182/5 186/8 189/7 rather [10] 3/2 15/20 31/5 73/23 85/4 97/4 115/7 132/14 140/2 160/4 ratio [16] 8/20 10/22 11/12 11/13 22/19 22/23 23/10 23/11 23/14 24/17 33/19 34/14 76/20 93/17 94/14 111/10 rationale [1] 78/17 ratios [1] 94/2 rays [1] 173/17 RCPCH [4] 48/23 132/3 171/16 174/24 reach [1] 81/20 reached [1] 86/5 reaches [1] 58/13 reaction [2] 86/14 103/25 reactive [1] 11/6 read [8] 29/20 42/20 52/15 52/18 60/3 82/13 92/14 128/19 readily [1] 189/1 reading [3] 126/8	
			Q	
			Q's [1] 168/22 qualified [3] 40/24 65/9 66/24 qualify [1] 2/3 quality [14] 20/23 21/7 52/18 110/9 129/12 132/20 146/18 155/9 156/23 163/1 167/24 167/24 168/3 182/3 quantitate [1] 8/13 quarter [1] 40/1 queries [2] 70/8 188/10 querying [1] 12/9 question [10] 47/17 81/25 85/8 96/24 104/4 110/2 111/24 115/10 126/12 161/10 questioned [1] 164/4 questions [13] 1/13 39/9 39/10 40/12 65/13 65/15 66/11 123/19 123/20 192/4 192/6 192/8 192/9 quick [1] 179/9 quickly [3] 28/8 77/6 164/1 quietly [1] 153/9 quirk [1] 109/19 quirks [1] 122/8 quite [18] 9/18 15/18 17/15 17/19 72/10	

R	received [32] 5/8 7/10 9/15 10/4 13/16 31/4 42/11 43/20 44/14 62/11 82/1 82/3 82/11 82/12 85/5 85/13 86/3 94/4 95/15 98/9 107/1 121/9 126/24 128/8 129/13 130/17 150/11 150/13 154/25 165/8 165/10 173/3	reference [6] 5/23 23/9 83/23 86/15 86/20 161/8 references [1] 7/4 referral [15] 4/2 4/4 4/22 6/14 19/13 42/10 42/24 42/25 43/10 43/20 43/21 43/23 43/24 76/11 121/15 referrals [1] 58/12 referred [5] 4/7 4/13 5/24 20/5 178/16 referring [5] 50/17 111/13 168/4 176/8 176/11 refers [6] 131/3 132/7 144/2 149/1 171/15 177/2 reflect [1] 134/12 reflected [2] 142/2 158/8 reflecting [2] 155/4 171/21 reflection [2] 54/11 187/24 reflects [3] 104/11 161/25 188/25 refrigerator [1] 76/5 regard [4] 112/20 144/7 156/10 163/8 regarding [12] 141/11 145/21 146/4 146/14 147/2 147/7 150/18 150/21 164/15 167/23 168/2 181/14 regardless [1] 112/22 region [3] 5/2 77/20 167/17 regional [1] 159/15 regionally [1] 155/9 register [1] 67/14 registered [2] 67/7 109/18 registrar [15] 120/14 120/15 137/23 138/23 141/15 144/10 144/23 147/10 148/17 155/24 162/19 165/20 169/7 172/23 174/9 registrars [2] 134/8 161/11 registration [1] 184/15 regrettably [1] 90/1 regular [10] 46/7 48/18 49/22 53/19 54/1 120/24 155/15 163/19 182/20 187/2 regularity [1] 190/14 regularly [3] 60/8 108/7 148/7 related [6] 47/7 83/25 108/3 108/5 176/19	176/25 relating [4] 80/17 130/10 138/18 150/14 relation [21] 130/9 133/3 138/9 140/1 143/14 145/10 146/20 146/21 147/25 149/1 153/14 153/23 162/9 164/15 164/25 165/7 167/21 171/14 172/19 173/9 177/3 relationship [5] 80/8 137/25 139/1 156/1 165/24 relationships [15] 70/15 129/12 132/17 132/20 132/22 138/4 141/21 147/12 148/22 152/7 175/10 175/18 183/15 183/18 188/17 relative [2] 80/8 190/3 relatively [9] 31/3 79/11 86/7 86/10 105/3 117/8 139/9 164/5 167/2 release [1] 21/8 relevance [1] 130/20 relevant [10] 24/9 52/18 83/10 90/2 114/16 127/14 127/17 128/6 140/10 190/8 reliable [1] 83/3 reliably [1] 108/3 reliant [1] 88/6 relied [1] 113/22 reluctant [1] 114/25 rely [1] 113/6 remained [1] 183/10 remarkably [1] 187/5 remember [27] 44/10 62/20 86/6 88/5 91/4 97/16 104/14 104/19 107/17 107/25 108/4 108/12 131/11 135/17 135/21 135/23 142/9 142/11 144/16 150/20 153/25 159/3 161/10 169/17 169/18 181/7 186/9 remembered [1] 107/12 reminders [1] 155/15 remit [1] 61/5 removed [3] 23/20 128/14 143/24 renewed [1] 154/21 rep [2] 53/12 56/4 repeat [2] 47/17 74/2 repeated [3] 70/3 162/7 173/5 repeatedly [1] 164/7 replaced [1] 120/8 replaces [1] 29/23	replies [1] 62/1 reply [2] 62/1 63/1 report [12] 8/10 69/14 86/16 100/11 111/22 165/17 178/12 178/17 180/10 182/3 184/8 187/12 reported [3] 8/15 171/18 181/25 reporting [3] 162/3 189/18 189/19 reports [2] 69/3 141/12 represent [1] 182/16 representation [1] 179/1 representative [3] 168/12 172/2 189/9 representing [1] 185/5 reproduction [1] 99/19 reputation [3] 157/7 160/17 169/25 request [19] 5/5 5/7 6/4 7/9 9/24 10/6 32/19 36/2 36/5 36/9 75/2 75/17 76/9 78/5 80/1 81/12 81/14 92/23 167/18 requested [13] 4/21 5/10 5/18 6/11 7/20 7/24 10/8 12/7 33/1 43/13 156/3 156/12 172/24 requesting [2] 139/11 157/10 requests [4] 10/7 36/4 76/3 122/14 required [17] 19/3 27/17 28/22 29/6 36/14 54/15 69/8 74/14 76/6 77/7 77/7 77/12 93/2 104/16 118/23 146/5 150/17 requirement [1] 29/6 requiring [2] 6/20 139/9 resentment [1] 129/8 resident [1] 127/7 residual [1] 34/25 resilience [4] 27/23 28/7 28/21 29/10 resolved [3] 20/19 121/14 134/15 respect [6] 68/7 135/14 138/4 144/4 147/15 151/23 respected [2] 141/21 177/20 respectful [1] 184/25 respond [1] 60/4 response [4] 18/3 157/19 184/22 189/22
----------	---	---	---	--

R	153/17 173/1	50/24 50/25 52/14	Rule 10 [1] 39/10	saw [8] 10/14 44/9
responses [1] 87/9	resuscitate [1]	53/23 55/2 55/18	rumours [1] 179/7	44/16 44/19 45/2 72/7
responsibility [8]	164/14	55/21 56/12 57/17	run [13] 5/3 9/25 10/2	72/12 136/3
25/4 25/7 26/1 27/1	resuscitated [1]	61/23 66/25 67/6	10/5 10/8 35/19 35/20	say [91] 10/11 11/20
27/3 28/12 64/25	173/20	67/18 67/19 67/25	107/18 136/8 159/18	16/18 17/10 19/23
116/3	resuscitating [1]	68/1 76/1 79/4 80/22	161/14 170/1 190/22	20/7 23/11 27/15
responsible [5] 68/9	163/21	81/23 83/24 85/23	running [1] 68/9	30/14 34/17 36/5
130/24 132/13 176/15	resuscitation [20]	88/3 89/23 90/21 95/2	Ry Lance [2] 137/22	36/24 42/5 43/12
184/14	134/14 134/20 135/3	99/14 110/10 121/24	138/6	46/23 47/4 50/6 51/19
responsive [1]	145/23 152/23 153/2	126/20 179/5	S	52/13 52/20 53/7
156/11	153/8 153/11 157/10	ring [3] 73/24 92/24	S's [1] 168/24	54/16 60/22 61/1 61/2
rest [3] 27/20 39/15	157/20 158/1 164/18	109/22	sad [2] 166/17 170/8	61/7 62/8 63/10 63/20
39/25	170/7 170/10 170/14	ringing [2] 73/23	safe [2] 61/3 134/25	64/6 64/8 71/1 71/21
restricted [1] 45/9	170/20 172/15 173/16	102/6	safeguard [2] 162/9	72/4 74/24 76/12 80/5
result [54] 9/19 9/21	174/5 174/12	rise [3] 13/7 141/7	165/7	88/10 93/22 96/16
12/6 16/7 16/14 16/19	resuscitations [1]	191/1	safeguarding [30]	97/16 98/15 100/20
18/4 20/20 21/2 21/8	169/6	risk [11] 17/12 17/12	27/8 27/9 27/14 27/16	102/18 103/15 104/13
28/2 28/5 28/13 29/16	retinopathy [1]	17/14 27/17 27/19	27/23 63/4 63/13	108/4 108/13 109/23
30/17 33/6 33/13	182/19	27/19 27/23 63/6	123/3 127/25 131/14	109/24 110/6 110/14
33/15 34/11 35/23	retired [1] 180/25	177/25 179/13 180/17	133/3 144/3 146/5	111/9 111/11 112/5
36/2 36/6 38/7 82/21	retrospect [5] 112/4	robotic [1] 85/17	148/7 148/11 148/15	112/8 113/11 115/24
83/12 86/20 87/12	112/8 113/8 114/1	robust [3] 19/22	150/10 150/11 150/13	116/20 117/9 118/20
90/5 91/11 91/19	171/6	103/24 181/2	151/1 151/15 154/20	120/23 120/25 121/14
92/22 94/3 94/9 96/11	return [3] 62/18 99/4	role [33] 2/5 2/7 2/17	154/24 162/16 165/8	122/13 125/2 125/5
99/1 99/2 100/22	180/6	3/24 15/17 18/15	165/14 171/14 172/1	126/21 131/7 135/6
101/19 101/20 102/5	returned [4] 58/17	25/15 30/19 41/12	187/15 189/12	141/8 144/6 145/15
105/21 108/23 110/15	132/9 155/22 156/20	41/20 46/14 47/9	safety [3] 180/22	146/8 149/21 154/13
114/13 114/24 117/4	returning [4] 61/11	50/24 51/24 53/10	181/15 182/3	155/2 157/17 161/1
117/17 120/21 121/16	61/14 61/20 132/6	53/11 54/8 54/20	said [25] 17/6 43/16	162/23 163/24 164/9
121/17 122/1 123/25	revalidation [1]	54/20 54/25 54/25	46/14 50/21 54/7	166/5 166/6 167/12
124/6 159/13	148/8	59/3 68/17 68/20	54/22 58/3 58/19	167/15 167/21 176/3
results [105] 9/8	reversal [1] 34/13	70/10 72/15 110/6	58/24 59/16 64/2 78/3	177/12 179/3 184/7
10/14 14/20 14/21	reverse [1] 12/4	110/12 116/18 119/12	99/8 101/8 108/16	saying [17] 33/22
15/20 20/18 21/6 22/3	review [37] 38/3	150/9 158/17 158/24	108/17 109/5 109/10	38/21 48/5 48/7 56/20
22/4 22/16 23/2 24/7	68/25 69/11 69/16	roles [2] 41/20	115/2 119/4 119/8	59/25 60/4 62/12 70/4
24/23 25/17 26/6	69/19 120/24 142/13	141/22	124/11 124/12 125/9	81/16 89/17 105/23
27/13 27/22 28/19	144/13 149/11 149/13	room [2] 10/24 136/3	139/4	108/21 109/9 136/3
29/2 30/13 30/20 33/9	149/16 156/7 168/5	rota [2] 68/21 120/17	Sally [1] 138/21	152/5 172/16
37/11 37/13 37/24	168/9 175/21 175/25	rotate [2] 152/14	same [12] 16/8 17/3	says [72] 42/22 43/5
38/5 69/3 69/4 69/13	177/3 177/3 177/4	171/8	23/22 25/19 33/17	44/2 45/16 45/21 49/4
69/15 69/17 70/1 70/6	178/6 178/9 178/10	rotated [1] 129/15	35/23 60/4 92/5 92/9	57/5 62/2 63/19
70/12 72/17 72/24	178/13 178/16 178/21	rotating [4] 154/7	120/4 121/5 143/17	129/24 130/4 130/18
73/2 73/4 73/7 73/8	178/24 180/1 180/4	155/17 188/24 189/10	sample [21] 7/5 7/6	131/18 131/23 132/24
73/25 74/2 74/4 77/6	180/9 180/15 180/22	rotation [2] 159/6	7/12 7/23 9/6 16/10	133/9 134/18 135/20
83/6 83/7 84/1 84/2	181/2 181/4 185/25	169/1	18/21 20/14 21/4	136/6 139/23 140/7
84/12 86/3 86/7 87/11	186/1 186/19 186/23	rotations [2] 141/16	35/20 35/22 75/22	140/14 140/17 142/6
89/12 89/14 89/17	reviewed [5] 117/4	167/15	76/10 76/10 81/20	142/17 143/14 143/21
91/5 91/15 92/24	117/5 140/12 175/24	round [11] 11/15	82/12 84/18 85/16	144/10 145/19 146/3
93/12 95/23 96/23	176/23	74/10 75/8 101/14	122/3 123/11 172/25	146/5 146/13 146/23
96/25 97/2 97/14	reviewer [1] 180/25	101/18 101/21 111/14	samples [11] 10/4	149/2 149/24 150/19
97/19 100/1 100/6	reviewing [3] 68/23	132/11 142/14 142/15	31/10 68/24 76/3	152/23 156/13 157/11
100/8 103/14 104/16	144/12 167/7	163/13	76/12 77/20 85/17	158/6 159/5 160/15
106/2 106/18 106/23	reviews [2] 127/23	rounds [2] 132/8	122/6 123/5 123/8	161/5 161/16 162/9
107/11 107/13 108/6	165/19	188/14	123/12	162/13 162/20 163/18
108/8 108/9 108/17	Rhiannon [1] 165/20	route [1] 29/21	Sara [1] 179/11	164/25 166/15 166/22
109/11 109/18 109/23	rhythm [1] 86/18	routes [1] 63/13	Sarah [1] 137/22	169/16 170/12 172/17
111/1 111/8 111/21	right [56] 3/3 9/13	routine [2] 9/24 10/6	sat [4] 10/3 97/9	173/9 173/21 174/20
112/17 118/2 120/24	12/20 13/21 15/2	routinely [3] 25/21	179/16 179/18	175/23 177/22 178/8
121/23 122/14 122/20	18/24 21/1 21/21	29/3 39/4	satisfied [7] 21/3	178/21 180/24 181/6
122/23 123/2 123/14	24/12 31/15 31/25	row [1] 92/18	22/16 24/8 33/8 33/16	181/13 182/8 182/19
123/23 130/10 130/13	32/5 34/4 40/17 40/23	Royal [6] 2/11 15/1	110/9 110/21	182/22 183/21 183/25
130/17 130/20 130/22	41/4 42/7 43/3 43/24	48/23 67/3 171/15	Saturday [2] 60/6	184/3 184/21 187/18
131/1 139/9 143/3	46/23 48/13 49/17	186/19	84/8	scale [1] 77/21
	50/14 50/15 50/19	Rule [1] 39/10		scanned [1] 98/3

S	142/8 160/2 168/11 173/1 178/24	series [2] 85/15 85/22	152/23 153/11 153/15 153/23 153/24 154/9 154/9 154/12 154/20 154/22 154/23 154/24 155/2 156/22 156/25 157/9 157/17 158/9 162/20 162/20 162/23 163/3 163/18 163/19 163/25 164/14 164/16 164/22 165/8 165/23 166/5 166/15 166/15 168/20 168/24 169/1 169/3 169/24 170/3 170/18 170/23 171/1 172/10 172/11 172/15 172/17 172/17 174/15 174/15 174/16 174/20 174/25 175/1 175/17 175/22 177/20 177/23 177/24 178/4 178/6 178/10 178/21 179/13 179/15 180/7 180/11 181/6 181/13 181/21 184/18 184/20 184/21	shown [1] 117/4 SI [1] 8/18 siblings [1] 174/3 sick [2] 163/20 166/18 sicker [1] 154/11 side [10] 14/5 17/7 17/10 71/3 76/13 89/24 110/1 113/4 122/25 142/15 sidelined [2] 122/24 184/21 sign [1] 24/16 signal [1] 185/22 significance [6] 10/25 11/1 28/19 36/13 98/23 120/20 significant [6] 29/16 50/7 54/12 122/20 162/4 185/18 Significantly [1] 174/4 signify [1] 8/6 signs [2] 173/11 177/16 silence [1] 183/4 similar [7] 3/13 33/24 37/11 95/23 130/3 132/5 153/12 similarities [1] 133/18 similarity [1] 174/7 Simon [2] 136/12 185/1 simply [1] 32/12 since [16] 58/25 67/14 67/21 102/10 118/25 138/12 140/6 144/19 149/20 154/14 158/2 158/18 168/8 170/13 170/16 181/21 since September 2015 [1] 140/6 single [1] 186/13 sinister [1] 106/10 sit [7] 1/14 29/20 40/10 41/24 66/9 68/2 97/4 sites [1] 120/13 situation [27] 13/4 19/25 25/7 29/5 30/7 36/17 37/16 38/9 51/22 52/2 55/8 59/5 59/8 59/9 72/4 87/4 87/6 87/9 88/12 89/8 89/12 109/20 109/21 124/19 146/9 153/13 167/7 situations [2] 38/3 189/15 six [6] 127/11 129/16 134/3 161/17 180/17 188/24 six months [2]
scenario [4] 13/23 15/7 124/3 124/6 scenarios [2] 13/8 96/18 scheme [1] 188/23 science [3] 4/16 39/14 67/24 sciences [1] 68/4 scientist [19] 2/3 2/6 2/10 2/15 2/17 3/6 12/12 13/6 14/19 34/8 67/8 68/14 72/6 72/11 73/10 94/1 120/8 120/12 120/12 scientists [6] 3/14 70/16 73/4 73/24 91/6 91/16 screen [21] 3/20 8/8 9/8 9/12 10/15 22/8 24/1 31/1 32/9 42/10 45/12 51/8 52/15 56/24 59/22 81/24 90/3 90/25 91/23 91/24 130/11 screened [1] 182/18 screens [2] 52/17 123/8 screenshot [4] 3/20 6/23 9/2 9/11 scribbled [1] 125/2 scrutinise [1] 123/2 scrutinising [1] 121/2 scrutiny [1] 155/6 search [1] 106/18 second [6] 8/18 70/5 91/7 98/19 142/1 153/3 Secondary [1] 175/24 seconds [1] 89/1 secretary [1] 182/15 secreted [1] 93/14 see [69] 6/24 8/2 10/10 14/19 14/21 21/11 21/20 21/25 22/2 23/2 24/4 26/9 30/13 33/6 37/7 42/23 43/24 44/6 45/14 45/16 46/16 46/19 46/20 49/4 49/5 51/10 56/9 57/5 58/8 59/24 62/6 68/25 69/19 69/23 69/25 70/3 79/2 79/23 80/25 81/2 81/5 81/7 81/8 82/10 82/17 82/22 83/19 85/8 85/24 88/17 90/5 90/8 91/11 91/22 91/25 95/7 98/21 101/20 101/25 108/9 112/24 115/20 123/2 125/14	seeing [4] 41/21 53/3 53/19 106/2 seek [3] 132/2 148/14 174/1 seeking [3] 30/8 128/12 151/24 seem [6] 38/19 39/2 103/14 109/25 115/19 176/13 seemed [4] 68/25 94/16 161/13 169/19 seemingly [1] 163/25 seems [2] 89/15 94/16 seen [18] 7/23 20/14 21/23 56/16 89/2 103/11 104/8 106/21 107/12 117/3 130/2 130/2 133/16 146/24 149/19 149/25 156/11 156/15 seized [1] 28/9 self [1] 190/19 self-evidently [1] 190/19 send [9] 4/9 4/24 18/21 20/6 36/2 68/24 76/14 77/5 122/3 sending [4] 20/14 33/21 77/20 122/5 senior [18] 2/7 3/14 29/7 53/14 55/5 60/18 120/14 127/5 141/2 146/11 146/12 154/14 155/21 162/16 172/9 183/7 183/19 183/21 sensible [1] 101/19 sensitive [1] 122/18 sent [12] 7/6 7/9 31/12 31/13 68/24 69/1 121/24 123/11 130/11 158/24 176/7 178/20 sentenced [1] 37/19 separately [1] 179/25 sepsis [1] 142/20 September [23] 49/2 49/3 49/17 128/25 129/18 132/6 138/23 140/6 143/7 147/11 152/4 155/21 155/23 156/22 160/15 161/23 162/19 165/21 165/22 167/9 169/23 174/10 177/22 September 2015 [7] 129/18 138/23 147/11 152/4 155/21 160/15 162/19 September 2016 [3] 49/17 155/23 165/22 sequence [1] 33/2	serious [8] 55/1 95/18 103/3 103/5 104/10 106/5 153/21 183/2 seriously [2] 26/22 141/7 service [6] 5/2 36/18 54/10 179/16 179/16 180/3 services [5] 179/18 179/20 179/24 181/23 181/25 sessions [1] 158/20 set [4] 77/11 103/14 106/23 109/19 sets [7] 108/8 130/8 146/21 151/3 155/5 171/17 181/20 setting [1] 189/16 several [3] 140/22 143/12 186/9 shall [1] 126/20 share [5] 55/13 68/16 120/16 122/16 148/15 shared [1] 121/6 she [187] 30/5 47/6 47/8 47/10 52/8 53/12 54/5 55/21 56/9 57/7 57/21 57/22 58/2 58/6 59/13 59/15 59/16 59/16 59/18 60/11 61/21 61/22 62/1 62/2 62/9 62/16 62/17 62/19 62/21 62/22 62/23 63/19 63/20 63/20 63/21 63/23 64/8 64/10 64/10 66/3 104/24 128/24 129/2 129/17 129/24 130/8 130/9 130/12 130/16 130/16 130/17 130/18 130/21 131/2 131/7 131/16 131/18 131/18 131/18 132/7 133/3 133/4 133/9 133/11 133/13 133/20 133/20 133/21 135/10 135/12 135/17 135/18 135/23 135/24 135/25 136/3 136/8 137/7 137/10 137/14 137/14 137/15 137/19 137/20 137/24 138/2 138/7 138/9 138/15 138/24 139/21 140/15 140/16 141/23 142/17 142/21 142/25 143/8 143/21 143/22 144/6 144/10 144/15 147/12 147/20 147/20 148/13 152/4 152/6 152/8 152/9 152/10 152/11 152/20 152/21	she'd [3] 62/24 63/23 64/8 she's [5] 22/9 59/25 60/1 60/2 163/25 sheet [1] 24/10 shift [9] 45/24 133/9 138/12 154/18 163/22 163/24 165/6 176/16 190/12 shifts [3] 136/8 164/5 167/2 Shirley [4] 66/3 66/7 66/14 192/7 shock [2] 153/8 168/18 shocked [1] 135/21 shopping [2] 51/9 51/11 short [4] 11/9 40/3 160/9 176/9 shortly [2] 92/15 117/18 should [48] 5/11 11/12 14/19 18/3 24/15 25/18 25/25 26/20 37/23 39/18 55/6 55/9 55/24 60/7 69/16 82/6 90/6 90/21 91/11 91/25 93/18 94/2 94/15 105/25 106/3 116/19 118/18 124/20 126/14 128/2 128/13 134/13 134/20 138/17 138/19 148/1 148/4 151/11 155/11 155/15 165/3 171/23 178/9 178/15 183/11 184/12 187/20 187/22 shouldn't [2] 13/4 13/16	

S			
six months... [2] 127/11 129/16	118/3 147/24	134/4 160/14 166/25 184/17	148/22 149/5 150/15 152/13 155/1 155/12
six-month [2] 161/17 188/24	someone's [4] 17/23 34/17 64/25 97/10	specialists [1] 178/25	158/24 162/11 163/4 163/15 165/2 165/11
size [1] 72/9	something [40] 4/17 21/19 28/17 60/6	speciality [1] 41/16	166/19 171/22 172/5 175/12 175/19 176/13
skilled [1] 163/4	60/16 62/4 63/20 64/22 70/5 72/7 75/13	Specialty [1] 184/17	176/20 179/8 181/8 181/12 182/15 182/17
skills [1] 175/15	89/18 91/12 96/19 104/9 104/16 105/13	specific [14] 46/9 123/15 131/17 140/25	183/5 183/7 184/16 186/12 186/13 187/16
skin [2] 130/1 173/25	109/15 114/7 114/8 114/25 115/4 115/8	141/5 141/11 142/11 144/4 146/17 150/13	188/13 188/17 188/20 190/10
slaves [1] 15/12	115/17 116/19 118/23 123/22 124/9 124/14	specifically [7] 72/21 76/10 132/13 133/5	staffing [2] 71/3 176/24
sleep [1] 187/22	124/15 125/6 149/19 154/1 157/13 158/1	140/20 140/24 146/6	stage [10] 28/12 34/22 99/7 101/2
slight [2] 1/7 122/8	158/8 159/10 167/5 179/5 184/2	specimen [3] 82/8 82/13 82/15	102/19 105/16 112/7 118/3 118/22 135/24
slightly [6] 1/6 33/19 34/10 49/3 126/17 134/5	sometimes [14] 5/24 11/14 36/17 69/22	specimens [2] 73/7 83/1	stand [1] 154/6
slower [1] 29/12	69/25 74/6 76/3 76/4 91/9 97/1 101/9 110/5	spectrum [1] 71/4	standard [2] 56/11 163/2
small [3] 78/9 127/15 159/10	121/25 167/4	speculation [2] 111/7 140/3	standardised [1] 171/24
smaller [1] 4/23	somewhere [1] 116/22	speculative [3] 114/11 115/1 115/12	standing [1] 105/21
Smith [3] 169/7 169/11 169/16	Soni [4] 147/9 147/11 147/25 148/11	speedily [1] 31/3	standpoint [1] 190/4
snippets [1] 108/2 so [354]	Soni's [2] 147/17 148/5	spend [1] 171/13	start [11] 1/6 2/1 12/11 17/17 39/25
so April 2017 [1] 60/10	soon [1] 35/22	spent [2] 127/11 142/4	51/7 54/7 65/21 96/7 135/2 160/14
sole [1] 68/11	sooner [1] 28/3	spirit [1] 137/8	started [9] 36/21 40/24 41/2 48/2 48/13
solely [1] 178/18	sorry [12] 1/6 5/22 8/17 8/22 18/7 22/21	splits [1] 120/12	59/4 72/5 128/22 158/13
some [62] 3/23 7/2 9/17 10/9 26/5 34/22	45/13 47/17 61/1 62/2 84/25 164/23	spoke [7] 16/14 57/21 111/6 118/3	starting [1] 6/8
35/5 35/18 42/6 44/21 45/6 48/2 50/4 51/6	sort [37] 15/7 16/17 18/11 45/6 51/18	118/4 177/24 189/25	starts [1] 81/16
51/10 51/13 51/18 55/16 57/7 58/6 60/3	55/25 68/6 68/7 70/5 71/4 71/10 72/7 72/9	spoken [13] 15/22 45/24 45/24 64/22	state [8] 17/21 18/14 20/18 26/13 40/15
64/6 64/15 64/16 64/21 69/5 69/6 70/15	73/4 73/20 74/13 74/18 75/2 79/10	71/12 74/19 100/19 107/2 107/21 110/24	95/9 95/10 104/12
95/14 97/5 98/4 102/3 106/10 108/19 114/12	85/15 94/6 97/4 106/10 107/8 108/20	112/23 131/19 144/8	stated [1] 176/12
119/5 122/8 123/13 123/23 123/24 128/19	109/8 113/18 114/13 115/7 122/21 123/1	spring [1] 14/3	statement [61] 1/21 1/23 35/13 40/18
129/8 129/19 131/8 137/4 142/8 142/10	123/2 123/4 123/16 124/10 125/1 162/1	SR [1] 24/12	40/20 42/6 48/1 50/21 54/23 57/2 58/3 63/3
151/21 157/1 164/7 168/1 174/6 174/21	sorted [1] 93/5	ST3 [1] 166/24	63/10 64/2 66/16 66/19 75/15 94/12
181/20 185/3 186/6 186/20 188/13 189/5	sorts [2] 51/15 58/9	stability [1] 164/5	98/19 104/7 118/24 130/9 135/16 135/20
189/25 190/13 190/21	sound [1] 50/14	stable [5] 133/16 139/8 139/8 143/9	136/2 137/19 138/9 139/4 139/6 139/20
somebody [25] 13/23 14/15 17/5 17/24 29/8	speak [19] 9/3 29/7 70/12 70/19 72/23	145/14	139/21 139/25 140/1 140/17 141/8 145/7
30/22 43/8 47/15 54/25 55/11 56/3 56/6	73/17 73/23 74/6 74/8 74/23 96/22 97/12	staff [92] 29/3 41/18 41/19 41/21 42/2	146/22 147/1 149/15 151/3 153/1 155/5
63/6 63/18 65/8 70/13 78/1 81/16 88/1 89/17	100/9 101/7 101/8 101/11 101/17 112/19	46/15 46/16 46/20 48/15 49/5 49/21	157/12 158/6 159/5 161/5 163/18 164/2
95/16 97/12 101/6 102/23 107/21	131/25	50/23 51/3 51/17 51/21 51/22 52/21	166/15 166/22 170/12 177/2 179/14 180/18
somebody's [1] 29/20	speaking [5] 16/4 26/4 48/22 101/1 110/12	52/25 53/8 53/14 54/10 54/13 54/19	181/19 184/3 185/6 185/9 186/1 186/24
somehow [1] 47/7	specialised [2] 74/20 77/10	55/2 55/7 57/12 58/8 58/11 58/19 58/21	187/11
someone [19] 13/17 15/23 26/1 34/18	specialist [11] 19/13 19/14 67/13 77/3	58/25 59/6 64/17 76/8 103/11 120/7 127/18	statements [6] 126/24 127/9 127/19
34/19 65/4 70/1 87/24 92/25 96/22 99/7	120/14 120/14 127/7	129/9 129/22 130/1 130/19 131/16 131/20	128/8 158/16 188/3
100/7 100/10 100/19 101/10 104/1 108/11		132/18 132/20 133/7 134/16 134/19 138/5	states [19] 130/16
		140/4 142/10 143/16 144/5 145/4 146/7	
		146/11 148/9 148/13	
			133/3 133/20 136/8 136/20 139/14 147/11
			147/20 148/11 150/12 155/25 164/16 172/10
			174/15 174/25 180/1 180/11 185/19 186/24
			stating [1] 132/8
			status [1] 19/9
			statutory [1] 187/11
			stayed [1] 169/19
			steering [1] 185/4
			step [4] 25/14 28/18 38/1 98/24
			Stephen [4] 176/22 178/1 182/24 183/1
			Stephen Brearey [2] 178/1 183/1
			Stephen Brearey's [1] 176/22
			stepping [5] 33/20 37/18 38/13 105/6 106/1
			steps [1] 23/20
			stick [2] 26/20 30/23
			still [14] 14/7 15/5 17/15 17/21 34/11
			35/6 121/22 122/8 124/6 159/12 167/18
			177/13 178/2 178/13
			stillbirths [2] 178/17 180/15
			stood [1] 153/6
			stop [4] 11/5 16/11 110/4 179/10
			stopped [1] 153/7
			stops [1] 68/7
			store [1] 76/13
			stored [2] 31/12 76/4
			straight [4] 71/17 73/8 91/24 103/2
			straightforward [2] 100/16 100/18
			strain [1] 70/25
			strange [3] 147/19 149/23 150/5
			strategies [3] 52/10 58/1 58/12
			stress [2] 60/9 60/20
			stressed [2] 63/21 86/23
			stressful [1] 159/13
			stretched [1] 71/2
			strike [1] 153/5
			striving [1] 36/19
			strong [2] 160/17 187/7
			strongly [1] 151/9
			structured [2] 96/25 148/3
			struggling [1] 186/8
			studies [1] 189/15
			subject [2] 38/16 145/19
			submissions [1]

S	128/19 190/16 190/17 190/19 192/10	surprising [2] 38/19 39/2	72/24 92/19 108/11	86/25 88/25 107/20 115/16 119/9 120/18
submissions... [1] 128/12	summer [2] 46/10 181/6	surrounding [1] 133/11	talked [1] 102/22	123/16 158/23 167/13 171/9 190/10
subsequent [5] 145/17 149/17 158/7 170/21 187/4	supervising [1] 157/3	survive [1] 170/11	talking [7] 28/7 49/14 57/25 74/19 96/4 115/11 137/11	tertiary [3] 170/24 179/1 189/2
subsequently [4] 48/10 155/22 158/10 178/20	supervision [6] 55/14 64/21 64/24 65/1 65/7 167/24	suspect [1] 21/15	tasked [1] 52/24	test [42] 4/11 4/15 4/18 4/21 5/5 5/9 5/10 5/17 6/11 6/14 6/14 19/3 19/5 19/10 19/15 19/18 19/23 20/7 25/9 27/11 32/21 32/25 33/1 35/9 36/7 75/19 75/20 75/20 75/21 76/7 76/19 76/21 76/25 77/5 77/15 78/1 78/3 78/18 78/23 81/12 82/21 110/3
substance [4] 47/5 55/6 64/7 67/22	Supervisor [1] 181/1	suspected [5] 146/9 150/14 162/12 162/15 165/11	tasks [1] 113/17	tested [1] 7/16
substandard [1] 159/23	support [31] 42/1 42/7 43/14 45/25 47/20 48/3 48/15 50/9 50/22 51/3 51/23 51/24 51/25 51/25 52/2 53/6 53/20 54/1 54/21 56/6 58/12 61/11 64/17 139/10 157/5 167/25 168/3 171/2 175/16 176/20 183/10	suspicion [4] 14/5 38/5 105/24 148/12	teaching [1] 159/16	testing [7] 3/25 4/7 19/15 20/6 20/21 84/19 92/23
substantial [1] 149/18	supported [6] 30/10 148/19 152/8 162/24 167/10 188/12	suspicious [2] 17/11 38/7	team [55] 3/8 3/16 14/23 16/22 16/23 18/4 18/6 18/7 18/10 18/17 18/25 19/2 19/8 26/12 27/5 27/20 45/24 45/25 48/23 53/3 69/25 71/4 136/24 137/3 137/8 139/2 141/3 142/19 144/25 146/12 148/15 152/22 159/11 160/16 160/19 160/22 161/1 167/11 169/4 170/14 173/6 173/8 175/14 175/20 175/25 177/13 178/5 180/12 180/17 180/21 181/7 181/9 181/11 182/7 182/11	tests [15] 4/10 4/13 25/20 35/21 69/7 77/3 77/9 81/17 82/24 86/5 87/1 91/5 106/14 173/5 173/18
successfully [1] 173/20	supporting [12] 47/16 51/17 51/21 52/21 52/25 53/9 53/16 54/14 57/13 57/19 58/25 61/14	sworn [4] 1/12 40/9 192/3 192/5	teams [3] 129/2 155/13 161/3	text [3] 50/4 50/7 186/17
such [18] 13/10 25/17 30/22 32/21 54/12 55/24 63/11 64/18 64/20 113/12 120/20 144/13 146/24 150/23 162/15 165/12 179/6 190/9	supportive [16] 124/3 134/8 134/25 137/25 145/2 145/3 147/16 152/16 157/2 161/3 166/3 166/7 166/13 167/16 170/1 188/8	synthetic [1] 20/10	teamwork [1] 129/1	texts [1] 51/2
sudden [12] 135/4 144/13 149/18 150/22 151/13 165/16 168/10 168/14 174/13 186/12 189/18 189/20	suppose [16] 38/4 41/21 68/7 97/6 102/8 102/13 103/9 103/13 105/11 105/13 106/9 111/24 112/4 112/15 113/3 117/8	system [30] 21/9 23/23 35/6 36/10 36/13 36/24 88/17 88/18 89/1 92/10 97/25 111/19 114/22 115/18 115/23 116/4 116/6 116/10 116/12 116/13 116/14 116/17 117/8 119/20 119/22 121/23 122/8 125/5 163/6 180/1	telephone [19] 14/25 29/2 29/24 30/22 56/14 56/21 69/18 73/15 87/23 92/6 93/11 99/7 107/1 113/12 113/24 119/12 121/4 121/6 121/8	than [33] 3/2 9/21 12/1 15/20 22/22 24/16 31/5 32/3 34/24 43/22 73/24 81/4 81/6 83/3 86/22 93/15 93/23 97/4 106/10 113/21 114/18 115/7 115/16 118/13 132/14 137/1 140/2 150/25 159/3 166/7 171/12 176/15 177/23
suddenly [2] 149/22 168/23	supposed [2] 82/25 117/2	systemic [3] 17/25 28/7 30/6	telephoned [4] 20/20 22/4 69/20 121/10	thank [39] 1/9 2/9 2/14 16/16 21/18 24/5 25/3 39/8 39/11 39/13 39/17 40/11 40/23 42/5 42/12 42/23 43/5 50/2 52/19 56/23 65/11 65/12 65/14 65/16 65/18 66/8 66/10 81/8 82/4 82/5 84/24 86/1 123/21 125/19 125/20 125/21 126/2 126/6 190/25
SUDiC [1] 151/12	sure [29] 16/3 21/5 25/23 26/21 27/4 27/24 29/8 29/12 29/14 36/3 37/2 50/11 52/8 69/19 91/20 97/11 103/9 103/11 103/23 103/23 103/24 103/24 105/1 121/23 122/5 125/15 167/3 169/15 186/17	systems [2] 103/24 155/14	telephoning [4] 33/13 73/7 92/22 93/8	that [1259] that's [95] 3/4 3/20 4/14 5/10 5/22 8/11 8/11 8/19 9/14 12/21 14/11 14/21 15/8 15/17 16/18 18/15 20/5 23/6 23/24 24/15 24/17 24/20 26/7 27/9 28/8 28/14 29/19 30/14 33/1 36/19 38/6 40/19 41/1 42/8 42/11
Sue [4] 45/17 45/19 45/22 61/18	surely [2] 102/16 103/6	table [3] 142/15 185/24 186/1	tell [16] 1/8 8/24 10/25 22/2 31/15 34/3 35/13 35/15 36/6 45/17 64/10 68/19 95/6 98/7 98/23 107/15	
Sue Hodgkinson [4] 45/17 45/19 45/22 61/18	surgeon [2] 182/13 185/2	tachycardia [1] 142/20	telling [1] 64/8	
suffered [1] 158/11	surgical [1] 158/12	take [28] 2/5 4/3 9/21 25/3 25/14 29/4 39/19 39/21 39/22 40/8 50/2 57/20 65/21 74/11 76/9 76/11 81/19 86/24 89/11 91/18 112/3 126/14 126/14 126/16 131/21 151/17 178/9 187/16	ten [1] 93/15	
sufficient [1] 72/23	surprised [5] 138/11 140/15 152/18 174/17 174/18	taken [14] 6/11 7/13 16/10 26/22 33/4 55/16 61/3 75/16 85/13 95/10 110/18 162/1 181/21 188/1 143/3	tend [15] 4/22 54/14 64/3 86/12 100/21 105/11 107/16 109/17 112/19 113/25 115/7 122/24 125/4 125/9 149/11	
sufficiently [1] 30/21		takes [3] 36/17 37/16	tended [2] 108/23 152/13	
sugar [9] 5/25 6/5 12/8 12/14 12/23 13/2 83/2 87/15 172/25		talking [1] 141/7	tending [1] 14/10	
sugars [2] 82/24 142/20		talk [5] 8/5 55/14	tends [1] 86/18	
suggest [5] 18/21 48/1 65/20 109/11 112/19			tenor [1] 188/15	
suggested [3] 19/19 147/4 187/10			term [2] 171/8 175/25	
suggesting [4] 29/23 87/10 89/4 124/20			terms [23] 5/5 14/2 16/4 44/21 69/1 70/22 71/4 71/13 74/13 76/19 81/15 86/2	
suggestion [1] 188/13				
suggests [3] 16/21 56/17 171/21				
summaries [1] 126/8				
summarise [1] 41/11				
summarising [1] 75/14				
summary [6] 126/23				

T	80/5 93/12 114/17 122/4	4/10 5/1 5/13 7/8 9/9 9/12 9/15 10/4 12/16 13/18 13/18 13/24 14/19 15/21 15/24 16/14 17/2 17/8 17/16 18/10 18/14 18/17 19/15 20/6 21/3 24/17 24/24 25/2 25/8 25/8 25/9 25/17 25/18 25/22 27/12 29/12 29/13 29/14 31/11 32/16 32/21 34/6 34/19 36/6 36/6 36/8 36/9 37/12 40/22 45/9 47/24 49/2 53/22 56/3 56/4 56/5 57/14 66/21 68/25 69/6 69/8 69/9 69/19 70/12 70/17 70/17 70/19 70/20 71/3 73/5 73/25 74/3 74/7 74/9 74/9 74/21 75/6 76/4 76/9 76/9 76/11 76/12 76/13 76/14 76/17 77/19 78/3 78/3 78/6 78/9 78/10 78/14 79/6 79/9 80/11 82/13 82/23 83/5 83/6 83/7 83/13 83/14 87/3 87/7 91/5 92/24 92/24 93/1 93/2 93/3 95/6 95/8 95/12 96/5 98/2 98/10 98/15 99/8 99/17 101/12 101/13 101/13 101/14 101/18 101/19 101/20 101/25 103/22 109/1 109/6 109/6 109/7 109/16 110/13 110/14 110/16 110/16 111/8 111/8 111/9 111/10 111/23 113/7 113/24 114/10 114/11 114/16 115/7 115/8 117/5 117/17 121/10 121/18 122/3 123/17 127/20 127/21 128/5 130/22 147/16 151/22 155/18 158/21 159/17 163/8 164/7 167/7 168/22 169/15 175/19 176/23 176/25 181/8 184/23 186/14 187/8 188/9 188/18 189/23 189/23 190/1 190/6	24/16 24/25 25/1 25/18 58/10 95/15 110/8 121/9 thing [14] 10/11 16/8 35/24 39/3 50/23 78/11 97/2 105/8 108/20 109/9 113/9 117/23 122/2 155/7 things [14] 36/18 68/22 68/23 72/1 72/2 74/19 98/11 110/23 113/4 119/5 122/15 123/17 137/13 169/10 think [139] 14/5 15/5 17/8 22/19 24/17 27/21 28/1 28/18 28/21 29/17 30/9 30/21 36/12 36/20 37/22 37/25 39/22 41/2 43/5 44/2 44/20 47/8 47/25 48/5 49/1 50/18 50/21 51/10 52/13 54/3 54/11 54/22 54/23 55/5 55/6 55/18 55/23 56/16 58/3 58/24 60/5 60/7 60/14 60/22 61/21 62/5 63/3 63/6 63/10 63/16 64/2 64/18 64/21 65/19 71/2 71/10 72/8 72/12 72/25 77/7 77/16 80/6 80/21 80/25 83/22 83/22 83/25 85/6 85/9 85/10 86/6 89/12 90/2 90/13 90/22 91/11 91/13 94/7 99/5 99/10 100/25 101/18 102/5 102/14 102/15 102/24 103/8 104/8 104/10 104/15 105/11 105/25 106/3 106/9 107/12 107/25 108/1 108/3 108/15 109/5 109/10 110/7 110/18 110/21 111/21 112/9 112/12 112/21 113/23 115/18 116/18 117/7 117/23 117/25 118/3 118/16 119/8 120/22 121/24 122/15 122/22 123/24 125/17 126/13 126/14 126/16 131/21 134/13 141/20 142/2 148/1 149/3 153/6 154/1 157/13 160/2 160/3 183/15 185/20 thinking [7] 9/18 14/11 14/19 17/2 37/23 78/20 123/1 third [4] 13/23 81/1 166/25 176/9 thirds [1] 36/14 THIRLWALL [3]	123/20 128/7 192/9 this [273] Thomas [8] 152/2 152/17 153/1 153/14 153/20 154/20 155/4 189/9 Thomas's [1] 154/3 through [2] 17/22 178/24 those [52] 7/4 7/5 8/6 10/14 14/3 14/9 27/13 29/4 32/19 34/16 37/24 39/9 42/2 47/7 52/12 62/25 65/12 73/8 77/23 79/13 80/17 83/7 84/2 84/5 84/7 86/5 87/8 87/11 89/17 90/24 95/20 96/10 96/10 96/13 98/14 105/12 106/2 106/22 107/13 107/20 108/22 113/21 119/2 121/23 123/18 127/10 128/9 149/3 149/4 151/25 166/20 186/11 though [7] 22/7 24/14 62/3 62/12 91/4 110/3 123/4 thought [22] 11/22 13/18 52/1 60/24 77/25 96/17 96/18 96/22 96/25 97/10 97/17 102/16 102/22 104/19 107/8 107/19 117/10 119/4 125/3 135/24 142/19 147/19 thoughts [1] 97/17 threat [2] 184/8 184/10 three [25] 3/6 13/7 13/7 14/3 14/10 17/3 49/4 49/5 49/7 79/8 79/11 82/9 85/3 88/22 95/6 95/20 96/1 96/10 96/13 103/1 121/1 154/21 169/8 176/14 176/25 three years [1] 154/21 through [43] 6/15 6/16 8/5 16/7 20/20 21/2 22/10 26/10 30/16 33/13 35/22 42/2 51/18 52/1 54/21 55/11 69/2 70/20 73/3 73/8 75/11 78/10 84/12 87/25 91/16 91/19 92/22 92/24 93/5 96/17 96/21 100/23 102/22 107/21 109/23 121/16 124/8 126/19 137/18 160/3 179/20 183/12 190/22 throughout [3] 46/6
----------	----------------------------	--	---	---

T	timetable [1] 128/15	147/15 157/7 159/9	93/4 124/9 146/10	117/13 125/10 126/7
throughout... [2]	timing [1] 98/19	160/18 160/20 166/12	175/4	177/14 184/8
58/12 132/19	timings [3] 22/11	167/17 168/3 174/18	turnaround [1] 35/25	understanding [11]
thrust [1] 89/5	85/3 85/14	training [62] 2/2	turnover [1] 188/22	4/11 46/18 75/14
Thursday [2] 44/7	titled [1] 178/15	15/17 37/12 38/20	turns [1] 102/9	77/16 77/18 77/25
191/5	today [6] 1/10 21/20	127/8 127/11 129/14	twice [3] 10/2 132/12	94/1 94/14 118/1
thus [1] 133/23	34/9 45/24 65/17 66/3	129/18 131/14 131/17	188/15	120/19 155/13
time [134] 2/6 4/5	together [8] 3/16	133/3 133/4 133/6	twins [1] 172/23	understands [2]
4/17 6/10 7/18 8/14	12/12 92/5 101/4	134/2 134/4 136/13	two [35] 2/12 8/6	28/12 29/9
9/17 9/18 9/21 9/23	110/23 135/13 141/22	141/16 144/3 144/11	8/15 23/20 29/15 31/5	understood [2]
10/4 10/6 15/5 15/5	179/20	144/22 146/5 146/13	36/14 49/5 49/7 68/16	139/25 168/10
16/9 16/15 19/7 20/20	told [20] 2/14 3/5	148/7 148/8 148/9	69/4 69/7 71/5 73/17	undertake [4] 3/25
28/1 29/12 31/5 33/5	12/4 16/14 29/15	150/12 150/14 150/17	73/18 76/21 80/9	19/10 32/14 75/20
35/8 35/14 35/20	33/25 35/2 45/3 45/4	150/18 150/21 150/23	82/17 84/6 84/14 99/5	undertaken [3] 19/6
35/25 43/21 46/9	63/23 83/11 83/13	150/25 151/2 154/21	99/8 99/21 99/23	81/17 189/13
46/19 47/19 48/7	83/14 87/21 101/12	154/22 154/23 154/24	105/5 118/14 120/13	undertaking [2]
48/12 49/11 49/12	106/25 107/21 119/24	155/3 155/20 156/19	121/1 126/17 129/7	144/3 189/6
49/14 51/23 52/1 53/9	169/13 182/25	156/20 158/19 160/14	134/1 150/8 156/18	underwent [1]
53/17 53/18 55/10	Tomes [1] 180/25	162/9 162/10 165/7	160/4 179/20	156/18
55/12 57/19 59/3	tomorrow [1] 191/1	165/8 165/10 165/15	two days [4] 31/5	undetected [6] 8/8
59/10 61/24 62/14	Tony [4] 183/3	165/18 166/10 166/25	84/6 84/14 129/7	9/1 11/2 11/16 16/20
62/21 63/22 68/12	183/21 184/1 184/22	167/15 168/6 169/23	two hours [1] 126/17	23/4
68/22 70/21 72/22	Tony Chambers [3]	171/14 176/20 187/15	two minutes [1] 99/8	unexpected [19]
74/25 76/22 78/10	183/3 183/21 184/22	188/23 189/6 189/12	two years [1] 156/18	93/9 102/21 109/18
81/11 83/7 85/4 85/13	Tony Chambers' [1]	189/14	two years' [1] 134/1	127/24 133/14 139/23
88/9 88/21 88/25	184/1	transcribed [1] 26/10	two-hour [1] 160/4	140/9 143/9 143/15
91/18 91/23 92/5 92/9	too [13] 13/8 13/13	transfer [1] 119/14	two-minute [1] 99/5	145/9 149/1 152/25
92/13 92/15 96/1	14/6 17/19 34/18	transferred [1] 143/4	two-thirds [1] 36/14	154/17 157/16 162/4
96/17 96/21 97/14	39/19 71/20 78/16	transfers [1] 186/3	type [3] 76/3 76/7	162/6 162/7 172/16
97/18 97/22 98/4 98/5	78/21 109/7 122/5	transient [1] 78/11	158/22	176/5
98/21 99/9 100/4	163/25 188/14	translated [1] 26/9	typed [1] 49/1	unexpectedly [2]
100/21 104/13 104/20	took [5] 2/7 2/15	transmission [1]	types [1] 19/15	159/14 176/1
105/23 106/4 112/9	127/3 142/1 175/22	122/13		unexplained [2]
117/19 125/7 127/2	top [14] 6/24 6/24	transparent [1] 181/3	U	145/18 173/15
129/3 129/6 129/20	32/2 42/22 43/24 51/8	transport [7] 31/14	UK [4] 4/4 19/14	unfamiliar [1] 130/22
131/18 133/15 133/22	68/5 71/18 80/25 82/7	75/22 75/23 76/15	19/17 20/7	unfortunate [1] 136/8
134/1 135/5 136/10	85/3 106/8 185/24	76/16 76/18 84/23	Ukoh [7] 172/21	unfortunately [1]
137/1 137/5 137/22	186/1	transported [2]	173/9 173/13 173/20	22/20
140/3 140/10 140/19	topic [1] 134/18	31/10 84/22	173/23 174/3 174/5	unfounded [1] 179/8
140/21 141/10 142/4	total [4] 126/14	trauma [1] 149/6	ultimately [3] 25/10	union [4] 53/12 53/13
143/16 143/17 143/20	131/11 157/24 168/18	treatable [1] 139/16	36/23 111/2	56/4 132/2
144/11 145/24 146/2	totally [1] 41/23	treated [1] 156/16	umbrella [1] 68/23	unique [2] 41/16
150/2 153/7 153/10	touched [1] 118/17	treatment [1] 184/19	unable [4] 29/4 136/5	170/21
154/6 157/21 158/8	tough [1] 129/20	triangle [1] 79/15	169/17 181/18	unit [82] 45/8 46/2
158/14 158/20 158/22	towards [13] 14/10	tried [6] 14/15 37/19	unaware [3] 137/16	46/8 46/13 46/19
158/24 161/7 161/11	22/3 45/15 51/8 54/22	99/6 100/7 100/25	146/3 147/6	46/22 46/25 47/2
163/7 169/5 173/1	80/25 98/20 118/20	120/23	uncomfortable [1]	47/15 47/19 47/21
176/10 178/6 180/5	133/7 148/13 150/15	triplets [1] 179/4	25/24	48/5 48/10 48/14
185/18 186/12 190/3	162/12 184/1	trouble [1] 108/1	uncommon [2] 26/18	49/13 52/22 53/1 53/4
time-consuming [1]	toxicology [1] 123/8	true [3] 1/24 40/20	78/7	57/13 58/7 59/12
4/17	TPN [1] 131/11	66/20	under [14] 14/25	60/12 62/10 62/18
timed [1] 92/4	track [2] 85/16 85/17	Trust [9] 2/24 51/24	41/22 41/24 42/23	62/24 63/16 72/21
timeline [2] 61/25	trail [1] 28/15	54/21 131/21 138/20	46/22 55/21 58/9	73/1 81/13 81/16
153/17	trails [1] 113/23	147/5 148/14 155/18	68/23 70/24 78/19	82/25 94/10 101/13
timelines [1] 185/15	train [1] 122/12	162/17	90/8 112/24 128/4	102/10 102/19 105/15
timely [2] 165/4	trained [1] 151/5	Trusts [1] 168/11	187/9	105/18 112/17 115/25
185/16	trainee [16] 134/6	try [15] 5/13 6/13	undergoing [1]	117/22 118/1 122/19
times [16] 9/7 32/3	134/23 135/10 136/14	26/8 52/8 73/21 74/11	129/14	127/14 127/17 129/4
49/6 49/7 57/9 59/5	136/23 152/8 152/9	78/14 97/3 97/5	understand [22] 4/15	131/6 135/11 137/3
64/1 70/18 71/9 73/19	154/4 154/7 160/21	101/17 104/18 107/25	5/15 10/21 42/10 61/9	137/6 140/5 140/5
93/15 99/22 156/8	168/10 168/13 171/2	108/24 121/23 122/9	72/16 76/21 76/24	140/9 140/19 143/11
161/15 164/8 187/21	188/7 188/11 189/10	trying [5] 17/5 94/7	78/14 81/9 87/22	145/3 147/7 148/2
times.' [1] 153/5	trainees [13] 3/15	102/11 119/21 183/4	90/18 99/16 99/21	148/23 152/4 152/6
	127/6 129/25 137/12	turn [6] 45/11 56/23	108/25 109/12 113/13	154/10 154/19 156/24

U	upcoming [1] 51/12	24/12	53/16 61/3 93/25	29/3 46/6 73/13
unit... [19] 162/8	update [1] 148/7	values [1] 8/6	94/13 101/17 122/11	124/22 124/24 129/6
166/24 169/14 170/9	updated [1] 45/22	variable [2] 73/13	129/11 132/18 144/24	160/23
170/25 174/23 175/5	upgrade [1] 119/24	98/10	150/7 151/4 153/20	warning [3] 58/16
176/9 180/3 181/15	upon [8] 25/24 26/23	variety [2] 41/20	172/4 184/5 184/12	90/15 90/19
182/21 186/12 187/21	64/19 71/14 72/20	68/22	188/5	warranted [1] 14/22
188/4 188/5 188/21	76/20 92/25 118/17	various [6] 32/16	viewed [3] 183/22	was [575]
189/14 189/24 189/25	upset [6] 62/20	46/6 69/2 131/4	188/18 190/6	wasn't [24] 7/25
units [12] 8/7 8/11	148/25 153/6 153/9	169/22 173/16	views [1] 30/8	10/11 11/17 22/7
8/15 8/17 8/19 24/12	153/9 170/5	vary [2] 98/12 151/21	virtual [1] 106/15	29/23 38/20 38/22
30/20 74/20 129/12	upstairs [1] 91/15	vehicle [1] 31/10	visible [3] 114/11	61/22 72/7 73/15
154/15 156/6 189/2	urgent [11] 7/9 7/21	Ventress [9] 141/14	160/23 185/22	73/17 73/18 75/20
university [2] 2/2	7/24 10/7 28/3 70/11	142/6 142/12 143/6	visibly [1] 153/9	76/21 76/25 86/22
2/23	92/23 93/6 93/9	143/14 143/21 143/25	visit [4] 46/5 46/12	95/13 101/7 102/20
unknown [3] 85/4	139/11 179/17	144/2 144/10	46/16 61/23	105/9 106/23 115/15
85/4 170/17	urgently [2] 107/10	Ventress' [1] 142/25	visited [2] 45/23	125/7 167/3
unless [4] 7/9 7/20	172/14	VER [1] 98/21	49/12	waste [1] 118/15
75/8 168/13	urine [1] 123/8	verbal [1] 139/15	visiting [7] 46/2 46/4	way [25] 2/9 11/15
unlikely [1] 172/13	urology [1] 186/4	Verghase [4] 155/19	46/8 47/14 48/14	11/21 14/11 15/25
unlucky [1] 161/14	us [54] 1/16 1/19	155/25 156/5 156/13	49/15 62/24	17/11 23/16 29/10
unnatural [1] 159/22	2/14 2/16 3/5 4/15	verification [3] 98/24	visitor [1] 182/20	33/3 49/12 53/23
unpleasant [1]	6/16 8/5 8/24 9/17	100/3 100/9	visits [2] 49/22 53/4	65/10 81/1 91/16
136/17	9/23 10/25 12/4 15/25	verified [6] 92/18	visualised [1] 182/11	91/19 94/4 96/25
unpredictable [1]	27/11 29/15 31/11	92/19 99/9 100/12	vital [2] 26/7 28/11	108/19 113/12 116/11
164/8	33/25 34/10 35/2	100/14 101/22	voicing [1] 161/10	116/12 124/11 126/18
unread [1] 29/20	35/13 35/15 36/2 36/9	verify [2] 100/6 101/3	vomited [1] 161/24	137/4 148/3
unsure [1] 140/20	39/15 39/19 41/11	verifying [3] 98/18	vulnerable [1] 46/1	ways [2] 29/15
unsuspicious [1]	42/15 61/10 65/17	98/25 101/19		159/15
17/7	66/12 68/19 69/6 71/5	Veronika [1] 136/23	W	we [276]
unthinkable [3] 30/3	76/24 77/24 87/21	versa [1] 132/23	wait [2] 100/18	we'd [10] 6/15 16/8
102/13 179/10	98/23 102/4 102/22	very [86] 8/22 8/25	119/24	19/23 28/1 35/17
until [14] 7/10 7/20	106/25 107/16 109/22	10/24 11/1 11/9 16/20	waiting [2] 87/14	102/24 102/25 108/24
48/24 49/16 58/13	113/13 115/24 116/2	18/5 21/18 23/10	120/1	119/5 119/22
59/4 69/10 76/14	116/13 120/16 121/25	23/14 23/25 24/5 25/6	walk [2] 75/11 115/25	we'll [7] 3/19 9/3
100/18 100/22 118/9	122/20 123/12 125/7	25/16 26/10 26/13	walked [1] 124/13	23/18 37/14 88/14
119/24 191/1 191/4	170/5 181/17	26/16 26/17 26/18	walking [1] 115/16	107/6 110/1
untoward [2] 99/2	use [8] 32/16 38/18	27/9 29/1 38/6 39/8	wand [1] 82/14	we're [24] 4/2 4/25
142/23	94/11 97/13 104/5	39/11 39/13 39/17	want [21] 4/9 5/9	9/11 21/11 21/13 25/3
unusual [33] 24/21	113/15 121/8 189/20	42/3 48/7 52/1 53/11	5/13 14/24 19/23 24/3	30/6 31/24 34/8 36/19
25/1 56/7 57/18 72/8	used [14] 8/19 9/25	53/13 62/17 62/20	26/20 28/16 37/13	36/20 36/22 36/23
72/8 73/18 75/7 93/10	9/25 10/2 24/11 24/12	62/21 62/21 62/21	57/3 65/7 73/23 74/23	39/24 41/15 49/14
108/6 108/9 108/10	37/18 37/22 102/2	63/21 65/16 66/8 68/5	78/14 85/2 91/20	71/14 76/19 80/20
109/19 109/22 110/17	104/6 104/24 105/4	69/22 70/2 72/3 73/1	102/14 103/10 108/10	92/17 94/11 94/12
114/1 130/2 130/15	106/23 168/4	73/12 77/2 78/11 81/8	115/5 132/1	96/4 125/25
135/4 140/19 140/21	useful [3] 54/23	82/18 86/1 87/2 87/15	wanted [6] 35/11	we've [29] 2/19 12/5
141/2 145/11 145/13	117/1 155/16	92/15 95/1 97/22	70/12 73/16 74/16	18/12 22/4 24/19
150/4 153/5 154/16	using [4] 19/21 23/21	98/10 100/16 102/13	78/3 183/7	35/19 36/10 38/22
157/19 157/19 168/1	24/6 82/24	105/22 106/5 117/18	wanting [1] 74/4	38/25 49/2 50/3 63/22
186/15 190/2 190/6	usual [5] 50/23 51/15	120/22 120/25 122/14	ward [45] 21/12	71/2 75/11 82/10
unusually [1] 131/5	88/7 99/6 177/23	122/21 123/6 123/25	21/25 22/10 24/24	83/22 84/17 85/3
unwell [2] 164/4	usually [19] 70/14	124/2 124/6 125/21	26/4 27/2 27/13 28/24	88/25 90/20 93/13
164/7	73/22 74/4 74/16	129/3 133/16 147/16	29/7 32/18 34/7 37/5	107/8 109/8 119/17
up [38] 2/5 2/7 2/15	74/17 74/22 75/4 75/7	148/19 149/5 151/21	53/4 72/16 72/20 74/7	119/20 119/24 120/23
2/16 3/19 15/22 17/24	75/8 76/15 77/5 83/2	153/8 156/17 160/23	74/8 74/10 74/25 75/7	121/15 123/7
23/10 23/23 24/1 40/7	92/13 98/3 114/7	165/3 167/1 167/10	75/8 75/16 82/21	weapon [1] 38/19
42/9 45/11 47/25 49/4	114/12 118/13 133/2	174/17 184/9 188/22	83/11 83/14 83/15	website [1] 128/7
50/12 56/23 56/24	143/3	190/25	101/14 101/18 101/20	wedding [1] 51/12
59/22 61/6 62/2 70/2	V	via [6] 3/4 26/12	103/22 107/3 109/1	Wednesday [1] 1/1
77/11 82/2 82/4 87/6	vague [1] 131/4	28/25 32/16 128/7	111/14 115/17 115/22	week [17] 10/2 34/10
87/25 93/4 100/20	vaguely [1] 104/22	148/14	116/21 117/16 124/13	44/11 44/12 57/22
108/2 113/18 121/12	validation [1] 119/10	vice [1] 132/23	124/25 127/4 132/11	60/1 71/6 71/7 71/14
123/22 133/4 162/5	valuable [1] 97/13	vice versa [1] 132/23	142/5 163/13 169/2	71/22 84/17 129/7
163/12 176/22 180/4	value [3] 8/2 8/3	view [21] 18/11 23/21	187/20	130/24 132/12 142/16
		26/19 28/25 43/14	wards [9] 16/24 19/1	169/8 188/15

W	68/24 69/17 69/17 70/14 70/24 71/3 71/5 71/9 71/22 72/1 72/1 73/2 74/9 74/9 74/20 74/21 76/14 86/7 87/3 87/20 92/21 96/3 97/17 97/19 97/23 97/24 97/25 98/2 98/10 98/15 98/20 99/17 101/12 101/18 101/20 102/3 104/19 104/24 105/5 106/19 106/20 109/6 112/25 114/16 117/7 117/18 118/1 118/17 119/11 121/18 122/19 123/22 124/24 127/3 127/9 127/16 127/18 127/20 127/22 129/18 129/21 130/2 130/22 131/9 131/15 133/1 134/1 134/8 137/11 137/12 141/3 141/6 142/7 142/14 142/23 143/15 143/17 144/17 145/17 147/5 147/16 152/15 152/25 153/8 154/17 156/11 157/1 158/1 158/21 158/21 159/7 159/10 159/17 159/17 161/2 163/4 163/13 164/7 164/7 166/3 166/7 166/17 167/7 168/1 169/15 169/15 170/25 174/18 175/10 175/16 177/4 177/17 179/7 179/9 179/20 180/17 180/21 180/23 181/3 181/5 181/12 183/2 183/4 183/16 184/20 185/12 186/20 188/6 188/9 188/14 188/17 188/21 189/1 189/2 189/3 189/16 weren't [10] 17/16 21/3 21/5 53/8 69/8 74/8 101/15 109/7 129/3 129/9 what [133] 1/10 3/13 5/8 5/20 7/4 8/5 9/22 10/3 10/14 10/25 12/9 14/18 15/17 15/18 18/13 19/8 19/23 21/17 23/2 23/3 23/18 25/24 29/10 29/14 30/5 34/3 35/15 35/15 36/6 36/19 39/23 41/12 43/16 45/4 45/6 46/12 46/18 49/16 49/24 50/1 52/1 55/4 55/5 56/19 58/18 58/23 63/1 63/1 63/2 65/2 68/19 69/1 72/1 72/1 72/21 74/13 75/1	78/4 78/14 79/5 80/14 81/9 83/10 83/13 83/14 85/4 86/3 86/4 86/6 86/11 86/17 87/3 88/11 89/7 90/12 91/2 92/21 92/23 93/17 94/2 94/8 94/8 95/6 97/7 97/14 97/17 98/3 98/10 98/13 98/15 98/23 99/5 100/4 100/20 101/8 103/9 104/19 105/22 107/25 109/1 109/10 110/16 110/24 111/3 111/5 111/8 111/11 112/16 114/10 116/7 117/20 119/8 120/3 120/19 121/17 124/7 125/3 125/8 125/10 131/15 140/8 141/3 144/16 148/25 153/6 154/11 154/25 157/15 161/11 162/10 163/12 165/11 183/11 what's [5] 22/15 23/22 76/6 80/10 82/14 whatever [2] 26/20 58/11 WhatsApp [5] 50/7 50/17 50/22 51/20 53/7 whatsoever [1] 44/24 when [85] 5/18 7/5 11/3 11/20 13/19 14/19 14/21 16/13 16/14 27/21 31/13 34/19 36/5 36/6 43/22 44/3 44/16 44/19 48/12 49/21 54/5 54/16 54/25 59/4 62/11 62/23 63/11 68/24 71/9 72/5 73/24 74/4 74/13 74/24 75/2 76/9 77/4 80/11 82/12 83/1 83/7 85/3 85/16 95/17 105/4 111/6 112/25 116/20 117/2 117/24 118/10 119/22 124/19 126/14 129/17 132/9 133/9 133/11 136/4 136/5 138/8 138/11 138/12 140/20 142/14 143/16 145/25 146/14 146/25 149/9 151/18 156/8 157/9 158/14 159/15 161/24 164/14 165/4 170/8 170/23 174/15 174/25 181/16 186/14 187/25 whenever [1] 15/21 where [47] 4/8 10/3 18/15 29/5 30/7 32/17 36/1 45/16 55/19 59/5	61/11 64/25 65/7 68/2 68/7 69/8 74/20 81/6 82/6 83/21 88/12 98/20 106/13 109/20 110/6 111/6 113/5 116/22 117/3 123/9 124/23 132/3 135/24 136/3 151/9 151/16 154/22 158/11 162/11 163/19 163/24 165/2 170/17 173/22 177/15 182/5 189/15 whereas [1] 11/10 whether [47] 15/6 19/3 20/10 24/25 25/10 25/11 29/19 30/2 30/6 31/20 36/15 37/7 56/9 60/2 61/24 69/25 70/3 70/3 77/4 79/23 85/8 87/23 87/24 92/12 96/5 96/16 98/7 105/1 107/19 107/20 109/3 109/5 109/15 109/16 110/13 112/23 113/12 117/11 117/20 123/2 126/18 126/18 161/6 171/6 176/19 186/17 188/25 which [67] 1/7 5/7 10/15 15/25 20/7 20/19 20/24 23/11 24/13 25/19 29/11 32/17 35/2 35/18 42/10 50/18 54/15 60/19 69/13 69/14 69/15 70/24 73/19 74/10 76/12 76/15 77/21 78/11 85/14 86/10 86/17 92/5 92/21 95/17 107/10 109/20 110/18 113/10 114/4 119/20 119/25 121/7 121/18 123/23 124/10 142/3 149/6 149/18 154/10 154/21 155/7 158/12 158/25 161/14 174/23 176/21 177/4 179/18 180/16 182/15 183/19 185/16 185/21 186/12 186/22 188/23 190/14 whichever [1] 76/10 while [3] 27/15 101/20 133/4 whilst [13] 14/9 20/4 129/23 132/24 140/23 143/22 146/13 150/4 169/17 188/13 188/20 189/5 189/12 whistleblowers [1] 156/15 who [67] 12/19 13/19 13/24 17/1 18/6 22/9	25/8 25/9 26/3 30/1 34/9 37/21 45/17 53/8 53/14 56/17 58/8 68/9 74/19 75/4 75/9 78/2 111/24 116/3 120/8 120/12 120/15 121/8 126/25 127/3 127/10 127/13 127/15 127/16 128/2 128/4 128/9 128/20 143/25 145/13 146/15 155/13 155/17 157/8 160/19 161/7 163/11 164/17 167/1 169/13 170/11 171/8 171/10 174/18 175/4 175/16 176/15 179/22 181/19 183/14 186/14 187/7 188/4 188/18 189/3 189/13 190/23 who's [3] 3/10 16/25 120/10 whoever [4] 70/20 73/25 74/3 101/12 whole [5] 27/3 58/13 77/17 141/1 167/11 whose [1] 153/24 why [38] 14/21 19/2 19/12 28/14 32/21 35/18 36/12 45/9 46/18 52/7 52/24 53/25 60/14 60/24 61/9 61/13 62/22 62/22 63/24 63/24 63/25 69/1 76/24 76/25 79/18 79/20 87/15 96/24 99/21 102/4 102/7 113/13 123/11 139/20 156/3 164/4 169/15 177/17 wider [6] 151/1 151/14 153/18 162/3 183/10 184/19 will [45] 1/11 6/9 11/22 14/3 23/25 23/25 24/24 25/16 25/22 25/23 26/16 34/23 35/22 36/25 37/2 37/3 37/5 37/10 37/13 39/22 39/25 43/15 43/17 44/22 45/1 52/14 52/15 52/22 59/24 60/6 60/8 65/21 90/24 104/8 111/2 126/4 126/13 126/16 126/21 128/19 151/21 160/6 163/10 187/24 191/1 Wirral [1] 120/11 wish [1] 64/15 within [35] 3/8 7/12 10/5 14/9 14/25 15/12 20/24 34/15 38/12 68/2 77/8 79/11 84/5 84/14 86/8 86/20 95/1
----------	--	---	--	---

W	167/8 167/14 169/7 169/21 170/23 172/8 172/21 174/9 175/19 188/4 188/6 189/13 working [42] 6/9 6/18 12/5 22/9 32/22 36/21 36/22 40/24 41/2 55/15 68/14 76/15 95/4 102/20 122/9 127/18 132/24 133/25 136/24 137/4 141/10 143/22 144/25 145/4 147/10 147/12 152/13 152/15 154/14 155/18 155/22 156/8 156/21 159/11 165/5 169/20 174/25 175/14 184/17 184/25 188/8 190/12 workload [2] 4/25 142/3 workplace [1] 41/15 works [2] 94/1 119/9 worried [7] 103/7 133/20 147/18 153/25 166/23 169/15 169/18 worry [1] 176/18 worrying [1] 102/6 worst [2] 14/15 17/4 worth [1] 122/5 would [352] wouldn't [28] 4/18 6/4 7/8 14/4 19/7 20/2 20/21 21/1 21/2 21/4 21/24 29/21 31/22 44/15 49/11 51/19 75/6 75/7 77/15 91/4 96/24 98/4 98/14 98/17 111/2 115/3 115/12 131/21 write [18] 36/9 92/13 111/2 113/16 114/5 114/19 114/20 114/21 114/23 115/24 115/25 116/6 125/4 125/6 125/9 125/11 125/12 125/13 writing [4] 24/8 42/22 115/17 121/25 written [13] 17/23 43/11 43/20 58/16 113/19 114/24 117/15 128/8 139/20 180/10 188/1 188/3 190/23 wrong [12] 17/23 17/24 17/25 62/4 63/24 64/9 64/11 77/18 102/25 110/7 115/4 119/7	18/3 20/12 21/22 30/9 34/5 49/10 84/7 104/22 116/24 120/5 year [11] 1/20 40/18 49/8 66/17 106/21 113/15 117/14 118/14 121/2 166/25 169/14 years [14] 36/25 49/6 88/9 106/18 113/22 119/21 120/1 154/19 154/21 156/15 156/18 158/18 170/13 170/22 years' [1] 134/1 yes [244] yesterday [1] 52/22 yet [5] 120/2 121/25 122/11 125/17 190/8 you [587] you'd [8] 64/2 73/21 87/1 100/21 100/22 109/9 110/24 116/7 you'll [2] 29/3 59/25 you're [20] 3/20 10/24 15/12 19/10 33/8 33/16 48/5 50/17 55/10 56/19 63/4 71/2 71/2 80/21 98/25 99/1 103/4 111/13 126/1 126/7 you've [22] 2/14 3/5 12/4 29/15 29/18 33/15 33/25 35/2 50/21 54/22 58/3 58/24 58/24 60/2 65/8 71/14 87/21 100/18 102/22 104/6 106/25 110/21 you,' [1] 163/23 your [137] 1/16 1/24 3/8 3/24 3/24 4/11 6/18 7/13 8/24 11/21 14/9 14/11 15/12 15/18 19/21 19/22 20/24 21/1 21/11 22/12 22/16 23/20 23/21 23/21 24/6 24/7 25/15 25/19 28/17 30/8 30/22 31/4 32/12 33/25 35/13 37/10 37/22 38/12 38/16 38/23 39/2 39/15 40/15 40/21 41/12 42/6 42/11 42/16 46/12 46/18 47/13 47/18 48/1 50/21 50/24 52/24 53/23 54/7 54/8 54/22 54/25 58/3 61/7 63/3 63/10 64/2 64/15 65/16 66/12 66/20 66/22 67/2 67/23 67/23 70/13 70/22 71/15 71/18 71/23 72/15 72/21 75/12 75/14	75/15 75/17 75/19 75/19 75/21 81/21 83/10 83/12 83/17 83/23 85/5 88/22 90/19 91/25 92/10 94/2 94/12 94/13 95/20 97/6 97/8 97/14 98/19 100/4 101/4 102/4 102/22 103/4 104/5 104/7 104/7 104/11 104/12 105/13 106/12 107/6 107/16 110/6 110/7 110/12 113/10 113/13 114/5 116/18 117/12 117/15 117/20 118/6 118/17 118/18 118/24 122/11 126/19 160/3 yours [2] 4/20 10/12 yourself [6] 30/16 32/20 43/8 89/11 110/21 112/24
	Z		
	ZA [6] 24/19 130/13 130/14 130/18 130/24 130/25 ZA's [1] 131/1 zero [3] 8/13 22/24 24/17		
	X		
	x-rays [1] 173/17		
	Y		
	yeah [12] 17/6 17/14		