PD

Witness Name: Dr Katherine Lyddon Statement No.: 1 Exhibits: 0

Dated: 19/04/2024

THIRLWALL INQUIRY

WITNESS STATEMENT OF DR KATHERINE LYDDON

- 1. My full name is Dr Katherine (Kate) Lyddon, MBChB (2012 Liverpool), MRCPCH (2018).
- 2. I started my career as a foundation doctor at the Countess of Chester Hospital (COCH) in August 2012 August 2014. This included a rotation in paediatrics and neonates between April-August 2014. During this time, I worked on the paediatric ward and neonatal unit (NNU) including the postnatal ward and attending deliveries. I also reviewed children in A&E and attended outpatient clinics alongside a consultant. When working on the wards (paediatrics and neonatal) I was generally working alongside a senior colleague. My role involved more simple tasks and reviewing the most well babies and children. Generally, the registrars looked after and reviewed the most unwell patients. Towards the end of my rotation, I would attend deliveries alone, and the majority of the work on the postnatal ward was done without direct supervision, however if I asked for help or a senior review then this was completed.
- 3. I then continued at COCH as a trust grade junior doctor (not in a training programme) on the tier 1 rota between August 2014 and September 2015. My role was very similar as described above. As I grew in experience and confidence I would do more independently and was allocated to see some of the more complex patients with senior support. Knowing I wanted to start paediatric training (and later in the year knowing I had a place in training) I started to undertake more complex procedures with senior support. This isn't usual for all senior house officers (SHOs) (doctors on the tier one rota) who aren't in paediatric training.

- 4. In September 2015 I started paediatric run through training in the Mersey deanery. This involved rotating hospitals and departments every 6 months until I completed my training and became a consultant in October 2023.
- 5. During my training I returned to COCH on several occasions. The first-time being September 2017 September 2018. During these 12 months, I was an ST3 level (first year registrar) on the tier 2 rota. This including work on the paediatric ward, neonatal unit and outpatient clinics. During this rotation out of hours (evenings/ nights/ weekends) I would be the only senior doctor present. The consultants were present until early evening and for some of the weekend daytime, and the rest of the time were on call and available to attend. In office hours I was one of the most junior registrars on the rota. Work included ward rounds on the paediatric and neonatal wards, reviewing patients on the postnatal ward if there were concerns, attending high risk deliveries, or supporting junior members of staff to attend deliveries, running outpatient clinics independently with the support of consultants and reviewing unwell children in A&E.
- 6. I next returned to COCH in March 2020 for 6 months as an ST5 trainee March 2020 Sept 2020. My roles were as outlined above as an ST5. During this rotation I was no longer one of the most junior registrars and was a "mid-level" registrar. This meant I was more confident and completed more tasks independently.

My Career and employment to date

- 7. My career and employment to date is as follows:
 - Macclesfield Hospital (East Cheshire NHS Trust) Locum consultant paediatrician
 Full time. 8 April 2024 present
 - Countess of Chester Hospital NHS Trust Locum consultant paediatrician
 Full time. 9 October 2023 7 April 2024
 - Leighton Hospital (Mid Cheshire Hospitals NHS Foundation Trust) ST 8: General paediatrics with neonates
 - Full time. March 2023 October 2023
 - Countess of Chester Hospital NHS Trust ST 8: General paediatrics with neonates
 Full time. September 2022 March 2023

- Leighton Hospital (Mid Cheshire Hospitals NHS Foundation Trust) ST 7: General paediatrics with neonates
 - Full time. March 2022 September 2022
- Countess of Chester Hospital NHS Trust ST7: General paediatrics with neonates
 Full time. September 2021 March 2022
- Alder Hey Children's NHS Foundation Trust ST6: Paediatric Rheumatology Registrar
 - Full time. March 2021 September 2021
- Alder Hey Children's NHS Foundation Trust ST6: Paediatric Oncology Registrar
 Full time. September 2020 March 2021
- Countess of Chester Hospital NHS Trust ST5: General paediatrics with neonates
 Full time. March 2020 September 2020
- Wirral University Teaching Hospital NHS Foundation Trust ST5: Neonatal Registrar
 - Full time. September 2019 March 2020
- Warrington Hospital (Warrington and Halton Hospitals NHS Trust) ST4: General
 Paediatrics with neonates
 - Full time. March 2019 September 2019
- Glan Clwyd Hospital, (Betsi Cadwaladr University Health Board) ST4:
 Community Registrar
 - Full time. September 2018 March 2019
- Countess of Chester Hospital NHS Trust ST3: General paediatrics with neonates
 Full time. September 2017 September 2018
- Alder Hey Children's NHS Foundation Trust ST2: Paediatric Rheumatology SHO
 Full time. March 2017 September 2017
- Alder Hey Children's NHS Foundation Trust ST2: Paediatric Cardiology SHO
 Full time. September 2016 March 2017
- Warrington Hospital (Warrington and Halton Hospitals NHS Trust) ST1: General
 Paediatrics with neonates
 - Full time. March 2016 September 2016
- Liverpool Women's Hospital NHS Foundation Trust ST 1: Neonatal SHO
 Full time. September 2015 March 2016
- Countess of Chester Hospital NHS Trust Trust grade: General paediatrics with neonates
 - Full time. Aug 2014 September 2015

- Countess of Chester Hospital NHS Trust Foundation Year 2
 Full time. August 2013 August 2014
 - Emergency Medicine (August 2013 December 2013)
 - General Practice (December 2013 April 2014)
 - Paediatrics (April 2014 August 2014)
- Countess of Chester Hospital NHS Trust Foundation Year 1
 Full time. August 2012 August 2013
 - General medicine (April 2013 August 2013)
 - General Surgery (December 2012 April 2013)
 - General medicine (August 2012 December 2012)

The culture and atmosphere on the neonatal department at the hospital in 2015-2016

- 8. I worked in the paediatric and neonatal department from January 2015- September 2015. During this time, I was a very junior member of the medical team. I had a supervisor, from memory this was Dr Newby, however this is the only job I didn't have to keep a formal portfolio for, so don't have any records. I have no recollection of ever knowing who the department managers were at the time, or even what division the department sat in. Dr Jayaram was the clinical lead; Eirian Powell was the neonatal unit manager and either Anne Murphy or Anne Martyn (now McGlade) was the paediatric ward manager. (I can't remember at what point Anne Murphy retired and Anne Martyn took over.)
- 9. In terms of whether I had any concerns and reporting, my first contact would have been with one of the consultants, either the consultant on call or my supervisor depending on the nature of the concern.
- 10. As stated above I am not sure who the relevant managers were at the time to comment on the relationship between the clinicians (medical or nursing/ midwifery). In respect to the relationship between medical and nursing staff I have mixed recollections. When I first started working on the neonatal unit (April 2014) I was very inexperienced as a general doctor and a complete novice in paediatrics and neonates. At the time the nursing staff sometimes made it obvious that this was frustrating. As I gained more experience and

throughout 2015, until I left in September, I was generally treated with warmth and respect. I'd gone from being a complete novice to one of the most experienced SHOs (tier 1 doctors) which meant I had a good understanding of how the unit worked and my role compared to many of my peers. I recall the unit being a busy environment but from memory there was good teamwork and camaraderie between the junior medical and nursing teams.

- 11. At the time the consultants weren't very present on the neonatal unit due to covering both paediatrics and neonates. There were two days a week the consultant would complete the neonatal ward round and on other days they would attend for a board round/ handover after completing the paediatric ward round. From memory there was some resentment from the nursing staff that the consultants weren't more present.
- 12. From my perspective the quality of relationships on the neonatal unit didn't affect the care received by the patients. If there was any larger disquiet I was unaware of it in my role.
- 13. I was a very inexperienced doctor at this time, and since qualifying had only worked at COCH. Apart from community placements (GP) and specialist placements (psychiatry) the last two years of my medical training at the University of Liverpool had been placements at COCH. I therefore had limited experience of the culture and environment of different hospitals. My foundation training meant I rotated though different departments across different specialities (adult medicine, adult surgery, and A&E) as well as paediatrics and neonates. To me, the paediatric and neonatal teams were one of the friendliest and teamwork focused departments I had worked for. There was a lot less of a hierarchical approach than in adult medicine. The unit was busy but the staff seemed to enjoy the workload and the breadth of acuity that was cared for on the unit. As such a junior member of the team I had little to no contact with the unit manager or senior team.
- 14. As a very junior doctor (I had been qualified 2.5-3 years during 2015) I had no real awareness of the bigger hospital picture and no insight into the management and governance of the hospital as a whole. I was starting to understand more around the governance processes within a department but didn't really understand the mechanics of how all the departments fit within divisions and within the trust. This is something I am only

truly starting to work out as a new consultant. I was unaware of any relationships which may have impacted on the wider running of the hospital.

- 15. Other trusts I worked at during 2015 and 2016 were Liverpool Womens hospital (LWH) (doing tertiary neonates) and Warrington (doing a very similar job to that I was at COCH). Due to the nature of the patients at LWH there was a lot more consultant presence and hierarchy compared to COCH. In other respects, there still felt like a strong sense of teamwork and camaraderie similar to at COCH. While at Warrington the day to day set up was similar from memory. Generally, SHOs didn't work on the neonatal unit, but as I had experience of being in COCH and LWH I asked and was allowed to routinely contribute to work on the neonatal unit. I don't recall recognising any major differences in the way the unit ran day to day and how medical and nursing/ midwifery staff interacted.
- 16. Again, as a junior member of the team I didn't spend much, if any, time thinking about the bigger picture of the department or hospital as a whole and was focused on gaining experience and my immediate tasks.
- 17. I don't recall hearing any particular comments about care at COCH or the management of the unit or difficult relationships. When I left COCH I moved to LWH and started working on the tertiary neonatal unit. Several babies who had been cared for at COCH and I had either been involved with, or aware of, were then at LWH during my rotation. I don't remember any specifics but recall some general comments that COCH were having a tough time and lots of difficult cases. From memory these were generic comments between doctors and nursing and medical staff.

Child A and Child B

18. I was in attendance for the births of Child A and Child B. I have vague memories of attending this delivery and the resuscitation, however all of the detail is taken from reviewing the medical documentation. I do not have any clear memories of the specifics. They were delivered by emergency c-section at around 2030. This is around handover

time for the medical team. I attended with Dr G Beech who was the day registrar and Dr E Thomas who was one of the SHOs on day shift. It was usual for there to be two SHOs and one registrar on the long day (on call until 9pm). I think I was the other day SHO, rather than the night SHO who had just started, but I do not have access to the rotas to clarify this. The night team (one registrar and one SHO) would start at 2030, with a 30-minute handover.

- 19. As the babies were born just prior to the night shift doctors starting there was initially only the day team (myself, Dr Beech and Dr Thomas present).
- 20. For preterm deliveries you usually would have at least two members of medical staff attending, for twins you need a team for each baby. As there were only three doctors on duty in the hospital, one of the senior neonatal nurses joined to be the second team member. I do not recall if there were additional neonatal nurses supporting as well.
- 21. As the senior doctor, Dr Beech allocated roles, Dr Thomas and myself to look after twin 1 (Child B) and herself and SNN (Senior Neonatal Nurse) Caroline Bennion to look after twin 2 (Child A).
- 22. Child B was born with a low heart rate and no spontaneous breathing, they were blue and floppy. Dr Thomas was in charge of the airway, as the more experienced doctor, and I was supporting (listening to the heart rate, providing second hands for two-person airway, passing equipment).
- 23. Child B didn't respond initially to manoeuvres to inflate her lungs, so I supported with a two-person technique. We identified that air was moving into the lungs which is demonstrated by chest wall movement. There was no corresponding increase in the heart rate with this chest movement, so we proceeded down the NLS (neonatal life support) algorithm and started chest compressions. I do not recall exactly but as Dr Thomas was managing the airway, I presume I gave the chest compressions.

- 24. At this point we asked for further assistance and for the consultant to be called. Dr Thomas attempted to intubate Child B to secure her airway, an ETT (Endo-tracheal tube) was inserted, with no colour change and no obvious chest wall movement. Dr Brunton, the night registrar, then attended labour ward theatre and took over Child B's airway, she stabilised and was transferred to NNU.
- 25. Once both babies were admitted to the neonatal unit, I was asked to cannulate Child A while Dr Beech completed her documentation of the delivery. For preterm babies, especially if they have needed significant input at delivery we would start antibiotics to cover for infection. Due to the prematurity of the twins, feeds are started cautiously, so the babies commenced intravenous fluids. It would be routine to insert a cannula, take blood tests and start IV fluids and IV antibiotics. Records show that I prescribed these IV fluids and antibiotics for Child A. I do not specifically remember this; it is something I have done hundreds of times for babies.
- 26. I next reviewed Child B on 12 June 2015 when they were podays old. I completed their daily ward round independently. I have documented their corrected gestation and list of problems. I have then reviewed them by system, noting their progress in ventilation, feeding and fluids, medications prescribed, infection, jaundice, neurology, cardiovascular and haematology. I have documented my examination on that day and my plan for the day. The plan relates to their breathing support, feeding and monitoring blood tests.
- 27. I do not recall and there is no evidence provided to me that I attended any formal debrief surrounding Child A's death and Child B's collapse. I was not present for either event. Usually, formal debriefs involve staff present for the acute event rather than the wider team. I don't remember any more informal specific discussions. I do not think I should have been included in any debriefs held.
- 28. I personally did not have any suspicions about Child A's death and Child B's collapse. I do recall discussions between the paediatric trainees (more senior specialist paediatric doctors) and NNU nursing staff that the rashes/ skin changes, seen in both babies, was

unusual and no one had seen anything similar before. At the time I didn't find this suspicious.

Neonatal Mortality Meeting

- 29. I have no recollections of attending the meeting referred to as Neonatal Mortality Meeting [INQ0003297] on 29 July 2015. From the minutes taken it appears I signed the register as being present. M&M (morbidity and mortality) meetings are held to discuss cases with a poor outcome where a patient has suffered a significant event causing long term issues (morbidity) or has died (mortality). These types of meetings are commonplace across departments and across trusts. I would assume meetings such as this were held every few months, possibly quarterly. That assumption is based on my years of experience, I cannot accurately recall exactly the timing of these at this time at COCH. I couldn't say how many I attended during 2015-2016. If I was on shift in the hospital and not busy with clinical work, then I would have attended as a learning opportunity. I couldn't say which cases were discussed at which meeting or remember any details about the discussions. It would not be unusual for a junior doctor to get bleeped and called away during the meetings. I cannot be sure if I attended the whole meeting or got called away.
- 30. I have no recollection of who chaired the meeting [INQ0003297]. It would usually be led by one of the consultants. Ideally they would be attended by as many consultants as possible. Usually they are scheduled for a "rolling half day". These are days where usual programmed activities such as clinic are cancelled, to enable meetings such as these and other important governance or learning opportunities can be attended by as many clinical staff as possible. Junior members of the medical team would attend unless clinical demands on the wards prevented them. From the minutes it appears to have been a purely neonatal M&M meeting. Sometimes these are joint "perinatal M&M" with the obstetrics and gynaecology teams. I don't recall if senior members of the NNU nursing team regularly attended these meetings or not.
- 31. To my knowledge no one specifically raised concerns around the number of deaths at this meeting. I do have vague memories of there being various discussions at points about the

unusually high number of collapses and deaths on the unit but I can't remember if these were raised in this meeting. From memory, I recall being aware at some point that the consultants collectively raised concerns and were considering potential reasons. One potential reason I remember being considered was if the TPN (total parental nutrition) bags could be contaminated or issues with equipment. Later I know the consultant team asked for external review to help try and identify any potential causes.

32. I also do not recall any specific concerns or suspicions being raised regarding Child C or Child D at the meeting on 29 July 2015. I do not know if there were any follow up meetings regarding Child D once the postmortem (PM) results were available, I do not recall if I was told about PM results or not, it would not have been of relevance for me specifically to be informed of the results, though sometimes these types of results are shared for learning purposes.

Child E and F

- 33. I attended the planned c-section delivery of Child E and Child F. I attended alongside another SHO Dr Wood, two registrars Drs Beech and Ogden and the consultant Dr Jayaram. The twins were born in the early evening, usually there would only be one registrar present at this time. I do not recall why both Dr Beech and Dr Ogden were present, or if one of them had been asked, or offered to stay late to help with the delivery.
- 34. I was working with Dr Beech to look after twin 1 (Child E) at delivery. They were born in good condition and initially cried immediately after birth. On getting to the resuscitaire (if preterm babies are well at delivery they receive delayed cord clamping for up to 2 minutes) they didn't have spontaneous breathing. We followed the NLS algorithm and supported by Dr Jayaram with a two-person technique established good chest wall movement.
- 35. As the senior doctor, Dr Beech would have been managing the airway and I would have been supporting, with a neonatal nurse.

- 36. Monitoring applied during stabilisation showed low oxygen saturation levels, we titrated the oxygen as needed. Once stable, Child E was transferred to the neonatal unit by the team in theatres, bypassing mum in theatre on the way.
- 37. Once in the neonatal unit Child E was commenced on a fairly standard management plan for a baby of this gestation, the plan was set by Dr Beech. I do not recall the specific input I had in executing this plan.
- 38. From Dr Ogden's notes, once both babies were on the neonatal unit, I supported her with the care of Child F. I suspect I therefore had little involvement in Child E's care once on the neonatal unit.
- 39. I am documented as inserting an umbilical venous catheter (UVC) into Child F. This is a central line commonly used in preterm babies. It is a way to access a larger vein fairly easily in babies that need infusions of medication or fluids.
- 40. Due to antenatal factors the twins would need to increase milk feeds slowly. They were receiving TPN via a central line to support nutrition and hydration while milk feeds were built up slowly.
- 41. At this stage in my career, I would not have been competent to do this procedure alone, so I did it alongside Dr Ogden. From the notes it is not clear if Dr Ogden was the primary practitioner, and I was supporting/ observing for my learning, or if I was leading the procedure with Dr Ogden's support.
- 42. The UVC must be positioned in a specific place to be deemed safe to use, this is assessed using X-ray. Unfortunately, the UVC was not in an adequate position so was removed and not used.

- 43. On 11 August 2015 I have completed a "weekly review sheet" as the documentation for the ward round review of Child F on that day. Weekly sheets were completed by a junior doctor on a Tuesday, then presented to the consultant at the "grand round" the following day. Every Wednesday the junior medical team would present each baby in detail to the consultant, who would then review all of the babies and make a detailed plan for their ongoing care.
- 44. The weekly sheets encompass more detail than a usual ward round, capturing longer term monitoring that is needed for preterm babies that is important to not be missed, but isn't relevant day to day. Sections such as ROP (eye screening), head scans and immunisations are sections that do not need to be considered daily.
- 45. The weekly sheet identifies the gestation and age of the baby, the named consultant, the reviewing consultant this week and their current problems. It reviews their systems with specific details about their growth. It highlights if a baby qualifies for head scans or ROP screening and when these are indicated. It covers routine childhood immunisations and laboratory results.
- 46. The bottom section is then completed the following day by the team presenting to the consultant with their plan. The person who has completed the form on a Tuesday isn't necessarily there to present at the grand round on Wednesdays.
- 47. From reviewing the weekly sheet, [INQ0000859 p.36-37], there isn't anything particularly striking about Child F. I have noted waiting for results from a hypoglycaemia screen, that Child F was being treated for potential infection and a longline had grown a bacteria, their respiratory support could be stopped, they were for a routine head scan and awaiting transfer to their local NNU.
- 48. Later in the medical notes I have documented some results of Child F's hypoglycaemia screen and my discussion with Dr ZA regarding these. I have discussed this further below.

- 49. My entry [INQ0000859 p.38-39] is initially a ward round entry (page 38, onto 39). Every day each baby is reviewed by a doctor. Sometimes this is a single doctor as this appears, sometimes it is two or more doctors that review a patient. It's usually the most junior member of the team's responsibility to document that review.
- 50. From the entry I conducted and documented the ward round review alone. In neonatal care there is a fairly standard formula we use for documenting. Starting with the baby's gestation at birth, age, and corrected gestation. A list of their issues/ problems and then a systems review. Systems review means going though body systems one by one and reviewing progress or areas of concern. These are again fairly standard, not all systems are relevant to every baby, and everyone has their own order for documenting them. System review is followed by an examination and then a management plan for the day. My review appears to be fairly standard.
- 51. As one of Child F's problems I have documented "hypoglycaemia screen awaited". Looking at other resources provided to me for the purpose of this document, I can see that Child F had a prolonged, profound episode of hypoglycaemia on the 5th August 2015. It is routine in these circumstances for a child to have a hypoglycaemia (hypo) screen done to look for potential causes of the prolonged or profound hypoglycaemia. Noting it is awaited means as a team we were aware it had been sent, but the results were not available to be reviewed as yet, and to act as a prompt to look out for these results going forward.
- 52. Later in [INQ0000859 p.39] I have documented two sets of results that had been returned from other hospitals pertaining to Child F. The second were results of the hypoglycaemia screen that had been sent on 5 August 2015 after Child F had prolonged episodes of hypoglycaemia.
- 53. A hypoglycaemia screen comprises of many investigations both blood and urine. Some tests are processed locally (at COCH), and some are "send away" tests that go to more specialist laboratories. Due to the complexity of some investigations and the need for them to be sent to different labs, the results return at different times.

54. I have documented four results relating to the hypoglycaemia (hypo) screen sent on 5 August 2015:

"<u>Hypo screen results</u>

Cortisol 364

Insulin 4657 ↑ (upward arrow)

Insulin c-peptide <169 ↓(downward arrow)

CPeptide/ins 0 ↓ (downward arrow)

D/W [Doctor ZA] – insulin high, c peptide low – unusual for hypoglycaemia. As now well and sugars stable for no further ix.

If hypoglycaemia again at any point for repeat screen."

- 55. These are documented as being received on 13 August 2015 (8 days after being sent).
- 56. The cortisol reading is normal. The insulin reading is high (indicated by an upward arrow), the insulin c-peptide is low (indicated by a downward arrow) and the C peptide:insulin ratio is unrecordable (downward arrow).
- 57. From my notes it is unclear if I directly received these results or not. I have no memory of how I received these results, or if I was asked to document them on behalf of someone else. I do not know if I took a phone call, if another member of staff took a phone call and passed them to me as the doctor present or if they were emailed/ faxed or posted. If I didn't take them directly I assume they were passed to me by one of the members of nursing staff or another doctor. Usually if a lab calls through results they like to speak to a doctor. It is my usual practice to document results received as soon as I'm able. There can sometimes be a delay in documenting results if I was doing something more clinically important at the time, or if someone else was using the babies paper notes. If another doctor took the results, but was busy with a task that required someone of a higher level, I may have been asked, or offered to document in the notes, as that would be a task I could complete independently.

- 58. I assume my time of documentation is fairly close to the time I was made aware of the results but can't be exact. They weren't apparently available for my ward round at 0920, but I've documented them and my discussion with Dr ZA at 1030, so I would have received the results somewhere between these times.
- 59. I do not recall the conversation with Dr ZA, regarding the hypoglycaemia screen results, explicitly. As to where it took place (NNU or paediatric ward), looking back at a calendar it was a Wednesday which used to be "grand round" where the consultants would do the neonatal ward round so, they may have been present on the NNU when the results were received.
- 60. Their advice was that they were unusual results, but as Child F was now well with no further hypoglycaemia, to do nothing further at present. If Child F had further episodes of hypoglycaemia to repeat the investigations.
- 61. Parts of the hypo screen (insulin and c peptide readings included) need to be taken during an episode of hypoglycaemia for them to be accurate and interpretable. If Child F had had the tests repeated when their blood sugar level was normal the repeat tests would be uninterpretable.
- 62. At the time I was unaware of any other action that was taken by Dr ZA after receiving these results. I can see from [INQ0010283 p2-4] that they did take further action.
- 63. As a junior member of medical staff, I didn't appreciate the relevance of these results. They are levels we interpret rarely and would be something I would have had to look up to interpret. I don't recall understanding the fact they were unusual at the time. If the lab called the results though that would be a sign they were unusual (the lab rarely call through normal results as it would take up too much of their time). As they were results I was unfamiliar with interpreting I discussed them with the consultant responsible that week, Dr

- ZA. I assume I documented using the word "unusual" after my discussion with Dr ZA as that was their interpretation of the results.
- 64. As a much more experienced clinician now I can appreciate the results indicate use of exogenous (not created within the body) insulin. The presence of high insulin levels in a state of low blood sugar doesn't make physiological sense. When your blood sugar is low, the body normally "turns off" insulin production to stop the blood sugar falling more. The C- peptide level indicates whether the insulin in the body is endogenous (produced by the body) or exogenous (produced outside the body). Usually, the insulin and c peptide levels follow each other if the insulin is endogenous, so you would expect a relatively high c peptide level. In this case the c peptide level was low, in mismatch to the high insulin, this indicates use of exogenous insulin. In a baby this means they were administered insulin.
- 65. To my knowledge I wasn't involved in any debriefs or formal discussions around Child E's death or Child's F care. I wasn't present for Child E's resuscitation and death, a debrief usually involves the team that were present for the significant event (in this case resuscitation and death). I do not think I should have been included in any debriefs held.
- 66. Child F had a clinical deterioration (low blood sugars) that was unexpected and unexplained. From the notes and my memory, I wasn't involved with their care during this acute period. It appears I became involved several days afterwards including documenting the results. Apart from my documented conversation with Dr ZA about the results I don't remember being involved in any other discussions around these results in particular. I do not recall any conversations about concerns or suspicion surrounding these results or Child F's care in general.

Response to neonatal deaths

67. At this point in my career, my only experience of paediatrics and neonates as a qualified doctor were at COCH. I had undertaken placements at Alder Hey and Chester as an undergraduate experience of paediatrics and neonates. With no experience of other

neonatal units, I did not find anything unusual. I had no knowledge of "normal" mortality rates or numbers of neonatal collapse.

- 68. As mentioned previously I do recall at points (I couldn't say when) there being various discussions about the unusually high number of collapses and deaths on the unit. It was only due to these conversations among staff that I realised this was a change to normal. As I had not noticed the unusual number myself, and the consultants were all aware, it didn't occur to me to raise the issue with anyone. At that point in my career, if I'd had any concerns I would have taken them to a consultant.
- 69. I don't have a memory of being presented with data from national groups on the mortality or morbidity rates on the NNU at COCH. For my stage of training, I don't expect I would have been presented with this data necessarily unless it came up in a M&M meeting. Some of these data sets are available to the public, so would have been available should I have wanted to review them too.

Review of deaths and adverse events

- 70. I couldn't say what the exact processes were at the time (2015-2016) for reporting adverse incidents or deaths within the hospital. Usually, adverse incidents would be reported via "datix". This is an electronic programme used by COCH and some other hospitals as a reporting database. There are other companies which provide the same function which other hospitals use. A "datix" prompts a review, the incident is graded in its level of harm caused and the likelihood to which it occurred. Combined, these two parameters give a risk rating. Depending on the risk rating calculated, would determine on which process was followed next. These could include: 48-hour reviews, level 2 review, serious incident (SI) panels, RCA (root cause analysis).
- 71. All deaths and collapses/ unexpected deteriorations would be discussed in M&M meetings, this would include sharing any learning from these events.

72. I did not have any discussions with the wider network about any incidents or deaths on the NNU. 73. To my knowledge deaths were investigated if they were deemed to be unexpected. Investigations may include several team members including paediatric doctors. Depending on the circumstances it may also include obstetric doctors or midwives. All child deaths are discussed with the coroner if there was uncertainty as to the cause of death a postmortem would be requested. In cases where the clinician and coroner were happy with a cause of death a PM can still be offered to the parents, but they can decline. 74. Internal investigation would be determined on the individual circumstances following the policies and procedures in place at the time. I do not know what these were exactly. 75. I don't remember attending any formal debriefs or discussions around specific events. I was only involved in one collapse (I have provided a police statement I&S regarding this event) and no deaths. collapse was quickly recovered from, so wouldn't necessarily have warranted a debrief. I don't remember any less formal discussions though I assume it would have been discussed during handover at the end of the night shift. 76. With hindsight I'm still not sure I&S collapse episode would warrant a formal debrief. If I was the consultant receiving handover for that event in a morning and the baby had fully recovered and remained stable for the rest of the shift, I would definitely take note of it and be vigilant for any changes, but I don't think I would call a formal debrief. 77. I do not know if I attended any other neonatal or perinatal M&M meetings relating to any other babies in the indictment.

Concerns or suspicions

78. I can't remember any specific discussions about concerns regarding Letby. I do remember there were conversations between medical and nursing staff that Letby had been on shift for all of the collapses or deaths, and that is why she was moved to non-clinical duties. From what I recall the general feeling was it was unlucky she had been on the shifts rather than there being suspicion about her. It was only much later when it became public knowledge with her arrest that I learned of the level of suspicion.

79. I didn't personally have any suspicions about Letby to report to anyone so did not use any formal or informal process to report any suspicions and had no concerns about the safety of the babies on NNU.

Safeguarding of babies in hospital

80. I don't recall any sections in any of my safeguarding training specifically covering what to do if I had concerns that a member of staff was abusing patients. It is often mentioned that abusers are commonly known to a victim or could be in a position of power. Usually, the context for this is children or people with learning or physical disabilities, who rely on others for care needs, rather than infants or young children.

81. The RCPCH (royal college of paediatrics and child health) has guidance about suspected abuse by a professional. In this the term professional isn't solely related to a healthcare setting.

82. If I had concerns now (as a consultant) I would speak to other consultant colleagues in the first instance. I would then want to discuss with the medical director and seek advice from my defence union and the RCPCH about where to go next.

Suspicions and contacting external bodies

- 83. From memory I don't recall freedom to speak up guardians being present in COCH during 2015-2016. As a foundation doctor and trust grade I think we were encouraged to speak to our consultants if we had concerns. If we felt we couldn't go to our consultants we were encouraged to speak to the foundation programme lead or our educational supervisors (they were often not our direct consultant so a little removed). I have no recollection of if there was a formal whistleblowing policy or not.
- 84. At the time as an F2 then trust grade SHO I don't recall having any specific training on process around a child death. At my level then I wouldn't have had any involvement post death of a child and due to the sensitive nature of the topic, it's not the kind of situation a very junior member of the team would be invited to join for learning purposes. As I've progressed through my training and become a consultant I have been involved in these processes. It would be more appropriate for a senior paediatric trainee to be included as a learning opportunity.
- 85. I did not have any concerns at the time regarding any care on the NNU, deaths or injuries. It would therefore be pure speculation about who I would consider raising concerns to. As an extremely junior member of staff, I wouldn't think to take concerns outside of the trust as a first point of action. Had I wanted to raise any concerns, then I would have approached one of the consultants, or if not comfortable within the department, then one of my previous supervisors or head of foundation programme within the hospital. At that point in my career, I don't think I was aware of all of the external scrutiny bodies. I suspect my first thought would have been the GMC if I had concerns about the medical team and NMC if I had concerns about the nursing team. As above, this is speculation.
- 86. I do not remember/ have not seen any documents relating to me having discussions with the coroner about any baby on the indictment.

87. During my time working on the NNU I never raised any concerns with management regarding Letby.

Reflections

- 88. Whether CCTV on the unit may have prevented some of Letby's crimes is a difficult question to answer. I do not know of, or have worked in, any unit with CCTV. On one hand it may have identified episodes of suspicion and led to preventable harm, on the other, from what I understand from the coverage of the trial, a lot of Letby's activity would fall into the remit of usual nursing care (administering medication, turning off alarms etc.), so may not have prevented any wrongdoing. I do not know if CCTV would be able to accurately see what medication was drawn up. I suspect the level of detail provided would not be sufficient to read a medication label, see what volume of medication has been drawn up, or even to distinguish between medication and air in a syringe. Similarly, I do not know if CCTV would be able to capture what alarms sounded and for what period of time. I suspect CCTV would have been able to capture any episodes of undue force, providing there were no "black spots".
- 89. From my understanding of CCTV, it does not provide high quality images and there are often "blackspots" that are not covered. Potentially knowing there was CCTV may have prevented Letby's crimes, but this is pure speculation.
- 90. Implementing CCTV on a NNU comes with other costs, the privacy of families, the privacy of expressing mothers, or having skin-to-skin with your baby. Having CCTV in an area where families are often at some of their most vulnerable times feels invasive. The balance of that against potentially identifying one person's wrongdoing is a difficult one.
- 91. It is extremely difficult to make recommendations on how babies should be protected against criminal action on a neonatal unit. The vast majority of babies on neonatal units do not need safeguarding against staff members.

- 92. Apart from ensuring all cares, tasks, medications are witnessed, and no member of staff touches a baby or their medication without direct observation I'm not sure how to ensure crimes are not committed against babies. Obviously, all nursing interventions happening in pairs is not practical or feasible in a profession that is already understaffed.
- 93. CCTV mentioned above may not have prevented all Letby's crimes and comes with its own set of concerns that would need to be carefully considered.
- 94. Currently only certain medications are "controlled drugs" which require two signatures when they are removed from the drugs cupboard and exact measurements documented. If all medication was treated in this way, then it may have prevented Letby from administering insulin unnoticed. Making all medication (including fluids/ TPN) "controlled" would potentially mitigate some of the opportunities Letby had, but again is impractical in day to day working. If this were thought to be a way to mitigate against potential future criminal action, there would be several other areas to consider first. Would these suggested changes be implemented across the NHS entirely? Could it be justified that this measure was needed on NNUs, but not the rest of a hospital? Or care homes? or any other setting? I do not think there is an easy answer to this question.
- 95. To this end syringes and other pieces of routine equipment could also be used for ill will.

 A member of staff could inject air without needing any medication. Logging all equipment usage would be impossible.
- 96. Having a culture that encourages speaking up without fear of retribution is much more likely to lead to improved safety for all patients compared to policies and procedures that make life more difficult for the majority, in order to try to prevent the minute.

Other matters

- 97. I do not have any other evidence, documents, or other information I am able to give relating to the inquiry.
- 98. I have never given any interviews regarding the actions of Letby or the nature of the inquiry. Naturally I have been asked about it by friends and family and colleagues at other trusts who are aware I was working in the department at the time in question. I have never given any specific information, just agreed that I was working in the department at the time and that I'm involved in the case and inquiry. On being asked if I ever had suspicions about Letby, I have responded that I didn't.

99.	I have also been asked if I knew Letby prior to wo	orking at COCH Irrelevant & Sensitive	
	Irrelevant & Sensitive	I had never heard of or met Letby	
	prior to working together on the NNU at COCH.		

Statement of Truth

I believe that the facts stated in this witness statement are true. I understand that proceedings may be brought against anyone who makes, or causes to be made, a false statement in a document verified by a statement of truth without an honest belief in its truth.

