Neutral Citation Number: [2023] EWHC 1199 (KB)

Case No: QB-2019-001807

IN THE HIGH COURT OF JUSTICE
KING'S BENCH DIVISION

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: 19/05/2023

Before :

MRS JUSTICE ELLENBOGEN

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Between :

Anna Callaghan (suing as administratrix of the estate of Miss Imogen Mary Eleanor Hill, deceased and in her own personal capacity)	**Claimant**
- and -	
South Tees Hospitals NHS Foundation Trust	**Defendant**

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Isabel McArdle (instructed by **Leigh Day**), for the **Claimant**
Judith Ayling KC (instructed by **DAC Beachcroft LLP**), for the **Defendant**

Hearing dates: 13,14 & 16 July, 30 November, 2021

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APPROVED JUDGMENT

Mrs Justice Ellenbogen DBE:

1. At 16:54 on 26 May 2014, the Claimant's daughter, Imogen, was born at James Cook University Hospital, Middlesbrough, from where she and her mother, the Claimant, were discharged at 14:36 on 28 May 2014. On 2 June 2014, Imogen died from Group B Streptococcus ('GBS') bacterial meningitis and septicaemia. This claim, alleging clinical negligence, arises from events which took place over 27 and 28 May 2014. Quantum has been agreed at £18,000 (inclusive of interest), subject to liability.

2. The Defendant admits that it owed a duty of care to Imogen to provide medical and midwifery services and management with reasonable care and skill, both directly and through its staff and agents. By her Particulars of Claim, the Claimant alleges that the care given to Imogen was in breach of that duty, in the following ways:

    a. By around midnight and, again, at 07:00 on 28 May 2014, (1) a midwifery check, to include a full set of observations, ought to have taken place; and (2) a feeding plan, for feeds at three to four-hourly intervals, at which the quantities of formula taken and observations made would be recorded, ought to have been put in place;

    b. At approximately 09:00 on 28 May 2014, a full set of observations ought to have been taken by the attending midwife and a feeding plan for feeds at three to four-hourly intervals, at which the quantities of formula taken and observations made would be recorded, ought to have been put in place;

    c. Imogen ought not to have been discharged at 14:36 on 28 May 2014, or until she had established a regular pattern of three to four-hourly feeds, at which quantities of formula normal for a baby of her age had been taken and the Claimant had been content with Imogen's feeding; and

    d. Imogen ought not to have been discharged without the Claimant having been advised:

        i. to continue a feeding plan of three to four-hourly feeds;
        ii. to call the postnatal ward, should Imogen not feed well; and
        iii. of signs of illness in Imogen of which the Claimant ought to be observant, such as a rash; raised temperature; high-pitched cry; drowsiness; lethargy; and irritability.

3. It is the Claimant's pleaded case that, with appropriate care, Imogen would have been kept in hospital for a further day, in order to monitor and record her feeds and take observations. Appropriate observations during the afternoon of 28 May 2014 would have revealed signs of sepsis, whereupon Imogen would have been referred for paediatric review, which, during the afternoon or early evening of 28 May 2014, would have identified sepsis. She would then have received urgent intravenous antibiotic treatment and would have survived her illness, notwithstanding that meningitis had begun at around 17:20 on that day, when her sepsis had crossed the blood/brain barrier. Imogen's death, it is said, resulted from the Defendant's breaches of duty.

4. In broad outline, by its Defence the Defendant denies acting in breach of duty. It contends that appropriate care was administered throughout the material period, including a full set of observations and the making of an appropriate plan at 09:45 on 28 May 2014. In the absence of any known risk factors, there had been no indication of the need for further observations, or to commence a regular feeding plan. It is denied that the absence of a generalised feeding plan amounted to a breach of duty and that Imogen had not fed well prior to discharge. On the evidence available to the midwife, discharge had been appropriate at the time at which it had occurred. No medical or parental concerns had been raised, nor had there been any clinical indicators of a need to have kept Imogen in hospital, including following a review and echocardiogram respectively carried out by different paediatricians, in connection with an unrelated heart murmur. The Defendant denies that Imogen had been displaying signs of sepsis prior to her discharge on 28 May and asserts that the Claimant's pleaded case as to when sepsis would have been identified is speculative. There had been no indication of a need for further evaluation for infection, or for treatment, prior to discharge. The advice given to the Claimant, throughout her stay in hospital and at discharge, had been appropriate. Whilst it is admitted that Imogen was later diagnosed with early onset GBS infection, no admissions are made as to the timing of the development of meningitis, it not being possible to speculate as to when that had occurred[1]. Save as aforesaid, no admissions are made as to the Claimant's pleaded case on causation.

The issues at trial

5. At the outset of the trial, counsel agreed a list of substantive issues to be determined, as follows (so far as extant by the end of trial):

    a. As questions of fact:

        i. What was Imogen's feeding pattern overnight on 27/28 May 2014 until discharge in the early afternoon of 28 May 2014;

        ii. What was Imogen's condition overnight on 27/28 May 2014 and until discharge?

        iii. What advice was given to the Claimant on discharge?

    b. Was the midwifery management of Imogen whilst she was in hospital in accordance with a logical and responsible body of midwifery opinion, in light of her feeding pattern?

    c. Was the decision to discharge Imogen in accordance with a responsible body of midwifery opinion?

    d. Was the advice given to the Claimant on discharge reasonable?

    e. As questions of fact material to causation:

[1] The position has since moved on and is agreed in a joint statement by both paediatric infectious disease experts (considered below).

i. When did Imogen exhibit signs and symptoms of sepsis after discharge?

ii. If it had been reasonable to discharge Imogen (see issue (c), above), when would the Claimant have sought assistance and brought her back to hospital, given the findings in relation to issue (e)(i) above?

iii. Would Imogen's life have been saved but for the alleged breaches of duty (if and in so far as established), because sepsis would have been detected and treated in time, before her condition had become irreversible?

The evidence received

6. In addition to the documentary evidence contained in the agreed bundle, I received oral evidence from the following witnesses of fact: the Claimant; Dr Harriet Kellett (at the time of material events, a Specialist Trainee, Year 2 in the neonatology department of James Cook University Hospital); and Ms Lynzie Cotton, midwife, neither of whom was, by the time of trial, working at the Defendant trust. The statement of Ms Emily Hurwood (formerly, Williams), midwife, was entered in evidence by the Defendant, but Ms Hurwood did not give live evidence, owing to a personal medical emergency. It was the Defendant's position that it would have wished to call Dr Tambe (at the material time, the specialist registrar who had examined Imogen during the morning of 28 May 2014), but that, at the time of trial, he was working as a consultant neonatologist and paediatric intensivist in Pune, India and, given the impact of COVID-19 there, it had been considered unreasonable and unrealistic to have asked that he be a witness. The Claimant relied upon the expert evidence of Ms Suzanne Cro, midwife; and of Professor Shamez Ladhani, Professor in Paediatric Infectious Diseases. The Defendant relied upon the evidence of Ms Brenda Maddy, nurse and former midwife; and of Professor Paul Heath, Professor in Paediatric Infectious Diseases. Neither professor was called to give oral evidence, an agreed position having been set out in joint statements, prior to trial. The Claimant challenged the expertise and experience of Ms Maddy and, hence, the admissibility of, alternatively weight to be given to, her evidence, matters which I shall address later in this judgment.

The facts

7. Much of the factual background is not in dispute and is set out below, together with my findings on certain disputed facts (in so far as it has been necessary to resolve them), and my reasons therefor. Those findings take account of the expert evidence and submissions which I summarise later in this judgment, and which it is convenient to set out in one place.

8. Imogen was the Claimant's second child, her first child having been born in August 2009. Her expected date of delivery had been 19 May 2014. At 17:15 on 25 May 2014, the Claimant was admitted to hospital for induction of labour. She was moved to the labour ward shortly after lunchtime on 26 May 2014 and Imogen was born at 16:54 that afternoon, being bottle-fed thereafter. Separate medical notes were kept for mother and baby, from which the following material records have been extracted and set out in the order in which they were made. The Defendant acknowledges that its

record-keeping was not complete. In particular, no record was made of an interaction between the Claimant and an unidentified midwife, at around 03:00 on 28 May 2014, or of one or more feeds (were there to have been any) between 19:00 on 27 May and 09:45 on 28 May 2014:

a. At 18:30 on 26 May 2014, Imogen was recorded to have taken 20mls of formula (baby notes).

b. Care was taken over by Midwife Milford at 19:20 on 26 May 2014. Imogen was noted to have been *'warm, pink and settled'*. Mother and baby were transferred to the ward at 20:10 (baby notes).

c. At 20:30 on 26 May 2014, following transfer to the ward, the Claimant's care was taken over by Midwife Hurwood, who recorded, amongst other matters (maternal notes), that the Claimant had been orientated to the ward and buzzer system and that no concerns had been raised. In the pro forma infant postnatal transfer checklist, infant feeding was ticked as having been discussed. In the baby notes, Imogen was recorded to have been *'warm, pink and settled*'. A plan was recorded to keep her warm; A/F[2] on demand; observe nappy output; and report any deviations from the norm.

d. At 21:00 on 26 May 2014, 20mls of formula were recorded to have been taken by Imogen (baby notes).

e. At 21:40 on 26 May 2014, Midwife Hurwood provided refreshments to the Claimant, recording nothing further at that time.

f. Imogen was recorded to have been groaning lightly at 23:15 on 26 May 2014. Observations were recorded as having been normal. Imogen was noted to be *'Very mucousy. To observe'* (maternal notes).

g. At 02:15 on 27 May 2014, the Claimant was noted to be *'Sleeping — left undisturbed'* (maternal notes) and the following record was made in the baby notes: *'No further concerns reg baby. Noise settled. To continue to observe'*.

h. At 06:10 on 27 May 2014, the Claimant was again noted to be *'Sleeping — left undisturbed'* (maternal notes).

i. At 06:35 on 27 May 2014, Midwife Hurwood spoke to the Claimant and retrospectively recorded the following feeds on Imogen's daily care sheet:

    i. 21:00 on 26 May 2014: 20mls of formula;
    ii. 02:00 on 27 May 2014: 10mls of formula; and
    iii. 04:00 on 27 May 20214: 45mls of formula. Imogen was also recorded to have passed urine.

j. Care was taken over by Midwife Cotton at 08:00 on 27 May 2014. She recorded:

[2] Meaning 'artificially feed'.

i. (maternal notes) *'Introductions made. Anna reports to be feeling well this morning and is keen to go home as soon as possible. Explained that discharge will be after NIPE*[3]*. Postnatal check and obs NAD*[4] *as charted. Analgesia up-to-date. For discharge when ready.'*; and

ii. (baby notes) *'Baby is settled with Mum at present, having last fed @ 04:00 hrs. Mum feels baby is not so mucousy and took large amount at last feed. PLAN: –*

– keep warm
– ensure regular feeds
– feed now!
– observe output
– hearing and NIPE today
– discharge when ready.

k. A discharge summary timed and dated at 08:00 on 27 May 2014 indicates that (amongst other documentation) infant feeding leaflets were provided to the Claimant.

l. A NIPE, carried out by Dr Kellett at 12:55 on 27 May 2014, detected a soft systolic heart murmur, confirmed by the specialist registrar, but no other abnormality. Dr Kellett recorded, *'explained to mum that likely to be due to physiological changes that occur after birth which is common in newborn babies. We advised that they stay overnight and we recheck baby tomorrow. Mum and partner agree with plan.'* Imogen was noted to be bottle-feeding well, opening her bowels and passing urine and it was recorded that her mother had no concerns. Imogen was noted to have been warm, well perfused, pink in air, handling well and normal in tone.

m. Later that day, Midwife Cotton recorded the following details (baby notes), indicating whether Imogen had passed urine ('PU'); opened her bowels ('BO'); and the quantity of formula taken at the stated times. It was her evidence that all such notes had been completed retrospectively, at 18:00 on 27 May 2014:

i. 09:00 — PU, BO, 45mls;
ii. '?' — BO, 30mls;
iii. 14:00 — BO, 30mls;
iv. 17:10 — PU, BO, 15-20mls;
v. 18:00 — *'Baby pink, warm and settled at present. PU ü BO ü See feed chart. Baby remaining in hospital overnight as she has an audible heart murmur requiring review mané'*;

A final entry on the feed chart, timed at 19:00, was left blank.

[3] Meaning 'Newborn and Infant Physical Examination'

[4] Meaning 'nothing abnormal detected'

n. Midwife Hurwood resumed care at 22:45 on 27 May 2014, recording (maternal notes) that no concerns were then raised. In the baby notes, she recorded that Imogen was *'warm, pink and settled with Mum. Mum states last fed at 19:00 10mls. Plan (1) A/F on demand (2) Keep warm (3) Report any deviation from norm'*.

o. At 05:40 and, again, at 06:50 on 28 May 2014, Midwife Hurwood recorded that the Claimant had been sleeping and left undisturbed.

p. Midwife Cotton resumed care between 09:00 and 09:45. At 09:45, she recorded a plan (maternal notes), culminating in *'discharge when appropriate'*. Imogen's notes record:

   i. '*pink and warm'*; *'good tone'*; a *'moist and clean'* mouth; *'PU ü'*; '*BO ü'*; *'AF on demand'*; *'review today re heart murmur'*; and

   ii. *'Baby girl appears pink, warm and alert, but very windy. Has struggled to feed well since teats changed overnight but 30mls formula given by myself.*

   PLAN:
   – support for Mum
   – keep warm
   – ensure regular feeds
   (feed by 13:00 p.m.)
   – Paediatric RV re. heart murmur
   – discharge when ready'.

q. At 10:35 on 28 May 2014, Dr Kellett reviewed Imogen, recording that she was passing urine, opening her bowels and feeding, and a *'bit mucousy still'*. Dr Kellett was not sure whether the heart murmur had gone and, therefore, asked Dr Tambe to review her, recording his view that a very soft systolic murmur remained present. Dr Kellett recorded that an echocardiogram was planned for later that day and that, were it to be normal, Imogen would be discharged.

r. At 11:00 on 28 May, Midwife Cotton recorded that Imogen had taken 30mls of formula (baby notes).

s. Later that day, at an unspecified time, Dr Tambe recorded the findings from the echocardiogram and that he had explained them to the Claimant; Imogen's heart was structurally normal; the murmur might, or might not, disappear; no follow up was required.

t. In the discharge summary sheet, timed and dated at 14:10 on 28 May 2014, ticks were inserted against (amongst others) boxes marked 'infant feeding' and 'baby led feeding explained' (baby notes). In the maternal notes, the discharge summary of the previous day was marked by Midwife Cotton as having been reviewed on 28 May 2014.

9. I turn to the evidence given by the witnesses of fact. I am satisfied that each witness from whom I heard gave evidence to the best of her recollection, reflecting her genuine perception of material events. That is not to say that I am satisfied that such recollection and/or perception was always accurate or reliable, as I shall explain. I begin with a summary of the qualifications and career histories of the Defendant's witnesses, which were not contentious.

Midwife Hurwood

10. Midwife Hurwood qualified as a registered midwife in October 2013, commencing employment as a Band 5 registered midwife at James Cook University Hospital on the 21st of that month. She left the Defendant trust in September 2018, by which time she had been employed as a Band 6 registered midwife. Until 2017, she had rotated between the postnatal ward, central delivery suite and maternity assessment unit at the hospital. She had then worked as a community midwife and in the maternity assessment unit. From June 2019, Midwife Hurwood had worked as a bank midwife, predominantly for the Defendant trust and mostly in the community. From May 2020, she had been working full-time for the NHS Track and Trace scheme, as a clinical contact caseworker, and had retained her midwifery registration.

Midwife Cotton

11. Midwife Cotton qualified as a registered midwife in April 2005, going on to work in Band 6 and Band 7 roles. She has been involved in a number of service improvement initiatives, including the writing of guidelines to inform practice. According to her witness statement, she commenced employment as a Band 6 midwife on the postnatal ward at James Cook University Hospital on 30 December 2014 (though it is likely that the year has been misstated, given the date of Imogen's birth). Having undertaken further roles for the same NHS trust, she left its employment in 2016, to commence employment at a different trust, in a Band 7 role, in which she remained until October 2018, maintaining valid registration thereafter and working intermittently as an agency midwife. She has worked as a locum midwife in Gibraltar and is the co-owner and director of a training business. Her evidence was that, in the periods prior and subsequent to her involvement with Imogen, she had had dealings with 'a few thousand' babies.

Dr Kellett

12. Dr Kellett qualified as a doctor in 2010, obtained a Diploma in Child Health in 2015 and qualified as a General Practitioner in 2017, since which time she has been working at her current practice. She commenced paediatric training in September 2012 and employment as a Specialist Trainee, Year 2 in the neonatology department of James Cook University Hospital in March 2014, in which capacity she first met the Claimant.

26 May 2014 — 18:30 to 23:15

13. The Claimant accepted that Imogen had taken 20mls of formula, without difficulty, at 18:30 on 26 May. She agreed that, at 19:20 that evening, Imogen had been warm, pink and settled and had seemed well. Following her transfer to the ward, she (the Claimant) had been put in a bay with two other mothers, directly opposite the midwives' office. At 20:30 that evening, when Midwife Hurwood had taken over her care, Imogen had seemed well. At 21:00, Imogen had taken a 20ml feed, with which

there had been no documented difficulties. Midwife Hurwood had provided refreshments at 21:40. The Claimant stated that she could not remember whether Midwife Hurwood had taken the recorded observations of Imogen at 23:15 that evening, though she could remember Imogen groaning lightly. All such evidence is consistent with that given by Midwife Hurwood, summarised below.

14. Midwife Hurwood's witness statement was based upon contemporaneous medical records and a written statement provided at the time of the Defendant's internal investigation, which she had exhibited. As she did not give live evidence, she was not cross-examined. She stated that she had provided postnatal care to the Claimant and her baby over the course of two, 12-hour nightshifts, on 26 and 27 May 2014. She could recall having been particularly busy on the latter night, as a number of the women and babies who had been allocated to her had required high-dependency care.

15. Midwife Hurwood stated that she had some, limited recollection of the Claimant and Imogen. She had first met the Claimant at 20:30 on 26 May 2014, when she had taken over her care, following the Claimant's transfer to the ward from the central delivery suite. It had been usual practice for handover to take place at the bedside. She had recorded that Imogen was being artificially fed and that her mother had raised no concerns at that time. It had been standard practice, on transfer, to conduct a quick, top-to-toe check, to ensure that the baby looked well, and she had completed the checklist, having completed an infant individual care plan for Imogen (see above). Midwife Hurwood stated that, over the course of that night, she had attended on the Claimant at 21:40, to provide refreshments, and, again, at 23:15. Had that been at the Claimant's request, it would have been her usual practice to have recorded that fact. Having noted that Imogen had been groaning lightly at 23:15, Midwife Hurwood had carried out neonatal observations, checking Imogen's oxygen saturations, pulse, temperature, respiration rate and colour. She stated that she would have opened Imogen's Babygro and vest, in order to complete that, to observe her chest moving and to check respirations. She would also have touched Imogen's chest, to check that she was warm. All observations had been normal and Midwife Hurwood had noted that Imogen had been very mucousy and had planned for that to be kept under observation.

27 May 2014: 00:00 to 07:59

16. It was the Claimant's evidence that she had tried to feed Imogen at around midnight on 27 May 2014, but that Imogen had had difficulty feeding and had seemed to be choking on her milk. Concerned, the Claimant had pressed her buzzer, but no-one had responded. She had, therefore, gone to find a midwife and had asked that Imogen be reviewed. She had told the midwife that Imogen had appeared to be choking on her milk and the midwife had turned Imogen onto her front and tried to wind her. The midwife had then checked Imogen's oxygen levels before advising the Claimant that Imogen was fine and that her choking could have resulted from mucus, which should clear up in a few days' time. The midwife had not fed Imogen at that time, nor had she asked the Claimant to do so. There being no other evidence inconsistent with that account and no record made by the midwife to whom the Claimant spoke, I accept it as accurate.

17. Midwife Hurwood's evidence was that, both at 02:15 and at 06:10, when she had checked on the Claimant, the Claimant had been sleeping and it had been usual practice to leave a mother to sleep, unless she or her baby had been under extra observations, or, previously, had given rise to concerns. At 02:15, she had checked that Imogen had been settled and had made the notes recorded above.

18. The Claimant stated that she would have provided the information which had led to the documenting of a 10ml feed (approximately) at 02:00 that morning. She could not recall Midwife Hurwood having returned at 02:15. Whilst she accepted that it was likely that Midwife Hurwood had done so, she did not accept that the noise had settled and could not recall whether they had discussed that. I accept Midwife Hurwood's evidence, reflective of the contemporaneous record which she made. The highest that the Claimant's evidence is put is a lack of recollection of that which had been discussed, in the early hours of the morning.

19. Midwife Hurwood's next interaction with the Claimant had been at 06:35 that morning, when she had retrospectively completed Imogen's daily care sheet for 26 May 2014. Her evidence was that it was common practice for that sheet to be completed retrospectively, as midwives could not be present for each feed. Information as to the time and quantity of feeds would have been obtained from the mother, as would information as to whether there had been any wet or dirty nappies. Midwife Hurwood's evidence was that the feeding pattern and quantity of formula taken between 18:30 on 26 May and 04:00 on 27 May (being 95mls, over four feeds) had been normal for a baby of Imogen's age.

20. The Claimant did not accept that Imogen had taken a feed of 45mls at 04:00 on 27 May, as had been recorded, as she did not recall Imogen ever having taken any significant quantity of formula. She accepted that she had had a discussion about Imogen's feeding with Midwife Hurwood, at 06:35. It was her recollection that Midwife Hurwood had never looked at Imogen's nappy, but would have asked the Claimant, who would have told her that she had changed Imogen's nappy. She could not remember whether she had told Midwife Hurwood that Imogen's nappy had been wet, or whether she had raised any concerns with Midwife Hurwood at that stage.

21. Here again, I accept Midwife Hurwood's evidence — with the exception of the quantity of formula recorded as having been taken at 04:00, it was not contradicted by the Claimant, who accepted that she had had a conversation with Midwife Hurwood at 06:35. In particular given the Claimant's hazy recollection of that conversation and her lack of challenge to the other aspects of Midwife Hurwood's record, I accept that Midwife Hurwood recorded that which she had been told in relation to the 04:00 feed, which extended not only to the volume of formula taken but to the fact that Imogen had passed urine.

08:00 on 27 May 2014 to 07:00 on 28 May 2014

22. At 08:00 on 27 May 2014, the Claimant met Midwife Cotton for the first time, when Midwife Cotton had taken over her care and that of Imogen.

23. Midwife Cotton told me that she could remember her interactions with Imogen in detail. She had obtained the Claimant's history at handover, from her maternity records and by speaking to her. She had had no concerns about mother or baby at that time and none had been expressed by the Claimant, who had been keen to go home as soon as possible. Midwife Cotton had explained that she would be unable to discharge them until Imogen had been examined by the paediatrician. Her evidence was that, subject to that examination, she would have been happy to have discharged the Claimant and Imogen at that point, having identified nothing which had been abnormal.

24. The Claimant stated that her earlier concerns had not fallen away by 08:00 on 27 May 2014, but acknowledged that, by then, she had been wanting to go home with Imogen; she had not felt that she had been receiving the necessary care, or that she could speak to anyone at the hospital. She did not elaborate on what she meant by that and the Defendant's care to that point is not the subject of criticism in these proceedings. The Claimant stated that she could not remember whether she had registered a concern which Midwife Cotton had then not recorded, or had said nothing because she had wanted to go home. Given the Claimant's lack of recollection of any expression of concern, her desire to go home and the detailed notes and plan recorded by Midwife Cotton at 08:00, I find that, on the balance of probabilities, the Claimant raised no concern at that time.

25. The Claimant acknowledged that Midwife Cotton's note to the effect that Imogen had last fed at 04:00 in the morning had resulted from information which she (the Claimant) had provided. Accepting that she had informed Midwife Cotton that Imogen had not been as mucousy, she did not accept that she had informed her that Imogen had taken a large amount at that feed; she had never done so. That information had come from Midwife Cotton herself, who had simply written a load of lies on the documents, she said. There is no evidence of dishonesty on the part of Midwife Cotton in relation to any aspect of her care of the Claimant and Imogen and such a contention, rightly, formed no part of the case advanced by Ms McArdle on the Claimant's behalf. Properly, Midwife Cotton was not cross-examined on that basis, nor would there have been any reason for her to have compiled a dishonest record of her initial, or any subsequent, meeting with the Claimant. None was proffered by the Claimant. Midwife Cotton's note of the 04:00 feed was consistent with that which had been recorded at that time by Midwife Hurwood and I accept that it accurately reflects that which the Claimant had reported to her.

26. The Claimant stated that she could not remember Midwife Cotton having discussed discharge arrangements with her during their first meeting, or the steps to take in the event that any problems arose at home. Had Midwife Cotton done so, the Claimant told me, she (the Claimant) would have brought Imogen back to the hospital a lot sooner than, in the event, she had done. She was certain that, on 27 May, they had not discussed infant feeding leaflets, infection or anything contained in the Red Book (the personal child health record). Midwife Cotton had given her no information about going home at that time. Insofar as it is inconsistent with the initial maternal postnatal discharge summary, I reject that account. In that summary, timed at 08:00 on 27 May 2014 and signed by Midwife Cotton, a tick or cross had been applied to the relevant pro forma entries and associated comments had been noted, where required. The document incorporates information which could only have come from the Claimant

(Advice on contraception: *'To see GP. Would like implant'*). It indicates that a number of matters relating to discharge were discussed at that stage, amongst them infant feeding leaflets. That is consistent with both parties' hope and expectation at the time that the Claimant and Imogen would be discharged later that day.

27. Dr Kellett stated that she was unable to recall her involvement with the Claimant and Imogen, and that her statement had been prepared from the contemporaneous medical records and with reference to her usual practice at the relevant time. She had first become involved in Imogen's care at 12:55 on 27 May 2014, when she had completed the NIPE (a standard examination, usually performed in the first few days of life), in the Claimant's presence. Amongst the matters which she had recorded had been that Imogen had been feeding well by bottle, opening her bowels and passing urine, and that her mother had had no concerns. Whilst she could not recall the conversation, it had been her usual practice to ask those questions of a baby's mother, and to look at the records. She would not have spoken to a midwife unless there had been concerns about the baby and, given her usual practice, it was highly unlikely that the information recorded had come other than from the Claimant. Had Imogen been unusually tense, irritable, or demonstrated an unusual cry, she (Kellett) would have made a note to that effect and the note which she had made had been inconsistent with a baby who had presented in that way. Whilst she might not have noted whether the baby had cried when examined, she would have recorded any abnormal cry and asked for a senior review by the registrar. Dr Kellett recounted her detection of a systolic heart murmur, and request that the specialist registrar examine Imogen, who confirmed its presence. Dr Kellett stated that, in ordinary course, she would not have had any role in monitoring and recording a baby's feeding, which would have been left to the midwives. On 27 May, she had had only the written records to indicate that Imogen had been feeding well, which she had assumed had come from the Claimant's verbal statement to that effect.

28. The Claimant told me that, as far as she could recall, only she and Imogen had been present during Dr Kellett's NIPE, at 12:55 on 27 May. Nevertheless, she could not account for Dr Kellett's note that Imogen had been feeding well; perhaps there had been a midwife present — Imogen had not been feeding well, so why would she have informed Dr Kellett otherwise, she asked. Whilst she could not remember being asked whether she had had any concerns, she acknowledged that Dr Kellett's note, *'Mum no concerns'* must have come from her (the Claimant). The Claimant did not accept that Imogen's tone had been normal, or that she had been handling well at that time; she had been sleepy, irritable when handled and had not been feeding. She had raised her concerns with Dr Kellett. Nevertheless, she accepted that, other than the heart murmur, no other concerns had been documented on 27 May.

29. I accept Dr Kellett's record of the NIPE and of her findings on examination as being accurate. The NIPE was a standard examination and Dr Kellett would have had no reason to deviate from her usual practice, or to have recorded something other than she had been told by the Claimant. The purpose of the NIPE had been to check that all was well with Imogen and I accept that Dr Kellett would have been alert to, and have noted, any abnormal cry, tension or irritability, just as she had noted the presence of Imogen's systolic heart murmur and sought a review by a specialist registrar. Furthermore, I accept Dr Kellett's evidence, which was not contradicted, that the note

which she had made would have been inconsistent with a baby who had presented in such a way.

30. It was the Claimant's evidence that Midwife Cotton had come to see her at 18:00 that evening. She could not remember whether she (the Claimant) had told her that Imogen had passed urine and opened her bowels, nor could she remember whether she had raised any concerns about Imogen's condition with Midwife Cotton. Her evidence was that Midwife Cotton had noted that she had not recorded any feeds since 09:00 that day, and had asked how much formula had been taken since that time. The Claimant's recollection was that she had gestured towards all of the bottles which had been around her bed from which she had tried to feed Imogen, which had still been full. She considered that the quantities recorded had been overestimated, as much of the formula would spill over Imogen and herself, hence the need to have used so many bottles. She did not consider that there had been any grounds for recording the quantities of formula said to have been taken and had not given Midwife Cotton the timings recorded, which, she stated, the midwife had simply made up. Imogen had not taken very much formula in the course of 27 May, she said.

31. Midwife Cotton told me that, at 18:00 that day, she had completed Imogen's feed chart retrospectively; something which (I note, in common with Midwife Hurwood) she believed to be common practice, as artificial feeds given by experienced mothers were rarely observed, in the absence of concerns. Ms McArdle did not challenge the propriety of that practice, absent any indicator of concern. It was Midwife Cotton's evidence that, during the first day of life, one would expect the gaps between feeds to be between two and five hours. It was important that newborn babies having no risk factors fed on demand, but a gap between feeds exceeding four hours was sub-optimal, she told me. Midwife Cotton said that the feed chart was designed to highlight problems with infant feeding and, thus, was not an appropriate tool for identifying poorly babies. Imogen had not had any risk factors which required regular observation using the Newborn Early Warning Score form, whereby observations were recorded in a structured way, enabling the prompt identification of any change in the baby's condition. Midwife Cotton stated that she had completed Imogen's feed chart from her discussion with the Claimant, who had provided the time of each feed. The volume of each feed had been recorded following examination of the formula bottles, on which a measuring scale had been marked, displaying the volume of milk in millilitres. Midwife Cotton stated that she would not have recorded information which she had believed to have been false, or which had not been provided by the Claimant in the course of their conversation. It had been for that reason that she had not recorded a time for the feed for which the Claimant had been unable to provide an approximate time. In her experience, many babies would spill milk and it was very easy to tell whether that formed part of normal feeding, or whether a baby was pouring a whole bottle of milk on itself. In conjunction with a discussion with the mother, looking at the scale on each bottle was the best and most accurate way of assessing the volume of formula taken. The Claimant had confirmed both the timings and quantities of the feeds taken and recorded, which had been normal for a baby of Imogen's age. Throughout 27 May, Midwife Cotton told me, she had had no concerns regarding mother or baby and Imogen's feeds had followed a normal and reassuring pattern. Had she been concerned, she would have commenced a feeding plan, detailing the quantity of milk to be taken at each feed, over 24 hours. Midwife Cotton stated that, but for the required echocardiogram, scheduled for the following day, she

would have been happy to have discharged the Claimant and Imogen, on the basis of her assessment at 18:00.

32. I prefer the evidence of Midwife Cotton in relation to the above visit. It is clear that, in the course of her discussion with the Claimant, she was given information (that Imogen had passed urine and opened her bowels) which only the Claimant could have provided. The description recorded of Imogen's condition (pink, warm and settled) was consistent with a baby who was not giving cause for concern and the Claimant cannot positively recall having raised any concern with Midwife Cotton at that time. Had Imogen not been feeding at all, or been spilling most of the formula down her front, I consider it likely that the Claimant would have reported that to Midwife Cotton, rather than simply gesturing towards the bottles, from which that state of affairs could not have been apparent, and leaving Midwife Cotton somehow to have discerned the position for herself. Further, had the day's bottles remained full at the relevant time, that would have been apparent to Midwife Cotton and inconsistent with any report by the Claimant to the effect that Imogen had been spilling most of her formula over herself. There is no basis for concluding that Midwife Cotton had made up the feeding times which she had recorded; had she been inclined to do so, it is unlikely that she would have inserted a question mark in place of one of the feed times. It was her positive recollection that the timings recorded had come from the Claimant and I am satisfied that the Claimant can have been the only realistic source of that information.

33. At 22:45 on 27 May 2014, Midwife Hurwood visited the Claimant. The Claimant could not remember whether she had mentioned any problem to Midwife Hurwood at that stage. She accepted that she had told Midwife Hurwood that Imogen had taken a 10ml feed at 19:00 that evening and that she had not raised any concerns about Imogen's feeding with Midwife Hurwood at that time. In my judgement, that would have been an unlikely approach had she raised concerns about Imogen's feeding with Midwife Cotton less than five hours earlier, lending further support to my finding that she had not. The note made by Midwife Hurwood accurately recorded the volume of formula which the Claimant had reported Imogen to have taken at 19:00.

34. It was Midwife Hurwood's evidence that, during the night of 27 May 2014, she had prioritised visiting each woman for whom she had been the named midwife, according to that woman's care needs. The Claimant had been seen at 22:45, probably towards the end of Midwife Hurwood's round, as neither she nor Imogen had had any additional care needs. Midwife Hurwood had made the notes for mother and baby recorded above. Her recollection was that that shift had been particularly busy; she had been responsible for two bays and there had been mothers and babies in each bay requiring a significant amount of care. There had been at least two other women in the same bay as the Claimant, one of whom had had twins and required intensive feeding support. Over the course of her shift, Midwife Hurwood had been present for all but the last of their feeds and estimated that feeding assistance had been required every two to three hours. She noted that curtains would usually be drawn around mothers during the night, to afford privacy. However, buzzers had been provided and, when it had not been possible for a buzzer to have been answered by a mother's allocated midwife, someone else would have answered it. Midwife Hurwood noted that she had made no further entries in the notes until 05:40 on 28 May, from which she could only assume that there had been no reason for her to have attended to the Claimant or

Imogen and that the Claimant had not alerted her to any concerns or needs which either of them had had.

35. It was the Claimant's evidence that, overnight on 27/28 May, Imogen would not settle and would start to choke when trying to feed. The Claimant said that she had gone to find a midwife and that someone had asked her what she had wanted. She had explained that she was concerned about Imogen, who had been choking on her milk, and had been told to go back to bed and that someone would come to see her shortly. A midwife had visited (to the best of her recollection) some three hours later, at 03:00, and the Claimant had been told to change the bottle teats. Imogen had been sleeping at the time and the midwife had not held her, or attempted to feed her. The Defendant has no record of this interaction, but accepts that a conversation of that nature took place, in the early hours of 28 May.

36. The Claimant told me that, when the midwife had left, she (the Claimant) had tried to feed Imogen, having changed the teat, but Imogen still would not take any formula. The Claimant had been teasing the teat in Imogen's mouth, to try to encourage her to suckle, but she would not do so. It would have been in that way that formula would have come out of the bottle. If Imogen had taken any formula, it would have been '*just bits that accidentally fell down the back of her throat'*. The Claimant recalled that the woman in the bed next to hers had had twins, each weighing five pounds, and had had a lot of help with feeding her babies, albeit that they had been feeding better than had the Claimant's eight-pound baby. She felt that this had never been picked up. The Claimant's evidence was that, whilst Midwife Hurwood would have been close by for much of the night, she could not specifically remember her, or her face, but had raised concerns with one of the midwives, as previously described.

37. At 05:40 and at 06:50 on 28 May, Midwife Hurwood had recorded that the Claimant had been sleeping and left undisturbed. Accordingly, on her evidence, prior to commencing her handover at 07:00 on 28 May, she had not had the opportunity to discuss Imogen's overnight feeds with the Claimant and had then finished her shift at 07:30. She stated that she had not been involved in changing Imogen's teats overnight and that a combination of a very busy workload and the Claimant having been asleep when she had gone to see her had meant that she had not completed Imogen's daily care sheet, documenting her feeds after 19:00 on 27 May 2014, as would have been her usual practice; something for which the Defendant had apologised.

38. Midwife Hurwood's evidence was that she had had no concerns about Imogen on either of the nights on which she had been on duty, other than in relation to the light groaning which she had heard at 23:15 on 26 May, which had settled by 02:15 on 27 May. Had the Claimant informed her of any concerns which she had had, or had she (Hurwood) observed any worrying behaviours in Imogen, she would have documented them and taken appropriate action. In particular, she would have spoken with the paediatric team and arranged for Imogen to be reviewed. There is no reason to doubt that assertion. She had had no further contact with the Claimant, or with Imogen, following the end of her nightshift on 27/28 May.

28 May 2014: 09:00 to 14:36

39. Midwife Cotton resumed her care of the Claimant and of Imogen somewhere between 09:00 and 09:45 on 28 May. The Claimant told me that, at that time, she had advised Midwife Cotton that Imogen was not feeding and had not fed overnight, and so Midwife Cotton had given Imogen a bottle, but had not examined her, and the Claimant could not remember her having reviewed all of the matters recorded in the notes. The Claimant considered that she (Cotton) had been distracted and recalled that Midwife Cotton had been talking to her about her (Cotton's) son. The Claimant considered that Midwife Cotton had not properly observed or recorded the amount of formula which Imogen had taken and had been making eye contact with the Claimant throughout the feed. Whilst she had recorded a feed of 30mls, most of the milk had been spilled down Imogen's front, as Midwife Cotton had teased the teat. Nevertheless, the Claimant told me that she had remained happy to be discharged at that stage, once she had seen the paediatrician regarding Imogen's heart murmur.

40. Having resumed the Claimant's and Imogen's care in the morning of 28 May 2014, Midwife Cotton had made an entry in the records, at 09:45, to the effect that the Claimant had been feeling well but having bouts of severe after-pains. Her analgesia had been up to date. Midwife Cotton's evidence was that no concerns had been raised by the Claimant regarding her midwifery care overnight. Midwife Cotton stated that she had conducted a routine top-to-toe examination of Imogen, recording the details set out above. I accept that evidence, consistent with the information recorded on Imogen's postnatal care chart against the pro forma entries: temperature; general appearance; skin; eyes; mouth; cord; urine; bowels; and feeding. As noted above, at its highest the Claimant's evidence was that she could not remember Midwife Cotton having reviewed all of the matters recorded in the notes.

41. In Midwife Cotton's view, the fact that Imogen's bowels had opened and that she had passed urine indicated that Imogen had been taking on sufficient fluid and nutrients for her system to work. Never in her career had Midwife Cotton been asked to account for the timing and quantity of urine and meconium or faecal matter passed, in any context; the fact that a baby was producing wet and dirty nappies was generally accepted to suffice. The consumption of some nutrient would explain that the bowel was working, but it would not be reasonable to compare that which had gone in with that which had come out and a working bowel would not indicate how long ago the baby had ingested nutrients. Nevertheless, if a baby had not fed for 14 hours, Midwife Cotton's view was that it would be unlikely to have been passing urine and opening its bowels the following morning.

42. Midwife Cotton's evidence was that the Claimant had reported that Imogen had been difficult to feed overnight and, following discussion, she (Cotton) had considered that that might have been due to the fact that the teats had been changed, though she had been unaware of the matters underlying that change. A struggle to feed following a change of teat indicated that the teat was not appropriate for that baby; it was not an indication that the baby was not feeding properly, she told me. Nevertheless, and whether or not the Claimant had articulated as much in terms, I consider that Midwife Cotton would have been aware that there would have been no need for a change of teat absent an issue of some form with feeding from the original teat and no other potential reason for the change was proffered. That does not mean that the replacement teats did not themselves create some issue, or that any issue prior and subsequent to the change was other than short-lived, but it does indicate a pre-existing

issue of some form, a matter which, I am satisfied, Midwife Cotton would have appreciated at the time.

43. Midwife Cotton had suggested reverting to the original teat and, having no documentation regarding overnight feeding, had then fed Imogen herself, over a period of around 10 to 15 minutes, in order to assess whether there had been a problem with Imogen's feeding, stating that Imogen had taken 30mls of feed without difficulty. Midwife Cotton had observed nothing untoward during that time and had assessed Imogen as having been pink, warm and alert, in which context, she would not have undertaken a full set of medical observations. Imogen had been on a low-risk pathway; a bottle-feeding baby of an experienced mother, and Midwife Cotton would not have performed clinical observations based upon a lack of documentation overnight. She had relied upon her own observations, whilst not dismissing the Claimant's concern, having a basis to believe that Imogen was then well and displaying no worrying signs of dehydration or hypoglycaemia, she told me. Midwife Cotton stated that she had been provided with a mechanical reason for any difficulty in feeding during the night, which had provided useful information when ascertaining whether Imogen had been feeding poorly, or not feeding; had there been no question regarding the teats, she might have come to a different conclusion, or plan. It was not her recollection that most of the formula had spilled down Imogen's front and she would not have recorded that the feed had been taken with no difficulty, had that been the case. Had most of the feed been spilled, Imogen's clothing would have been soaked through and that would have been of great concern. Most bottle-feeding babies would spit out a bit of milk, or dribble, at first and she had not observed Imogen's behaviour to have differed from that of any other bottle-fed baby. Imogen had suckled when Midwife Cotton had fed her, hence Midwife Cotton's record that she had taken 30mls of formula.

44. Midwife Cotton stated that she did not accept that she had been distracted whilst feeding Imogen and conversing with the Claimant and that she had had no concerns during or after the feed that Imogen had not been feeding adequately, or had been unwell. She had agreed a plan with the Claimant to feed Imogen again by 13:00. Having made a full, holistic assessment of Imogen, discussed her overnight feeding with the Claimant and spent time holding, caring for and feeding Imogen herself, in order to ensure that there had been nothing untoward or providing a cause for concern, Midwife Cotton had been satisfied with her findings and with the plan made. Had she have found Imogen difficult to feed, or have found something worrying, she would have carried out clinical observations. Had she have had concerns, she would have implemented a feeding plan detailing the volume of formula to be taken at each feed over a 24-hour period, as a responsible midwife ought to do in such circumstances. In this case, she had not been concerned and she considered that a baby who had not fed, or who had encountered great difficulty in feeding, over 14 hours would not have presented in the manner in which Imogen had then presented. Such a baby would have been expected, at the very least, to have been very sleepy, and one might have started to have seen signs of hypoglycaemia, such as lethargy; coldness to the touch; irritability; jitteriness — the making of abnormal hand movements; the baby might have been pale or floppy; her skin might have appeared dry and pale; or she might have had a dry mouth, for which reason, in the course of a baby's daily checks, a midwife would check whether the baby's tongue, lips and mouth were healthy and moist.

Issues a(i) to (a)(iii)

45. Whilst, in the regrettable absence of a record, it is not possible to be certain of the volume of formula (if any) taken by Imogen between 19:00 on 27 May and 09:45 on 28 May, on the balance of probabilities I am satisfied that, during that period, Imogen had ingested sufficient fluid to have produced wet and dirty nappies, and to have presented in the way described by Midwife Cotton at 09:45 (which was not challenged by the Claimant). I accept that a baby who had ingested no formula over a 14-hour period would have been unlikely to have passed urine, opened her bowels or presented as she did. Consistent with the evidence of Dr Kellett (at paragraph 49, below), the passing of urine and opening of her bowels were indicative of a baby who had been feeding, recognising that they could not establish the precise timing or quantity of that feeding. Furthermore, from questions numbered two and seven in a list compiled by the Claimant after Imogen's death and prior to a meeting in August 2014, it is apparent that the Claimant then considered that Imogen had not had a 'good feed' and had not taken 'much milk' during the night. That, too, would suggest that she had taken some milk and that the Claimant's report that she had been choking on her milk did not indicate that no milk had been ingested, though it is not possible to say how much. It is consistent with the contemporaneous note made by Midwife Cotton at 09:45 on 28 May, to the effect that Imogen had struggled to feed (as distinct from not having fed at all); with the view which I have formed, and explain in this judgment, to the effect that the Claimant was not always a reliable historian of the volume of formula taken by Imogen; and with Midwife Cro's evidence (see below) that Imogen had not presented as an ill baby on 28 May 2014. Following the change of teat, the Claimant had not alerted Midwife Hurwood (or any of her colleagues) to any ongoing difficulty and she and Imogen had been sleeping when checked at 05:40. Those matters, too, are consistent with Imogen having taken some food overnight. In particular in the above context, I am satisfied that the absence of a record of overnight feeds is not something from which I am driven, or ought, to conclude that Imogen did not feed at all; as had happened previously, in keeping with usual practice, feeds could be documented retrospectively, on the basis of information obtained from the mother, and the Claimant had been asleep when checked at 05:40 and, again, at 06:50, being very shortly before Midwife Hurwood had commenced her handover and had then gone off shift. It follows that she (Hurwood) had not been in a position to complete such a record herself. In my judgement, the fact that the paediatric infectious disease experts are agreed (see below) that bacteraemia would most likely have been present from just before 05:30 on 28 May 2014, does not itself indicate that the Claimant's account of the position overnight is to be preferred, there being no evidence that bacteraemia, once present, had been the cause of any feeding issue and, in any event, on the Claimant's account of the timeline, it had not been present at the point at which, or until some time after, she had been advised to change and had changed Imogen's teats.

46. As to the 09:45 feed, I accept that, as an experienced midwife, Midwife Cotton would have been able to observe and assess a baby whom she was feeding whilst, at the same time, conversing and making eye contact with its mother. Had Imogen spilled most of a 30ml feed down her front, that would have been apparent (from her wet clothing), as would have unusual sleepiness or any signs of hypoglycaemia, as described by Midwife Cotton, had they been present. Midwife Cotton's purpose in feeding Imogen had been to assess whether Imogen could feed without difficulty and

I find that, in particular following the concern which had been expressed by the Claimant as to a difficulty feeding overnight, she would not have recorded that 30mls of formula had been taken, had most of it been spilled. The volume of feed taken indicated that any difficulty overnight was not manifesting by 09:45 on 28 May.

47. Dr Kellett conducted a second examination of Imogen at 10:35 on 28 May, in the presence of the Claimant. It was the Claimant's evidence that Imogen had been screaming at that time and that both the doctor and midwife had commented that she had been very vocal when handled. She recalled having asked about Imogen's cry, which had been high-pitched. Imogen had been very irritable and had tensed her whole body when touched or handled, she said. The Claimant acknowledged that Dr Kellett had noted none of those matters. The Claimant recalled her own mother having remarked (at an unspecified time) upon the unusual pitch and having stated that she had never heard Imogen cry like that before. The Claimant had told her that she had already mentioned it to the medical team and had been advised that it was likely to have been caused by mucus. The Claimant's evidence was that, when Dr Tambe had then examined Imogen, he had remarked that she did not like him, because she did not like to be handled, though he had made no record of the behaviour which the Claimant described. The Claimant said that she had raised no concerns with Dr Tambe about going home. She had been reassured all the way through that Imogen had been okay, which had been why she had wanted to go home.

48. Dr Kellett referred me to her record that Imogen had been feeding, passing urine and opening her bowels. Before carrying out an examination of any newborn baby, she told me, it had been her usual practice to review the maternal records, in which the baby's observations would have been recorded and its feeding noted by the midwifery team. Dr Kellett stated that it had also been her usual practice to ask parents if they had any concerns, to document any concerns expressed in the clinical notes and to take any appropriate action. She had not documented any parental concerns in this case and had had no further involvement in Imogen's care following her examination on the morning of 28 May. At that time, no concerns had been noted and there had been no reason why Imogen should not have been discharged.

49. Under cross-examination, Dr Kellett stated that, had she known that the midwifery notes had not recorded any feeds overnight; that it had been the Claimant's view that Imogen had not fed overnight; and that, at 09:45, the Claimant had reported that Imogen had struggled to feed well since the teats had been changed overnight, she would not have recorded, at 10:35, that Imogen had been feeding, though she could only assume that that information had come from a verbal statement, made to her at the time, to the effect that Imogen had been feeding, opening her bowels and passing urine. Those had been standard questions, asked to ensure that, for example, the baby's kidney system was functioning. It was important that a baby opened its bowels in the first day of life and, if a baby were feeding, it would also be passing urine and opening its bowels. No midwife had flagged to her that feeding had been an issue for Imogen.

50. Consistent with Dr Kellett's earlier evidence, I am satisfied that an unusual cry, unusual irritability and/or a tensing of Imogen's whole body when she was touched or handled would have been noted and have prompted referral to a specialist registrar. Dr Kellett would have had no reason to depart from her usual practice of asking a baby's

parent whether there were any concerns, yet had documented none. The Claimant had expressed no concern to Dr Kellett about being discharged and, I find, is likely to have been the source of the information that Imogen was feeding, passing urine and opening her bowels, provided in answer to Dr Kellett's standard questions, albeit that some reassurance in that respect would have been provided by the midwifery notes which Dr Kellett had read. Similarly, I consider it inherently unlikely that a specialist registrar who had been concerned about the way in which a baby had behaved when handled would not have recorded that concern, and undertaken, or indicated a need for, further investigation in its light. In my judgement, the jocular nature of Dr Tambe's remark, as reported by the Claimant, indicates that Imogen's behaviour during the morning of 28 May had caused him no professional concern. In short, neither Midwife Cotton nor either of the two neonatologists had identified any concern arising from the way in which Imogen had presented during the morning of 28 May 2014, consistent with a baby who had presented as healthy at that time. I consider it to be inherently unlikely that all three professionals would have failed to have noted or recorded an unusual cry and unusual behaviour on handling, had such features then been present.

51. Midwife Cotton told me that, for a bottle-fed baby, it would be reasonable to consider that two successful feeds would suffice to establish whether feeding was problematic, though she had not ascertained whether the Claimant's technique had been effective. In the event, Imogen had fed at 11:00. Midwife Cotton stated that she could not be sure whether it had been she or the Claimant who had given that feed, but, irrespective of who had done so, the quantity documented as having been taken would have accurately represented the quantity which either she had given to Imogen, or which had been communicated to her by the Claimant.

52. Midwife Cotton's evidence was that, in 2014, she had been aware of the danger of infection, including Streptococcus, in neonates, which could prove fatal, and had been trained on the Defendant's Care of the Newborn Baby Guidelines, in use between 2012 and 2015. She had been aware (as set out in section 17.4 of that guideline) that symptoms of GBS at, or shortly after, birth could include poor feeding, but, having conducted a holistic assessment, had found no worrying signs of poor feeding by Imogen. The Defendant's own guideline had stated that most babies having early onset GBS presented with symptoms shortly after birth and that 90% of cases presented by 12 hours of age. Imogen had been outside that group. Midwife Cotton's priority had been to ensure that Imogen had been capable of taking fluid, which she had found to have been the case. She stated that she had felt confident that Imogen had been well and able to feed. Her clinical judgement at the time had been that a 12- or 24-hour feeding plan had not been necessary.

53. Midwife Cotton told me that, in 2014, she had also been aware of the NICE 2012 Neonatal Infection Guidelines, though would not have been looking at them in the context of Imogen's care. She acknowledged that '*feeding difficulties (for example, feed refusal)'* and *'feed intolerance'* were two of the clinical indicators of possible early-onset neonatal infection there identified. Noting that section 1.2.3.2 of the guideline stated that, *'In babies without red flags and only one risk factor, or one clinical indicator, using clinical judgement, consider whether it is safe to withhold antibiotics and whether it is necessary to monitor the baby's vital signs and clinical condition — if monitoring is required continue it for at least 12 hours (at 0, 1 and 2*

hours and then 2-hourly for 10 hours)', she stated that her clinical judgement at the time, having observed lots and lots of babies feeding, had been that she had not been concerned by Imogen's ability or willingness to feed, or that she had been exhibiting poor feeding. Appreciating that the Claimant had been finding it difficult to feed her, Midwife Cotton had been confident of her own assessment that Imogen had been well and able to feed. She had not considered Imogen to have fallen within the relevant part of the NICE guideline at all; her assessment had reassured her that Imogen had been behaving as any normal bottle-feeding baby would behave and had had no other risk factors. The plan which she had put in place had been designed to ensure that Imogen was feeding regularly; it had not been designed by reason of any suspicion of GBS, or any other, infection. The guideline had related to antibiotic treatment, based upon a suspicion of infection, and had not been concerned with ensuring regular feeds. It stated that consideration needed to be given to the course described, using clinical judgement. Midwife Cotton told me that Imogen had not been assessed under any guideline relating to unwell babies as a baby at risk of infection; she had been assessed as a normal, term, demand bottle-feeding baby and, having assessed her, she could find no clinical indicator that Imogen had been at risk of infection.

54. The Claimant's evidence was that, at around 11:00, Midwife Cotton had fed Imogen again. The Claimant recalled that she (Cotton) had moved the bottle around in Imogen's mouth, but that the milk had spilled down Imogen's front. She, therefore, did not agree that Imogen had taken the recorded 30ml feed at that time, albeit that, when she had later presented at the hospital, on 29 May, she had told staff that Imogen's last full bottle had been taken at 11:00 on 28 May, having referred to the hospital notes of that feed, which she had had no reason to question at the time. Generally, the Claimant said that she had been concerned that Imogen had not been sucking sufficiently on her bottles when feeding. The Claimant had felt upset and remembered there having been a lot of small, ready-made bottles surrounding her all the time. Those bottles could not be used after an hour and had been stacking up in her cubicle. She had been constantly receiving bottles, but Imogen had never cried for a bottle, so she had tried to feed her at every opportunity. There had been no pattern of feeding and Imogen had never sucked on her bottles. The Claimant had felt that Imogen had been struggling, eventually to a point where she had not been feeding at all. She did not think that Imogen had ever taken more than 10mls at a time.

55. If it is the case that Midwife Cotton had given the 11:00 feed, I am satisfied that she would have been alert to check that the quantity which she had recorded had been ingested by Imogen and, as before, that she would have noticed and noted had most of the recorded 30mls been spilled down Imogen's front. If, in fact, it had been the Claimant who had fed Imogen on that occasion, she can have been the only source of the quantity recorded by Midwife Cotton. Furthermore, as it is her position that Imogen had at no point taken a quantity of milk in excess of 10mls, on 29 May she would have had cause to (but did not in fact) question any record which indicated that Imogen had taken a full bottle, or three times that quantity, at her last recorded feed prior to discharge from hospital the previous day. It is, in any event, clear that the Claimant's evidence that Imogen had at no point taken more than 10mls in a single feed is contradicted by her own earlier evidence that Imogen had taken 20mls at 18:30 and, again, at 21:00 on 26 May 2014. The midwives would have noticed a collection of full bottles stacking up around the Claimant, when variously reviewing the quantities of formula taken. For all such reasons, I am satisfied that the Claimant's

recollection of the amount of formula taken by Imogen during the morning of 28 May is inaccurate.

56. So far as relevant to this claim, I have set out above the material recorded in the infant postnatal discharge summary, timed at 14:10 on 28 May 2014 and the fact that the original discharge summary, which had been completed on the previous day, had been marked as having been reviewed on 28 May.

57. The Claimant stated that she and Imogen had been discharged at 14:36 on 28 May. She told me that she had not raised a concern with any of the medical staff that Imogen had not been well enough to have been discharged at that time and that she had not been given advice as to when to contact the postnatal ward, should Imogen's feeding not improve, or as to the signs of illness to look out for, or to continue a feeding schedule. She remembered having received a 'Bounty' pack and the Red Book, but did not remember there having been any discussions regarding the latter. She remembered that the Red Book had contained a meningitis card, at the back. She acknowledged that her delivery experience had been discussed and that advice had been given regarding contraception, but did not remember discussing discharge with Midwife Cotton, or what would happen thereafter. She could not remember whether Midwife Cotton had discussed baby-led feeding with her. She could not remember the discussion or what they had discussed, she said.

58. It was Midwife Cotton's evidence that, following the echocardiogram, the paediatric team had been happy for Imogen to go home without follow-up. She (Cotton) had been able to provide continuity of care, over two days, to the Claimant and her family, and she considered that she had built up a good rapport with the Claimant, having spoken to her at regular intervals throughout her shift. Continuity of care enabled a midwife to assess mother and baby, as part of a dynamic, ongoing process. It was Midwife Cotton's position that her decision to discharge a mother and baby would not rely upon documentation alone, but would take into account a holistic assessment of their needs. The Claimant had been very keen to go home and she (Cotton) had discharged her as soon as she could, when given the go-ahead to do so by the neonatologists. Imogen had fed well at 09:45 and, again, at 11:00 and no further concerns about her feeding had then been expressed by the Claimant prior to discharge. Had the Claimant voiced any concerns, Midwife Cotton would have observed Imogen for a longer period, but believed that she had been acting in accordance with the Claimant's wishes when discharging her. At that point, she had had no concerns regarding Imogen's health and well-being and had reassured the Claimant that she had seen nothing worrying. She had not observed her to have had a high-pitched cry, or to have been irritable or grunting. She had not observed any abnormal tensing on handling. Had she observed any worrying behaviours, or had such behaviours been reported to her, she would have recorded and acted upon them, and would have contacted the Advanced Neonatal Nurse Practitioner, or the paediatric team.

59. Midwife Cotton told me that she had completed the discharge paperwork, including the discharge checklist. The discharge process had included a discussion of Imogen's general well-being, including signs and symptoms of common problems, signs of an unwell baby and the significance of wet and dirty nappies. Feeding had also been discussed. Imogen had been the Claimant's second baby, the Claimant had already

demonstrated that she knew how to feed her, had been feeding her on demand and wanted to go home. Accordingly, Midwife Cotton told me, whilst she could not recall the exact words used, she would have advised the Claimant that, were she to have any worries about Imogen's feeding, she should call the hospital. The conversation would have been responsive to the Claimant's needs, so feeding would have been high on the list of priorities. She had told the Claimant to feed Imogen on demand and told me that, were Imogen only to have demanded food every five hours, but taken a reasonable quantity with no difficulty, that would not have given cause for concern. It was Midwife Cotton's evidence that she would give similar information to every mother whom she discharged from a postnatal ward regarding making contact should there be any concern whatsoever. All women discharged from the postnatal ward were given the advice line number and a personal child health record ('the Red Book'), which was a national document which included a section prepared by the Meningitis Research Foundation, containing details of symptoms for which to check and action to take. It was not expected that a mother would remember everything said to her on discharge. Advice regarding formula-feeding babies had been filled in on the discharge paperwork and it had been unnecessary to duplicate it within the Red Book. Information regarding rash, raised temperature, high-pitched cry, drowsiness, lethargy or irritability had been provided in pictorial format in the Red Book; it was, perhaps, a shortfall in the Defendant's tick-box documentation that it was not set out in the infant post-natal discharge summary, but she had fulfilled all of the Defendant's requirements when discharging Imogen and her mother and had ticked the box to indicate that the baby's general wellbeing had been discussed, including signs and symptoms of common problems. She had had no concern about early onset neonatal infection prior to Imogen's discharge. The infant post-natal discharge summary indicated that infant feeding had been discussed and baby-led feeding explained and her advice would have been that, should the Claimant be worried that her baby was not feeding regularly, she should contact the unit. On every discharge, Midwife Cotton stated, she would inform the mother that, should she have any concerns about herself or her baby, she should call the unit and, if worried that her baby was acutely unwell, should go straight to Accident and Emergency. That had been routine practice. Midwife Cotton stated that she had had no further contact with the Claimant following her discharge.

60. I accept Midwife Cotton's evidence relating to discharge, which is consistent with the paperwork which she completed contemporaneously and with her routine practice. Like Dr Kellett before her, she had not observed Imogen to have had a high-pitched cry, or to have been irritable or grunting. She had not observed any abnormal tensing on handling. I accept her evidence that, had she done so, she would not have recorded the information which she did record, or discharged Imogen. Similarly, had Imogen presented at the time in the way now described by the Claimant, I consider that the Claimant herself would have raised concerns about Imogen's fitness to be discharged, but she did not. I consider that, subject to some issue with feeding observed overnight on 27/28 May, Imogen had presented as a well baby up to the point of her discharge from hospital. I am fortified in that conclusion by the jointly held view of the paediatric infectious disease experts that, prior to her discharge, Imogen had not developed any signs or symptoms of, or relating to, her later sepsis (see below).

61. The Claimant candidly stated that she could not recall her discharge conversation with Midwife Cotton, and there is no other basis upon which to reject Midwife Cotton's account of its content.

14:37 on 28 May 2014 to 19:40 on 2 June 2014

62. The Claimant's evidence was that, following discharge, she had remained concerned that Imogen had not been feeding regularly and had been taking only very small amounts. During the afternoon and evening of 28 May, Imogen had not taken any feeds at normal intervals, and had consumed only very small quantities, in sips. She had been irritable, drowsy and increasingly unwell. She had flinched when the Claimant had changed her nappy and had arched her whole body. The Claimant had called her mother because she (the Claimant) had been unable to settle Imogen, who had had a constant high-pitched cry, and she had not been feeding as a newborn baby ought to have done; she had not been suckling. Her mother had arrived at around midnight on 29 May. The Claimant said that she could not really answer whether she had noticed that Imogen had deteriorated at around that time; she had been poorly for a long time before they had had to take her into hospital, she just had not realised how poorly. It was the fact that Imogen had become more unwell just before midnight which had made the Claimant ring her mother, albeit that Imogen had been getting worse all the time. As indicated by the clinical notes made, retrospectively, at 08:30 on 29 May, Imogen had become increasingly unwell over the 16 to 18 hour period preceding that time (i.e. from between 14:30 and 16:30 on 28 May onwards). At around 05:30 on 29 May, Imogen had been groaning and breathless, having a floppy and mottled appearance. The Claimant had noticed that Imogen had developed a rash, spreading from her bottom to her whole body. Imogen's condition had acutely deteriorated, prompting the Claimant to telephone the postnatal ward at that time. She had spoken to a midwife and informed her that Imogen had not fed since 22:00 on 28 May, was floppy, groaning and had a bruise-like rash spreading over her body. The midwife had advised her to change the bottle teat, and to hold Imogen skin–to–skin, to calm her down, as it was likely that she was worked up, from crying. The Claimant had also been advised to take Imogen to the out-of-hours GP, if she were concerned about the rash. There had been no attendance note taken of that telephone call and the hospital had been unable to identify the midwife to whom the Claimant had spoken.

63. The Claimant had decided to take Imogen to the Accident and Emergency department ('A&E'). A clinical note indicated that she had telephoned at 06:50, and had arrived at A&E at 07:25. The A&E admission record had documented her arrival at 06:15, and her own telephone records indicated that the earlier telephone conversation had commenced at 05:21, from which she concluded that the hospital records were inaccurate[5]. The A&E casualty card recorded that Imogen had been admitted at 06:15 on 29 May, by which time, the Claimant recalled, she had been deteriorating rapidly. The Claimant had informed the team caring for Imogen that the midwife had advised her to take Imogen to the out-of-hours GP and had been told that that had been inappropriate advice and that she had acted appropriately in bringing Imogen to A&E.

[5] I interpose to note that it is not clear whether the clinical note to which the Claimant referred documents the time, respectively, of the Claimant's telephone call and subsequent arrival at A&E, or the time at which the author of that note was (1) called to and (2) arrived at A&E. Given the accurate timings for the Claimant's telephone call and arrival at A&E recorded in all other clinical notes for this date, the matter is not of significance.

The hospital had since apologised for the fact that the Claimant's discussion with the midwife had not been documented and for the erroneous advice which had been given. Imogen had required resuscitation, before being transferred to the paediatric intensive care unit at the Great North Children's Hospital, within the Royal Victoria Infirmary. Blood samples had shown that she had had a severe GBS infection. Despite intensive treatment, she had continued to deteriorate. On 2 June 2014, the decision had been taken to withdraw active care and Imogen had died at 19:40 that day.

64. The above account is not challenged by the Defendant, subject to the need for me to make such findings as the available evidence permits as to the time at which Imogen had exhibited signs and symptoms of sepsis, and related findings of fact going to causation, which I shall address following a consideration of the expert evidence and my conclusions in relation to issues (b) to (d).

The expert evidence

Professors Ladhani and Heath

65. Further to their respective reports and two joint meetings, Professors Ladhani and Heath provided two joint statements (respectively dated 14 May 2021 (as amended on 10 July 2021) and 10 July 2021) which addressed certain previously identified questions, the second of which took as its stated premise that *'it is not alleged by the Claimant that Imogen should have been suspected of having sepsis before the time of discharge in the early afternoon of 28 May 2014.*' Professors Ladhani and Heath did not consider that, prior to her discharge, Imogen had developed any signs or symptoms of, or relating to, her later sepsis and stated that that opinion did not depend upon the court's resolution of any disputed facts. The only disputed fact for consideration was that of feeding difficulty, which may be a clinical indicator (but not a "red flag" symptom) of sepsis (see the NICE early onset infection guideline). Feeding in and of itself would not raise concerns of sepsis, unless accompanied by other clinical features or indicators of sepsis. In this case, feeding difficulty would have been the only clinical indicator present in an otherwise well baby. Professors Ladhani and Heath stated that they recognised that feeding difficulty was common in babies and, alone, had a very poor predictive value for sepsis, since the majority of infants with feeding difficulties would not have, or would not develop, sepsis. They were agreed that, by 05:30 on 29 May 2014, Imogen had developed overt meningitis and that the blood-brain barrier most likely had been breached by around 17:30 on 28 May 2014. On that basis, it was agreed that Imogen would have had bacteraemia (that is bacteria in the bloodstream) at around 12-24 hours prior to the blood-brain barrier being breached. As Imogen had been a neonate, with a relatively immature immune system, bacteraemia would most likely have developed closer to 12 hours prior to breach, i.e. just before 05:30 on 28 May. In the event that the court accepted the Claimant's statement that, during the afternoon and evening of that day, Imogen had been irritable, drowsy and become increasingly unwell, Imogen would have been referred to and seen by a paediatrician, had she remained in, or been brought back to, hospital. The presence of irritability and drowsiness in a newborn infant would have led to additional investigations, including a blood test and the initiation of intravenous antibiotics. Those measures would have been completed within two hours of assessment by a paediatrician. For meningitis to have been prevented, it would have been necessary to have administered antibiotics at least 12 hours prior to inception of meningitis i.e. by 17:30 on 28 May. Extrapolating from the progression of Imogen's

illness, Professors Ladhani and Heath were agreed that, on the balance of probabilities, in order for Imogen to have survived her infection the first dose would have needed to have been administered at least six hours before she had become critically unwell, i.e. by 23:30 on 28 May 2014. Had antibiotics been administered prior to that time, on the balance of probabilities Imogen would have survived her infection, though, given that meningitis (evidenced by drowsiness and irritability) had already been established, on the balance of probabilities she would still have suffered long-term neurological complications associated with bacterial meningitis.

Midwife Cro and Ms Maddy

66. Midwife Cro qualified as a midwife in 1991 and has current midwifery registration status. She has worked in hospital, community, research, practice, development, risk management, and statutory regulation of the midwifery profession. She holds a BSC and MSc in midwifery and held the post of Local Supervising Authority, Midwifery Officer, at Band 8D, for nine years. At the date of trial, she was the Deputy Director of Quality at an acute NHS trust and maintained her professional registration by meeting the NMC revalidation requirements, being 450 clinical hours every three years.

67. Ms Maddy had been a registered midwife between 1975 and 2010. She had not been a practising registered midwife in 2014, or at a time when the 2012 NICE guideline on neonatal infection had been in operation. She had been a registered nurse in 2014. Ms Maddy had held a position as a senior midwife until 2005, following which her role had not required her to hold a midwifery qualification, though she had undertaken continuous professional development and been a member of the Maternity Services Liaison Committee, which had helped to formulate the care and arrangements for maternity services. Between 2005 and 2006, Ms Maddy had been engaged in risk management and, from 2006 to 2013, as Associate Director of Corporate Services and Governance. She had then undertaken certain projects for the NHS, before becoming an adjudicator for the Property Ombudsman. She told me that she had over 35 years' experience as a midwife, in all aspects of care; whether in a management, supervisory or mentoring role, and in direct care. Ms Maddy considered that the particular area of infant feeding had not changed; babies were fed by breast or bottle in a similar way and their care had remained unaltered.

68. Following a meeting, Midwife Cro and Ms Maddy prepared a joint statement. Whilst, as will be seen, each shifted her position in certain respects under cross-examination, I begin by summarising the position as it stood at the outset of trial, as apparent from that joint statement.

69. Midwife Cro and Ms Maddy were agreed that a healthy baby would have been expected to feed on demand, approximately every three to four hours, albeit that, in her report, Midwife Cro had stated that a gap of four to six hours would be acceptable. They agreed that problematic and less frequent feeding could be a clinical indicator of underlying illness. Poor feeding could cause hypoglycaemia and be a clinical indicator of infection. In Ms Maddy's view, Midwife Hurwood's plan, at 22:45 on 27 May, that Imogen be fed on demand had been reasonable. Midwife Cro was of the opinion that it had constituted a breach of duty and that Imogen ought to have been checked at midnight on 28 May. Ms Maddy was also of the view that the Claimant's witness statement implied that Imogen had been handled overnight and offered feeds

between midnight and 07:00 on 28 May 2014. Midwife Cro's view was that Imogen ought to have been checked at 07:00 and that a failure to do so had constituted a breach of duty — there had been no record of a feed since 19:00 and the Claimant had stated that Imogen had not fed for 12 hours; a sign of poor feeding, itself a possible indicator of early onset postnatal infection. Imogen ought to have been assessed and her vital signs monitored. If those observations had been within normal limits, a feeding plan of three to four-hourly feeds ought to have been put in place. In Ms Maddy's opinion, Midwife Hurwood's witness statement implied that her plan at 22:45 on 27 May had been for the Claimant to care for Imogen overnight, with Imogen feeding on demand. Midwife Hurwood had recorded that she had observed the Claimant at 05:40 and at 06:50 and had left her undisturbed on both occasions. At 09:45, Midwife Cotton had noted that Imogen had struggled to feed overnight, since the teat had been changed.

70. Midwife Cro was of the view that there had been no record of any feed after 19:00 on 27 May. Poor feeding was a clinical indicator of infection, in response to which the plan ought to have been to assess the baby by taking a full set of observations. Had those observations been normal, a feeding plan ought then to have been put in place for Imogen to have been fed and checked every three to four hours, with the quantity of formula taken being recorded. The Claimant's statement had described a baby who had been struggling to feed. Midwife Hurwood had made no record after 22:45 on 27 May. Were the Claimant's account of events overnight on 27/28 May to be accepted, both Midwife Cro and Ms Maddy were agreed that it was indicative of a sleepy, uninterested baby who was not feeding effectively and that the feeding described would have been of concern.

71. In the absence of a recorded feed since 19:00 on 27 May, and having regard to the note made at 09:45 on 28 May, Midwife Cro's view was that, *'if a baby had been found not to have fed for over 14 hours…the midwife should have carried out and recorded a clinical assessment of the baby which should have included clinical observations'*. A period of 14 hours with no record of a feed would be a sign of poor feeding, considered to be a clinical risk factor. Ms Maddy was of the opinion that the absence of a record was not an indication that Imogen had not fed for 14 hours and that the midwife had assessed the baby and taken the appropriate action at 09:45 on 28 May, in having fed Imogen, who had taken 30mls of formula.

72. Following the plan put in place by Midwife Cotton at 09:45 on 28 May, in Ms Maddy's view there had been no breach of duty by Midwife Cotton in not having taken a full set of observations and planned for three to four-hourly feeds, or having recorded the quantities of formula taken and observations. Imogen had been examined, handled and observed by two clinicians, and by Midwife Cotton, in the presence of the Claimant. At 09:45, she had been described as pink/warm, having good tone and a mouth that was moist and clean. Midwife Cro's opinion was that a period of no feeding for 14 hours ought to have been a clinical indicator for possible early newborn infection, such that it would have been *'usual practice'* to have monitored Imogen's vital signs and clinical condition until a feeding pattern had been established and she had been feeding effectively, three to four-hourly.

73. Midwife Cro and Ms Maddy were agreed that the advice which ought to have been given on discharge was that set out in the NICE Postnatal Care Standards 2006. In Ms

Maddy's and Midwife Cro's joint view, on safe discharge the advice would have been to call the postnatal ward, should Imogen not feed well; and of signs of illness for which to be observant, such as a rash; raised temperature; high-pitched cry; drowsiness; lethargy; and irritability. They diverged in relation to the advice to have been given regarding feeding. In Ms Maddy's view, the advice ought to have been to continue feeding Imogen on demand, three to four hourly. Midwife Cro considered that, as Imogen had had a period of 14 hours with no feeds, the plan ought to have been to continue to observe Imogen's feeding pattern, with three to four-hourly feeds. In her opinion, Imogen ought not to have been discharged until her feeding pattern had been re-established, as there had been a clinical indicator for early infection. Both Ms Maddy and Midwife Cro were of the view that, if the Claimant's account of events in her witness statement, as to the quantity of formula taken by Imogen prior to discharge on 28 May, was correct, that would indicate ineffective feeding.

Midwife Cro

74. Midwife Cro's oral evidence was that there were a number of factors which one would consider in assessing whether a baby is healthy. A healthy baby should have normal colour for its ethnicity; maintain a stable body temperature; pass urine and stools at regular intervals; initiate feeds, suck well on the breast or bottle and settle between feeds; and not be excessively irritable, tense, sleepy, or floppy. She referred to the 2012 NICE guidelines relating to risk factors for infection and clinical indicators of possible infection and as to the steps to be taken, should there be any concerns about early-onset neonatal infection, before a baby is discharged.

75. Midwife Cro stated that she had taken as her assumption that the absence of a record of a feed after 19:00 on 27 May 2014 meant that Imogen had not fed since that time, that is for a 14-hour period. Taken to the 2006 NICE guideline on postnatal care up to eight weeks after birth, she accepted that indicators of successful feeding were a moist mouth and regular soaked heavy nappies. Midwife Cro stated that, if a baby were sucking well, and one were watching the sucking mechanism, one could be confident that a certain amount of milk had been ingested from a bottle and could see the amount which had been taken.

76. Referred to the NICE guideline on neonatal infection, Midwife Cro stated that there was a difference between a risk factor and a clinical indicator. There had been no risk factors in this case. Feeding difficulties and refusal or feed intolerance were clinical indicators, but not red flags. In this case, the only clinical indicator present, if any, would have been feeding difficulties. It was a matter of clinical judgement whether a feeding issue had crossed the threshold of a feeding difficulty and Midwife Cro accepted the paediatric infectious disease experts' joint view that, in and of itself, feeding difficulty would not raise concerns of, and had a poor predictive value for, sepsis. She also accepted that the section of the NICE guideline which indicated antibiotic management had not been engaged in this case because Imogen had had neither a 'red flag' nor two non-red flag risk factors. Viewing the position at its highest, Imogen had had one clinical indicator, calling for an initial exercise of judgement as to whether she had had a feeding problem sufficient to constitute a clinical indicator, and, if so, a second exercise of clinical judgement as to whether it was necessary to monitor her vital signs and clinical condition. Only in the event of concerns about early onset neonatal infection prior to discharge, would specific oral and written advice need to be given, as set out in the NICE guideline, albeit that she

would expect a midwife to give every parent advice about the signs and symptoms of illness. In deciding whether there is a concern about neonatal infection, feeding is not the only factor to be considered. Where there is only one risk factor, the NICE guideline indicates that it is a matter of clinical judgement whether one monitors the baby and puts a feeding plan in place. Midwife Cro stated that, prior to the implementation of the relevant NICE guideline, any reasonable midwife would have been alert to poor feeding and poor colour, for instance as signs of possible illness. The index of suspicion for early onset neonatal GBS infection would drop after day one (as demonstrated by the evidence to which the Royal College of Obstetricians and Gynaecologists' guideline refers). Midwife Cro acknowledged that the Defendant's hypoglycaemia guideline indicated that any term infant would undergo a process of normal postnatal metabolic adaptation which might be associated with low blood sugar and agreed with the following statements in that guideline, *'well-grown term babies are rarely at risk of clinically significant hypoglycaemia, even if they feed infrequently or reluctantly within the first 48 hours'*; and *'all newborn infants need to be kept warm and given the opportunity to feed whenever they show feeding cues.'*

77. Midwife Cro stated that the Defendant's guideline, as to the advice to be given on discharge, was reasonable, namely, that the midwife should discuss recognition of the unwell baby with the parents and how to recognise deviations from the norm; document the discussion on the discharge checklist; and ensure that the mother had the advice line number, if the midwife had been really clear as to what the mother should be looking out for. There were no guidelines as to the quantity of milk which a baby ought to be taking within the first three days of life and there were no guidelines of which Ms Cro was aware on how long it would take a baby to establish a regular feeding pattern, though the 2006 NICE guideline clearly indicated what a healthy neonate should look like. For a healthy neonate, feeding would be demand led. As a midwife, one needed to decide when a baby went outside of that 'remit', she said. There was flexibility in baby-led feeding for a healthy neonate. A normal baby should be able to cope without significant quantities of food in the first 24 to 72 hours of life. A baby who feeds spontaneously two to three times in the first 24 hours, and at least six times in the subsequent days, can be left to feed on demand. There was quite a lot of variability in the food taken by a healthy baby in the first days of life. Midwife Cro accepted that Imogen had taken six to seven feeds in the first 24 hours and that, during the following 24 hours (up to 11:00 on 28 May), Imogen had definitely fed on four occasions, even if it had been the case that she had not fed between 19:00 on 27 May and 09:45 on 28 May. She acknowledged that Imogen had initially fed well and that those feeds had been recorded, noting that, after 19:00 on 27 May, there had been no record of any feed during the next 14½ hours.

78. Midwife Cro stated that it was only when there were issues with a baby's feeding generating concern that it was the midwife's role to assess that baby's feeding, by observing it. She had no concerns about the care given to Imogen until 22:45 on 27 May. Prior to 19:00 on that date, there had been no indication of a need to step in. Midwife Cro also stated that, if a midwife were in the same bay with one mother, she would expect a different mother who was awake to indicate, were she to need help or support, though it could be quite difficult to interrupt someone else's care. The midwife would go round the ward enabling everyone to have contact. Midwife Cro noted that there had been two occasions on which Midwife Hurwood had checked on the Claimant and Imogen and the Claimant had been asleep. It was not her position

that Midwife Hurwood ought to have woken her up. From the Claimant's statement to the effect that, earlier that morning, Imogen had choked when trying to feed, Midwife Cro concluded that Imogen had been trying to feed. It was her evidence that, following the Claimant's expression of concern about Imogen and feeding, she would have expected that, rather than simply changing the teats, the midwife ought to have made a feeding assessment of the baby at that point. There ought to have been a midwifery check at midnight, five hours since the baby had last fed. Had her vital signs been normal at that stage, Imogen could have been left, with a plan to repeat the feed assessment in three to four hours' time. She accepted that there was no indication that Imogen's vital signs would not have been normal at that stage, because she had not been infected at that stage. Whilst Dr Kellett had assessed Imogen during the morning of 28 May, she had not carried out a feeding assessment, or been told that Imogen had not fed for 14 hours, had that indeed been the case. Should the Claimant's evidence be accepted, a check ought to have been made within three to four hours of 22:45 on 28 May and documented.

79. Midwife Cotton's account of Imogen, at 09:45 on 28 May, as having been pink, warm and alert, but very windy, had been of a baby who was well. Nevertheless, in Midwife Cro's view, Midwife Cotton ought to have carried out an assessment of a baby for whom there had been no documented feeds overnight, taking clinical observations. In Midwife Cro's opinion, the absence of a note of any overnight feed equated with the absence of such a feed, because the midwife ought to have recorded any feeds taken as part of her note. A midwife coming on shift who had found no note of an earlier feed would have been on notice that either there had been no feed, or there had been no note taken of a feed. The absence of a note could have provided her with no reassurance that Imogen had fed overnight and, if so, in which quantities; it was not just the fact of a feed, but the actual feeding which was important. Clinical observations would have been called for because a statement that a baby is warm is subjective and to be contrasted with the taking of her temperature. Similarly, stating that a baby is pink is not the same as checking that her respiration rate falls within normal range. Midwife Cro told me, *'So, to me, when there has been a big gap, and you are concerned about feeding, and there is a document there that says the baby has struggled since the teats were changed, and we do not know what time that was, and we do not know the amount of feed, good practice of a reasonable, responsible midwife would be to take clinical observations alongside their assessment… when you have got a baby that has gone outside the realms of normality, your subjective assessment should move into a clinical assessment that has observations that back it up'*. There was no indication from Midwife Cotton's note that she had been concerned at the fact that a baby had not fed for 15 hours, she said. She (Cro) was not suggesting that, had those observations been taken in this case, they would have been other than within normal tolerances. Midwife Cro accepted that Midwife Cotton had observed the baby's general clinical condition, and had held Imogen in her arms for long enough to feed her in order to see whether she was feeding properly and seemed well. Pressed in cross-examination, she said that she was not saying that no reasonable midwife could have done as Midwife Cotton had done. Similarly, she was not saying that no reasonable midwife could have done as Midwife Cotton had done in deciding that she should feed the baby herself, waiting to see whether another feed would take place, and allowing the baby to be seen by a paediatrician prior to discharge. Whilst it would have been best practice for the mother to have fed the baby, it would not have been mandatory; the guideline required the use of clinical judgement. Midwife Cro

told me that, nevertheless, she was critical of the plan which had been put in place, irrespective of whether Imogen had fed for nearly 15 hours; it ought to have continued for longer because one would want the mother, not just the midwife, to have fed the baby and to have been satisfied that Imogen was feeding effectively. It was a case of making sure, over a 12 to 24 hour period, that feeding was in a regular, established pattern, with the baby sucking well on the teat and taking milk down and the mother being able to carry that out.

80. Midwife Cro stated that, in so far as evident from the available records, no concerns had been expressed to Midwife Cotton by the Claimant regarding her discharge. Midwife Cro told me that all mothers should be given advice as to when they ought to seek advice, should they have concerns about the baby. A mother should be advised as to what an unwell baby looks like. All parents should understand the signs and symptoms of illness, so that they know when to call. The advice is not simply specific to early newborn streptococcal disease, but to illness in a baby. She stood by her opinion, set out in the joint statement, as to the advice which ought to have been given.

81. Asked whether a baby who had taken no milk overnight would have been poorly, Midwife Cro responded that she would not. She would have needed an assessment which went beyond feeling whether she was warm. It was not Midwife Cro's position that Imogen had been, or had presented as being, ill, simply that she ought to have been assessed, *'so you knew where you stood'*. Imogen had not been exhibiting symptomatic hypoglycaemia in the morning of 28 May.

82. Ms Ayling put to Midwife Cro the statement in her report to the effect that, if Imogen's blood glucose level had been normal, the plan ought to have been not to let her go for longer than three to four hours before the next feed. Midwife Cro accepted that that had been exactly what Midwife Cotton had done, and that Imogen had also been reviewed by a paediatrician (albeit for a different reason).

83. It was Midwife Cro's opinion that, by 21:30 on 28 May, if Imogen had not fed, the Claimant ought to have known that she should call the unit for advice and a midwife ought to have assessed the baby. Had Imogen still been sleepy and not keen to feed, the midwife ought to have advised the mother to bring her back to the unit. Alternatively, a community midwife, if available, could have carried out a clinical assessment, at home. Ms Cro stated that she was in no position to know whether such a midwife would have lived close enough to have arrived at the Claimant's home within a short period.

Ms Brenda Maddy

84. In oral evidence, Ms Maddy acknowledged that a feeding difficulty might be an indicator of illness, along with a number of other factors. In this case, Imogen had been born healthy and had not been a baby with any known risk factors. Ms Maddy agreed that poor feeding was a clinical indicator, or potential sign, of infection (not necessarily GBS) in a neonate, but stated that, in this case, although there had been a feeding difficulty, it had not been established that there had been poor feeding. Ms Maddy acknowledged the list of clinical indicators of infection set out in the NICE guidance on neonatal infection. She observed that the guidance allowed a midwife to use clinical judgement, as specified, for babies having no red flags and only one risk factor, or clinical indicator. Such a midwife would only behave logically and meet the

requisite standard of care if her judgement were exercised in a logical, responsible way, she said. Having regard to the Defendant's own guideline for care of the newborn baby, Ms Maddy accepted that a midwife operating in that trust would know that poor feeding could be a sign of the presence of GBS. Ms Maddy stated her understanding that, consistent with that guideline, early onset GBS referred to a period shortly after birth. Paragraph 17.4 of the guideline expressly referred to early onset within 12 hours of birth. GBS could appear at any point.

85. Ms Maddy's position was that one would hope that a demand-fed baby would feed three to four hourly. It was put to her that, by approximately midnight on 28 May, there had been no record of a feed for five hours, such that the midwives ought to have been observing and checking on the Claimant and her baby. Ms Maddy stated that the Claimant and Imogen would have gone home by then, had it not been for the need for paediatric review the following day. At that stage, the position had been that of a mother caring for her own baby throughout her stay, and, accordingly, the midwives would observe and respond to any concerns raised, but not necessarily offer direct care. At 22:45, the midwife had been reassured that there were no issues such that it could be said that it had been her assumption that the Claimant would feed her baby at the point at which the baby asked for a feed, or showed signs of needing one. She considered that the actions of the midwife at 22:45 on 27 May had been reasonable. The fact that there had been no record made of a feed subsequent to 19:00, did not mean that there had been no such feed, though a record ought to have been made. There ought also to have been a record made of the conversation between the Claimant and an unidentified midwife, at approximately 03:00, documenting the Claimant's concerns and the advice given. It was Ms Maddy's view that a report of a baby choking implied that that baby had actually taken something; she had choked on milk. That had been indicative of a baby with feeding difficulties; not necessarily an indicator of infection, though it could have been. There were a number of reasons why babies had difficulty with feeding, for example, the teat and the feeding technique. It would have been appropriate for the midwife to have undertaken an assessment by around 07:00 on 28 May, and, possibly, to have witnessed the mother attempting to feed her baby, or for the midwife to have fed the baby herself. Acknowledging that a midwife could not have ruled out infection, Ms Maddy did not consider the taking of a set of vital signs to have been necessary at that stage. At 03:00, in Ms Maddy's opinion, it had been reasonable to suggest that the teats be changed, but it had not been essential to do anything else at that time. She agreed, however, that no note had been made to inform the next midwife that there had been a problem prior to the change of teats, and no plan made to ensure that the change of teats had fixed the problem; that had not been responsible midwifery care. Nevertheless, when a midwife had visited the Claimant at 05:40 that same morning, she had found mother and baby settled, indicating that, whatever had happened after 03:00, it had been sufficient to settle Imogen by that time. This had not been a baby suggested to have been sleepy; the Claimant had talked about attempting to feed her baby throughout the night. The fact that Imogen had been sleeping and settled by 05:40 had been an indicator that she had had a feed. Imogen had fed well in the previous 24 hours; on her mother's own account, had last been fed at 19:00; and, possibly, had been fed again before midnight, and between 03:00 and 05:40. It was Ms Maddy's evidence that the conclusion which Midwife Cotton would have reached by 09:00 on 28 May, having heard from the Claimant what had happened overnight, would have been that there had been attempts to feed Imogen and a change of teats. It was potentially very important for a midwife

to take seriously, and listen to, that which a mother was saying; she would build up a rapport with the mother. Ms Maddy believed that Midwife Cotton had probably had the opportunity to do that, having cared for the Claimant over the previous day and in the morning of 28 May. She stated that a midwife, acting responsibly and in accordance with accepted practice, would have had a fairly detailed conversation with the mother as to that which had happened overnight. Whilst Ms Maddy agreed that the absence of records did not assist, her view was that that did not mean that a full discussion had not taken place, because such a discussion would have informed the midwife's assessment of Imogen that morning. Midwife Cotton's assessment had shown a baby who had been apparently well; pink, warm, had had good tone and clear skin; passed urine and opened her bowels, and who was being artificially fed on demand. Discussions regarding the difficulty with feeding during the night would not have suggested poor feeding, or that no feed had been taken at all. Imogen's presentation that morning had not indicated that she had not taken any feeds and the midwife had acted responsibly in the assessment which she had undertaken at 09:45. This had not been a baby for whom hypoglycaemia had been likely. She had fed previously, and, possibly, during the night. The absence of a form did not indicate that Imogen had not taken a feed. The midwife had indicated that Imogen would need to feed again by 13:00. By then, it might have been that the midwife would have considered putting in place a 12- or 24-hour feeding plan and taking observations, but there had been no need for her to have done so at 09:45 and, thereafter, Imogen had fed at 11:00. In Ms Maddy's opinion, Midwife Cotton had used her clinical judgement appropriately.

86. As to discharge, it was Ms Maddy's view that Midwife Cotton's assessment had been appropriate. There had been some keenness on the part of the Claimant to go home to her son, and the delay had resulted from the need for Imogen to have had an echocardiogram. Were the court to accept that the Claimant had advised Midwife Cotton that Imogen was not feeding and had not fed overnight and that most of the formula given at 09:45 and 11:00 had spilled down her front, a responsible midwife would not have discharged mother and baby at the time at which they had been discharged. The Claimant ought to have been told that demand feeding, at intervals of at least three to four hours, should continue. Had there been a concern about feeding or Imogen's attempts to feed, she ought also to have been advised to call the advice line. Ms Maddy accepted that there appeared to have been feeding difficulties in this case. She stated that, irrespective of the examinations which had been undertaken by the paediatricians, discharge would have been based upon a midwife's own clinical judgement; it was a midwife's responsibility to discharge mother and baby.

Legal principles

87. The applicable legal principles are not in dispute and were helpfully summarised by Cranston J in *Birch v University College London Hospital NHS Foundation Trust* [2008] EWHC 2237 (QB) [54] and [55]:

> '54. … The Bolam test is axiomatic. As McNair J put it (Bolam v Friern Hospital Management Committee [1957] 1 WLR 583, 587):
>
> > "[A doctor] is not guilty of negligence if he has acted in accordance with a practice as accepted as proper by a responsible body of medical men skilled in that particular art … Putting it the other way round, a doctor is not negligent, if he is acting in accordance with such a

> practice, merely because there is a body of opinion that takes a contrary view."

The gloss on this is that a court may still find that doctors are negligent, even though they have acted in accordance with a practice accepted as proper by a reasonable body of medical opinion, if it is not convinced that the body of opinion is reasonable or responsible. As Lord Browne-Wilkinson put it in Bolitho v City of Hackney Health Authority [1998] AC 232, 243C:

> "[I]f, in a rare case, it can be demonstrated that the professional opinion is not capable of withstanding logical analysis, the judge is entitled to hold that the body of opinion is not reasonable or responsible."

55. By suggesting that the court can depart from professional opinion in rare cases, Lord Browne-Wilkinson was indicating that such an opinion is not to be lightly set aside. The body of medical opinion must be incapable of withstanding logical analysis, in other words, cannot be logically supported at all. If there are different practices sanctioned by two bodies of medical opinion, both withstanding logical analysis, there is no basis for a finding of negligence against the doctor choosing one rather than the other. The matter may simply boil down to a different weighing of benefits and risks. If there is no failure to weigh the risks and benefits of each practice the Bolitho approach cannot be used to trump Bolam, even though the adherence to one body of medical opinion has led to the adverse outcome in the particular case. As Lord Browne-Wilkinson put it in Bolitho:

> "[It] would be wrong to allow such assessment to deteriorate into seeking to persuade the judge to prefer one of two views both of which are capable of being logically supported" (at 243D).

Not only am I bound by this view but I conceive it to be eminently sensible: it would be folly for a judge with no training in medicine to conclude that one body of medical opinion should be preferred over another, when both are professionally sanctioned and both withstand logical attack.'

The parties' submissions

For the Claimant

88. Ms McArdle submitted that the Claimant's case was based upon the opinion of a highly qualified expert (Midwife Cro) and the 2012 NICE guidelines. By contrast, the defence was based upon disbelieving a mother's reports (including undisputed and documented reports) of poor feeding, in the absence of a record of the feeding which had taken place overnight on 27/28 May, or any physiological evidence that feeding had taken place. Fundamentally, it was said, the defence should fail, because the Defendant's staff had not appreciated that, in neonates, the signs of GBS can often be subtle, and any logical management of neonates ought to have responded to those subtle cues, rather than dismissed them. The Defendant had failed to provide independent expert evidence to the effect that a responsible body of midwives would have behaved as its staff did, and its expert in relation to breach of duty was not qualified to act as such, having not practised under the relevant NICE guidelines, or for four years prior to the events in question, and having not occupied any senior midwifery position for the nine years preceding those events.

89. The Claimant's case was that Imogen had not fed overnight. She had taken a 10ml feed at 19:00 on 27 May 2014, had not appeared to have suckled overnight; and had seemed to choke when trying to feed, spilling formula down her front. The Claimant's

unchallenged evidence had been that she had gone to find a midwife during the night and that it had taken some time for the midwife to have attended her bay. At that time, the Claimant had told the midwife that Imogen had not fed overnight and had choked when feeding had been attempted. Imogen had not been examined or fed by that unidentified midwife and had been asleep when the midwife had attended. The advice given had been simply to change the teats on Imogen's bottles, and the interaction had not been recorded. The Defendant's position appeared to be that a significant and safe amount of food must have been taken, a case which rested on the need to disbelieve the Claimant's account, for no good reason. In particular, for that case to be correct, the Claimant's account to the midwife who had attended in the early hours of the morning, that Imogen had not fed overnight, would have needed to have been inaccurate and yet no basis for any such contention, nor any allegation of dishonesty on the part of the Claimant, had been advanced. There had been no record of any feed having been taken between 19:00 on 27 May 2014 and 09:45 the following morning. That was very important; in the absence of any contemporaneous record, there could be no proper basis upon which to allege that feeding had taken place. It was to be noted that the Defendant had sought to rely upon the absence of other records as a basis for disputing that an event had occurred as alleged by the Claimant, whilst asking the court to reject the absence of any recorded feeds overnight as evidence that Imogen had not in fact fed during that period. The court was invited to adopt the usual approach to contemporaneous records, and to conclude that the absence of any recorded feed indicated that Imogen had not, in fact, fed overnight, particularly in light of the other evidence of a lack of feeding. Night feeds had been recorded retrospectively for the night of 26/27 May, and there had been no reason why a retrospective record of the feeding overnight on 27/28 May could not have been made retrospectively during the morning of 28 May, but no such record had been made. The note made by Midwife Cotton at approximately 09:45 provided no support for a rejection of the Claimant's account and the Claimant had not been challenged on her evidence that she had advised the midwife that Imogen had not fed overnight. Midwife Cotton had not obtained an account that Imogen had taken any feeds overnight, nor had she completed a feed chart retrospectively. No care had been taken to enquire as to whether Imogen had taken any, let alone a reassuring, quantity of food overnight. Midwife Cotton had accepted that the fact that Imogen had opened her bowels and passed urine did not indicate how much she had ingested, or at what time. Insofar as she had relied upon the absence of symptoms of hypoglycaemia as justifying the absence of a three to four-hourly feeding and monitoring plan, that could not avail the Defendant, there being no evidence that Imogen would have developed hypoglycaemia following an approximately 14-hour period without food and the Defendant's own guideline stating that healthy, well-grown, term babies are rarely at risk of significant hypoglycaemia, even if feeding infrequently, or reluctantly, within the first 48 hours. The Defendant's case that Imogen had taken food overnight, whether at all or in any safe, significant quantity ought to be rejected. Furthermore, the Defendant's submission that the timing of Imogen's infection was inconsistent with her ceasing to have fed overnight on 27/28 May reflected a misreading of the evidence of the paediatric infectious disease experts whose joint view was that Imogen would have had bacteraemia, most likely just before 05:30 on 28 May 2014. Thus, there had been a strong temporal correlation with the absence of feeding.

90. The Claimant's case as to Imogen's condition between 09:00 and discharge on 28 May was that Imogen had not taken all of the feed which she had been given at around 09:00, having spilled much of it down her front. As Midwife Cotton had agreed that many babies spill milk, and that most bottle-fed babies will spill a bit of milk, there had been no significant disagreement with the Claimant's evidence on the point. Further, there had been no evidence contradicting the Claimant's account in relation to the period before discharge, when it had been known that there had been no pattern of feeding; that Imogen had never sucked on her bottles; and that she (the Claimant) had felt that Imogen had been struggling, getting progressively worse to the point where she had not been feeding at all. That had been supported by the contemporaneous notes taken on the morning of 29 May 2014 when Imogen had been brought back to hospital. Ms McArdle submitted that the evidence pointed only to the conclusion that, between approximately 09:00 and her discharge on 28 May, Imogen had never fallen into a regular feeding pattern of three to four-hourly feeds, at which she had taken significant quantities and sucked efficiently.

91. As to the allegations of breach of duty, Ms Maddy was not an appropriate expert and, were she permitted to hold herself out as such, it would make a mockery of the requirements imposed by CPR Part 35, designed to protect the court from unqualified individuals who presented their opinions as genuine expertise. The fact that Ms Maddy had been in practice for 35 years was irrelevant if she had not been an expert at the relevant time, or for a very substantial period beforehand. Ms Maddy had been unqualified to comment on whether practice had changed, because she had not been a midwife during the four years prior to the relevant events, and the 2012 NICE guidelines clearly demonstrated that practice had moved on significantly since she had occupied a senior position, seven years before those guidelines had been published. The latter had not been limited to recommending antibiotics, but had dealt with the care of babies having clinical indicators of infection and their management and were at the heart of this case. Ms Maddy's evidence had been neither careful nor considered and had advanced an illogical position. Whilst it was accepted that Midwives Hurwood and Cotton could give evidence to defend their actions, such evidence could not cure the absence of appropriate expert evidence for the Defendant and, in any event, Ms Hurwood had not been available for cross-examination and had provided no reason as to why her management had been responsible, given her limited involvement over the relevant period. Neither midwife had been an independent expert witness.

92. By contrast, submitted Ms McArdle, Midwife Cro had been a practising senior midwife at the material time, and continued to be so. Her report had taken account of the evidence given on behalf of both parties and fell to be contrasted with that of Ms Maddy, whose position rested on dismissing the possibility that Imogen had not fed overnight. Neither of the doctors who had seen Imogen during the morning of 28 May had been made aware of concerns about her overnight feeding, and even Ms Maddy had rejected the suggestion that a midwife could have taken their examinations into account when deciding whether discharge would be appropriate. In short, given her lack of appropriate expertise, the court was invited to reject Ms Maddy's evidence in its entirety, and to accept Midwife Cro's careful and logical approach, founded upon the NICE guidelines.

93. The undisputed facts in relation to the overnight period on 27/28 May were that there had been no record, even retrospectively, of Imogen having taken milk between 19:00 and 09:00. No-one had obtained a history of any milk having been taken. At some point during the night, the Claimant had gone to find a midwife who had taken some time to attend her baby. That midwife had not been called as a witness by the Defendant. When she had eventually arrived, the Claimant had informed her that Imogen had not fed overnight and had choked when the Claimant had tried to feed her. The midwife had advised changing the teats on Imogen's bottles, but had made no record of their interaction and had not examined the sleeping baby. There had been no challenge to that account. Midwife Hurwood had not gone into the Claimant's cubicle until 05:40 and, neither then nor at 06:50, had she disturbed mother or baby, as both had then been sleeping. For the reasons previously given, the Claimant's account of Imogen not having fed overnight ought to be accepted. The Defendant had offered no explanation as to why the Claimant would have given the midwife who had attended at 03:00 an inaccurate account and had not alleged that the Claimant had been an untruthful witness. Given the pattern overnight, a midwifery check, including a full set of observations, ought to have taken place by midnight, and again by 07:00, on 28 May, and a plan for feeds at three to four-hourly intervals, with a record of the quantities of formula taken and observations, ought to have been put in place. That need had become more pressing as the night had worn on, and the period of inappropriate feeding had elongated. It had been that course which a responsible, logical body of opinion would have taken, fundamental to which was the need for an appreciation of the fact that the signs of infection in neonates were commonly subtle, for which reason: (1) it had been Midwife Cro's evidence that a midwife needed to be extremely alert and vigilant to take action if there were any clinical indicators for infection; (2) the guidelines produced by the Royal College of Obstetricians and Gynaecologists noted that neonatal sepsis could present initially with subtle signs, but could progress rapidly to death; and (3) in his report, Professor Heath had noted the subtlety with which non-specific symptoms could present, which could include poor feeding. On the part of the Defence, there had been a total failure to have appreciated that point. The 2012 NICE guidelines called for consideration, using clinical judgement, of whether it was necessary to monitor the vital signs and clinical condition of a baby with poor feeding and, if so, required that monitoring continue for at least 12 hours. A decision not to monitor the baby would only be appropriate where there was a logical reason for it. Taking no action, in the absence of such a reason through which to rule out infection, would not constitute logical care. The Defendant's own guidelines on GBS in neonates in fact required a more risk averse approach, where poor feeding, itself listed as a symptom of GBS, was present, requiring admission to the neonatal unit; blood tests; and antibiotic therapy. Whilst the Claimant did not assert that that would be the only responsible approach (given that it was more risk averse than the NICE approach), the Defendant's attempt to defend its failure to have implemented a feeding plan and monitoring sat uncomfortably with its own guideline.

94. Reliance upon the paediatric infectious disease experts in relation to overnight management could not avail the Defendant, submitted Ms McArdle. Professors Heath and Ladhani were not midwifery experts and had nothing to say about breach of duty. The difference between poor feeding and a feeding difficulty had not been explained by the Defendant and there had been no logical, evidence-based reason for distinguishing between obviously synonymous terms. No such distinction had been

drawn in the 2012 NICE guideline, such that, on Ms Maddy's own evidence, Imogen had had a feeding difficulty and, hence, a clinical indicator for infection, according to NICE.

95. The Defendant's denial of the need to have checked on Imogen and the Claimant overnight on 27/28 May could not stand with Ms Maddy's evidence to the effect that it was accepted practice that a midwife observe mother and baby and have direct contact during the night. In particular given the Claimant's accepted account that she had been awake for much of the night, and that an unidentified midwife had had a conversation about feeding with her, it was not tenable that midwifery checks throughout that night had not been necessary. Any visit would need to have been conducted responsibly. After 22:45 on 27 May, Midwife Hurwood had made no attempt to see the Claimant and Imogen until 05:40 the following morning, and had not been the midwife involved in changing the teats. For the reasons previously outlined, there had been no basis upon which to consider that Imogen had fed overnight and, consequently, no logical basis for having done anything other than put in place a feeding plan, as infection could not safely have been ruled out in the presence of a feeding difficulty. The pleaded allegations concerning the overnight period were not specific to any particular midwife, nor need they have been; it had been the Defendant's responsibility to have ensured that one or more midwives provided appropriate overnight care.

96. Ms Maddy's position as to that which ought to have happened had a midwifery check occurred had been predicated upon Imogen having fed overnight. She had accepted that Imogen had had a feeding difficulty, and that infection could not be ruled out, yet had illogically concluded that mere advice to change teats had been reasonable; a baby who chokes cannot safely be assumed to have taken any milk, let alone to have fed without difficulty. Choking, self-evidently, constituted a serious feeding problem. The only responsible and logical act of a midwife who had been informed of the absence of feeding; of choking and who had had no records to contradict that account, or other basis upon which to have ruled out infection, had been to put in place a feeding and observation plan, as alleged. If that breach of duty and appropriate causation were made out, the Defence case failed, submitted Ms McArdle; the Claimant was not obliged to establish all breaches of duty which she alleged. By approximately 09:00 on 28 May 2014, Imogen had gone for a prolonged period without food; the Claimant had so informed a midwife during the night; and Imogen's teats had been changed. It had been acknowledged by the Defendant that a record of that encounter ought to have been made and the Defendant could not rely upon its own failure to make such a record to support its management the following morning. Midwife Cotton ought to have had that information available to her in the notes. In its absence, logical, responsible management required that a feeding plan and observations be put in place, entailing a period of monitoring over at least a 12-hour period. At around 09:45, Midwife Cotton had had no basis upon which to assume that the teats had been changed overnight for some reason unrelated to a prior feeding difficulty. There would have been no good reason for a change of teat in its absence. She had not obtained an account of any other reason for the change and responsible care would not have assumed a reason unrelated to problematic feeding, in the absence of any such reason having been communicated. Nevertheless, Midwife Cotton had taken no retrospective history of overnight feeds, a matter which was said to have been particularly significant given that she had done so on the previous day.

Her explanation for that had not reflected responsible midwifery care, given the subtle presentation of serious infection in a neonate. Responsible midwifery care would have recognised the possibility of infection in the presence of a clinical indicator and that the NICE 2012 guideline required that monitoring be continued for at least 12 hours in order that a pattern could be identified. Midwife Cotton had taken neither that nor any other step to ensure that the Claimant herself could feed Imogen, as required. Ms Maddy's evidence to the effect that a midwife would have had a detailed conversation with the mother, and that the absence of a record did not mean that such a conversation had not taken place, indicated that she did not support as responsible practice a failure to have ascertained the quantity of food taken overnight, but had made an assumption, contrary to Midwife Cotton's own account and the absence of a record, that Midwife Cotton had done so. Ms Maddy's evidence had been that hypoglycaemia would not have been expected, had Imogen not fed overnight. Her evidence had rested on disbelieving the Claimant's account to the effect that Imogen had not fed, undermining her independence. Midwife Cotton had dismissed the Claimant's expressed concerns as to Imogen's failure to have fed overnight and struggle to have fed well since the teats had been changed. Having failed to ascertain that any quantity of food had been taken overnight and in the context of the concerns which the Claimant had expressed, the only safe conclusion had been that Imogen had had a clinical indicator for infection, the presence of which had not been ruled out by a finding that Imogen had been pink, warm and alert; a dangerously ill baby could present in the same way. Similarly, the absence of signs of hypoglycaemia ought not to have been reassuring, such signs would not have been expected in a baby of Imogen's age, who had taken some food on the first day of life. The further feed given at 11:00 could not itself have provided reassurance; where monitoring is to occur, a minimum period of 12 hours is required, being one of sufficient length to enable determination of whether feeding has been safely established, or further indicators of infection have appeared. Midwife Cotton's own evidence had been that, had she been concerned, she would have implemented a 24-hour feeding plan. Midwife Cro had not conceded that, applying the correct legal test, there had been no breach of duty; she had been asked a series of unclear questions, together with others having a false premise, which might have served to confuse her. When the correct legal test had been put to her in re-examination, it had been entirely clear that her views had not altered since the time of the joint statement, namely that the logical and responsible course of action at 09:00/09:45 on 28 May had been to put in place a plan over a sufficiently long period such that the mother would know how, and would be able, to feed the baby and there would have been a regular, established feeding pattern which she could carry out. Both mother and midwife would have needed to have been satisfied, and the midwife would have needed to have seen that Imogen had been feeding appropriately over a 12 to 24-hour period. In short, the Defendant had failed in its duty of care in relation to management on the morning of 28 May 2014. Necessarily, appropriate management overnight on 27/28 May, or in the morning of 28 May 2014, would have placed Imogen on a three to four-hourly feeding plan, with monitoring of her vital signs. On that basis, inevitably, discharging her had been inappropriate because Imogen had not been placed on such a plan. No reliance could be placed upon the examinations undertaken by Doctors Kellett and Tambe, during the morning of 28 May, because neither had been made aware of Imogen's history of a 14-hour period without food, or of the history of changing teats and, in any event, it had been Ms Maddy's position that a midwife could not rely upon a different clinician's decision-making in order to discharge her own duty. The fact that Dr

Kellett had noted feeding had not constituted her approval of the midwife's decision-making, and there had been no evidence from Dr Tambe. Imogen had had a clinical indicator for infection and bacteraemia prior to discharge.

97. Ms McArdle submitted that the advice given on discharge and its reasonableness were indefensible. Ms Maddy and Midwife Cotton had accepted that discharge information ought to be given verbally, and that it would be unreasonable to expect a mother to read all written information provided on the afternoon of discharge. Accordingly, reliance by the Defendant on the written information provided was not tenable. It had been the joint view of Midwife Cro and Ms Maddy that, upon discharge, the Claimant ought to have been advised to call the postnatal ward, should Imogen not feed well, and of signs of illness for which to be observant, such as a rash; raised temperature; high-pitched cry; drowsiness, lethargy and irritability. It had also been agreed that the Claimant ought to have been told that Imogen should be feeding at least three to four-hourly, whether or not on demand. The evidence unarguably demonstrated that the Claimant had not been given the above information. There was no document indicating that the Claimant had been advised in relation to three to four-hourly feeding on discharge (or at all). She had been unable to remember the discharge conversation by the time of trial, though, in her statement, had said that she had not been given advice on when to contact the postnatal ward, should Imogen's feeding not improve, or of signs of illness for which to look out; or of the need to continue a feeding schedule. Midwife Cotton had been unable to remember the exact conversation at discharge, but her evidence had been that she had told the Claimant to feed Imogen on demand. Breach had been established.

98. There had been no proper evidence that the requisite advice had been given that the Claimant should call the postnatal ward, should Imogen not feed well. Midwife Cotton had not said that she had provided such advice and there had been no contemporaneous record of it. Evidence as to her usual practice to advise that, in the event of concerns in relation to mother or baby, the mother should call the unit, or, should she be worried about her baby being unwell, go to A&E, would not suffice; in particular in light of Midwife Cotton's dismissal of the Claimant's concerns about Imogen's feeding and the reassurance which she had provided, it had not related specifically to non-feeding. Her evidence had been that she had not told the Claimant to look out for the specific signs of illness previously summarised and had relied upon the written material in the Red Book.

99. Post-discharge, the Claimant's account of Imogen's feeding during the afternoon and evening had not been challenged, neither had the signs which Imogen was said to have displayed as the afternoon had progressed. The contemporaneously made notes of 29 May 2014 were supportive of the Claimant's account and constituted the best evidence of Imogen's condition, indicating that signs of illness had become increasingly marked from early in the afternoon on 28 May. She had never taken more than sips after 11:00 on that date and, thus, had not fallen into a safe three to four-hourly feeding pattern. The Defendant had called no witness to contradict or undermine the account given, which was supported by the clinical notes. Furthermore, the progression agreed by the infectious disease experts indicated that the Claimant's account was highly credible, and ought to be accepted. There had been no need for evidence from supporting witnesses for the Claimant, who could not have given evidence as to what had happened during the afternoon of 28 May, post-discharge and

would have had nothing to add on any issue in the case. There had been no suggestion by the Defendant that the Claimant could not have brought Imogen back to hospital rapidly, given that, at the time, she had lived approximately one and a half miles from the hospital. As Imogen had not been feeding at the requisite intervals — having last had a feed at 11:00, she would have been due for another by 15:00 — and had become increasingly unwell from the early afternoon, the court ought to conclude that she would have returned to hospital long before 21:30, being the latest time by which she would have needed to have arrived in order to have been assessed and received antibiotics in time to have saved her life. Had she remained in hospital on the requisite feeding plan, she would not have fallen into a safe pattern; would have had her vital signs monitored; and clinical suspicion of infection would have mounted. At the very least, a 12-hour plan ought to have been put in place, though Midwife Cotton's evidence was that a 24-hour feeding plan had been imposed at the Defendant trust, in the event of feeding concerns. The paediatric infectious disease experts had been agreed that an intravenous line would have been inserted, a blood test performed and antibiotic treatment started, on average, within two hours of assessment by a paediatrician, and that Imogen's survival would have been dependent upon the first dose of intravenous antibiotics having been administered by 23:30 on 28 May 2014. Causation had been established; Imogen would have received life-saving treatment long before 21:30.

100. Accordingly, the court was invited to find for the Claimant and to award damages in the agreed sum of £18,000.

For the Defendant

101. Ms Ayling KC submitted that there were a number of indicators of a healthy baby. Imogen had had no risk factors for hypoglycaemia or GBS. The guidelines and expert evidence in this case collectively had served to show that approximately 90% of infants who developed early onset GBS did so within 24 hours of birth. It was not the Claimant's case that any poor feeding prior to discharge from hospital had been caused, on the balance of probabilities, by GBS, nor had she alleged or established any other cause. In the course of these proceedings, she had repeatedly stated that she did not allege that infection or sepsis should have been diagnosed prior to discharge on 28 May 2014. Thus, no medical explanation for any poor feeding or feeding difficulty had been advanced and the Claimant's attempt, in closing submissions, to rely upon the presence of bacteraemia and to elide it with symptomatic infection had been inappropriate. There were no guidelines as to the volume of milk/formula which a neonate ought to be taking, nor as to the frequency of feeding, or the time taken to establish regular feeding. On that basis, the threshold at which a clinician ought to identify a feeding issue within the first 72 hours of life was high. Ms Maddy had indicated that demand feeding at intervals of two to five hours would not necessarily give cause for concern, consistent with the view expressed by Midwife Cro, in Appendix 2 to her report, that feeding every four to six hours would be reasonable. Imogen had taken six to seven feeds during her first 24 hours. In any event, a feeding difficulty did not necessarily equate with poor feeding, the latter itself being a poor predictor of sepsis, as stated by the experts in paediatric infectious diseases. From their evidence, it had also been clear that: Imogen had developed overt meningitis and septicaemia by 05:30 on 29 May 2014; the blood/brain barrier had most likely been breached at around 17:30 on 28 May 2014 (and there had been no evidence to the effect that Imogen would have displayed any signs or symptoms at that stage); and

Imogen would most likely have had bacteraemia just before 05:30 on 28 May 2014. The Claimant had given no evidence as to the timing or duration of Imogen's symptoms as she had deteriorated. Imogen would have been given antibiotics within two hours of presentation at the hospital with symptoms. In order to have prevented meningitis, treatment would have had to have been administered before 17:30 on 28 May 2014 and, in order to have avoided her death, by 23:30 on that day. Crucially, submitted Ms Ayling, the infectious disease experts had concluded that Imogen had not developed signs and symptoms of, or relating to, sepsis prior to discharge. The only disputed fact for consideration was feeding difficulty, which would not in and of itself raise concerns of sepsis, unless accompanied by other clinical features or indicators of sepsis. Feeding difficulty alone had a poor predictive value for sepsis, since the majority of babies with feeding difficulties would not have, or develop, sepsis. In this case, it had been the only clinical indicator present in an otherwise well baby.

102. Relying upon *Kogan v Martin* [2020] EWCA Civ 1645 [88] and *Gestmin SGPS SA v Credit Suisse (UK) Ltd* [2013] EWHC 3560 (Comm) [15] to [22], Ms Ayling emphasised the fallibility of human memory and the need to assess witness' accounts alongside contemporaneous documentary and other evidence upon which undoubted or probable reliance could be placed. She submitted that the court should be cautious about accepting the Claimant's account, where vague or contradicted by documentary evidence, or against the weight of other oral evidence, itself often supported by documentary evidence. Irrespective of the acknowledged lack of a record of feed quantities overnight on 27/28 May, there had been ample evidence that Imogen had fed overnight and the Claimant could not prove to the contrary. Ms Ayling submitted that it was surprising that the first mention by the Claimant of the call which she had made to her mother at around midnight on 29 May had been in cross-examination; in that context, it was also surprising that the Claimant had not called her mother as a witness of fact as to events in hospital and after discharge; and that the court had a discretion to draw an adverse inference from the absence of a witness who might have been expected to have had material evidence to give on an issue in the case: *Wisniewski v Central Manchester Health Authority* [1988] PIQR 324 (CA). Whilst no such inference was invited here, on key events post-discharge the court had only the sparse account of the Claimant and the hearsay evidence as to the comments allegedly made by family members regarding Imogen's condition ought to be disregarded. The Claimant's understandable desire to find something in Imogen's presentation prior to discharge which explained her death and which the Defendant could have prevented did not indicate that her account — extremely vague in relation to certain aspects of the timeline and key facts — was accurate.

103. Ms Ayling submitted that Ms Cotton had been a highly experienced midwife at the time of the material events, whose account had been consistent throughout and, in common with Dr Kellett's account, supported by the clinical notes. There were no factors which ought to detract from the weight to be given to Midwife Hurwood's evidence. Brenda Maddy fulfilled the requirements of an expert, possessing sufficient expertise and the necessary experience in the subject matter on which her opinion had been given, having been a midwife over many years. Furthermore, the evidence of Midwives Hurwood and Cotton as to why it was that they considered their own conduct not to have fallen below the standard of care reasonably to have been expected of them was admissible; their lack of independence going to cogency: *DN v*

Greenwich LBC [2004] EWCA Civ 1659. By contrast, it was submitted, Midwife Cro had been an unimpressive witness who had been away from day-to-day midwifery for a very long time. She had selected only those facts supportive of the Claimant's case, omitting adequately to have considered Midwife Cotton's account at 09:45 on 28 May 2014; to have acknowledged that Imogen had shown signs of being healthy; and to have taken such matters into account when reaching her conclusion. Ms Ayling submitted that Midwife Cro had equated an absence of documented overnight feeds with an absence of the feeds themselves and that her (Cro's) analysis had rested on the assumption that there had been no feed for 14 hours. Her analysis did not withstand logical scrutiny. She had stated that a full set of vital signs ought to have been taken, and that, were those signs to have been normal, Imogen ought to have been placed on a feeding plan and, were they to have been abnormal, she ought to have been referred to a paediatrician, yet Doctors Kellett and Tambe had examined Imogen on the morning of 28 May and had found nothing untoward. No allegation had been made to the effect that Imogen had had any signs or symptoms of sepsis prior to discharge. Midwife Cro had stated that it was not her position that, had observations been undertaken, they would have been abnormal. Further, she had conceded that, applying the appropriate legal test, it was not her evidence that no reasonable midwife could have acted as Midwife Cotton had acted on 28 May 2014. The inconsistencies between her report and its appendices were unsatisfactory and the collective effect of the flaws in her approach, as identified by the Defendant, was such that it ought to incline the court to reject her views.

104. In summary, Ms Ayling submitted that, when assessing Imogen's feeding pattern overnight on 27/28 May 2014, account had to be taken of the fact that the Claimant had not alleged that, on the balance of probabilities, any poor feeding had been caused by infection. It is said that the scale marked on each of Imogen's bottles had constituted the most reliable way of assessing the volume of formula taken and that it was not clear why the Claimant had accepted the accuracy of some of the amounts recorded by that method, but had disputed the legitimacy of adopting that same method in respect of others. The Claimant's account of poor feeding from an early stage (02:00 on 27 May 2014) did not stand up to scrutiny and it was highly unlikely that two experienced midwives would have recorded and wrongly estimated subsequent feeds. Midwife Hurwood, reasonably, had relied upon the Claimant's account at 22:45 on 27 May, which had not included a stated concern about Imogen's feeding.

105. Accepting that a concern had been raised with an unknown midwife at an unknown time overnight, at 09:45 Midwife Cotton had been told of a feeding difficulty following a change of teat, an account indicative of a difficulty with the latter. The Defendant's case was that it was likely that Imogen had taken some food overnight and that the Claimant's account of the volume taken had constituted an underestimate. The questions asked of the hospital by the Claimant following Imogen's death themselves indicated that some food had been taken. Overall, it was submitted, Imogen's condition in the morning of 28 May had not been that of a baby who had not fed for 14 hours and Midwife Cro had accepted that Imogen had not presented as an unwell baby at that time. Had there been ongoing concern overnight, the Claimant would have been expected to have raised it with Midwife Hurwood, who had been present in the same bay for much of the time. A time-limited difficulty leading to a change of teat had not required a conclusion that there had been a feeding

problem. The notes made, respectively, by Midwife Cotton and Dr Kellett indicated that Imogen had fed without difficulty at 09:45 and, again, unprompted, at 11:00 (i.e. in advance of the 13:00 deadline which had been set by Midwife Cotton). The Claimant had not questioned the quantity taken at 11:00 when she had arrived at the hospital on 29 May and had stated that she had had no reason to have done so. She had voiced no concerns with Doctors Kellett and/or Tambe prior to discharge. The court was invited to find that Imogen had fed well until 19:00 on 27 May 2014, and again at 22:45, after a reasonable period for a neonate. The Claimant had then spoken to a midwife, owing to some difficulty in feeding, and had been advised to change the teat. It was accepted that that encounter ought to have been recorded. Following the change of teat, there had been some, limited difficulty, which had resolved by 05:40, when both mother and baby had been observed to have been sleeping, as they had been when next observed at 06:50. The notes recording those observations had been available to Midwife Cotton. Accepting the absence of a record of the feeds taken overnight, it was impossible to discern from the Claimant's account the volume of feed in fact taken, owing to the vagueness of her evidence and her general lack of reliability in relation to the volume of formula ingested by Imogen. Some milk had been taken overnight and any feeding difficulty had not been present when Midwife Cotton had fed Imogen 30mls of formula at 09:45 and when a further feed, in the same quantity, had been given at 11:00. At no point thereafter had the Claimant voiced any feeding concern to any clinician, itself consistent with a limited feeding difficulty overnight.

106. Ms Ayling submitted that, but for the heart murmur detected at the NIPE, Imogen would have been discharged on 27 May 2014. Subsequently, she had been seen twice by Dr Kellett, once by a specialist registrar and once by Dr Tambe, when no material concerns had been raised. Midwife Hurwood had not seen the Claimant, for good reason, until 22:45, at which time Imogen had been warm, pink and settled and no concerns had been raised. Imogen had been well. There had been a time-limited feeding difficulty overnight. Her condition in the morning of 28 May had been well-documented, indicative of a baby who had been feeding well, and all three clinicians had considered her fit to be discharged. The Claimant's account of a baby who had been irritable and had tensed her body on handling, groaning unusually and having a high-pitched cry was not supported by the records and had been contradicted by the evidence of the paediatric infectious disease experts. Their opinion meant that it was not possible that Imogen had had poor feeding, or had behaved as described by the Claimant, owing to GBS prior to discharge, itself indicating that the Claimant's account was unlikely to have been true. Overall, Imogen had been a healthy baby, as defined by paragraph 1.4 of the NICE guideline.

107. Ms Ayling submitted that, in light of her feeding pattern, the standard of midwifery care provided to Imogen whilst in hospital had been in accordance with a logical and responsible body of midwifery opinion. Ms Maddy had, sensibly, distinguished between poor feeding and a feeding difficulty and Midwife Cro had accepted that there were no guidelines as to the quantities of, or intervals between, feeds in neonates. The Claimant had accepted that it had been reasonable retrospectively to have recorded feeds overnight on 26/27 May, and during the day of 27 May, in an otherwise well baby. It would also have been reasonable to have done so for the night of 27/28 May 2014, unless and until a specific, clinically significant concern had arisen. Imogen had fed six to seven times during the first 24 hours and,

on the face of the records, on at least four occasions between 17:00 on 27 May and discharge on 28 May (17:00; 19:00; 09:45 and 11:00). Suzanne Cro had accepted that all had been well up to 19:00 on 27 May 2014.

108. Ms Ayling submitted that the NICE Guidance required two separate exercises of clinical judgement: (1) to determine whether a clinical indicator in the form of poor feeding was present at all; and, if so, (2) as to whether monitoring of the baby's vital signs and condition over 12 hours was necessary and the withholding of antibiotics safe. It had not been suggested that antibiotics ought to have been administered prior to discharge in this case. Poor feeding had been only one of the factors to have been weighed in the balance. No check on Imogen had been required at midnight on 28 May, nor a set of full observations and feeding plan, because it had been reasonable to have allowed Imogen to have fed on demand and to have worked on the assumption that feeds would be documented retrospectively, as had happened prior to 19:00 on 27 May. The fact that Imogen had not fed by 22:45 had not been sufficient to require action in an otherwise well baby when the Claimant had raised no concerns. No check, full observations and feeding plan had been required by 07:00 on 28 May and the Claimant's assertion to the contrary had been predicated on the assumption that Imogen had not fed at all since 19:00. Neither assertion to the contrary had rested on the Claimant's interaction with the midwife overnight. The important question was what Midwife Cotton had found and done at the beginning of her shift. There had been a handover and a discussion with the Claimant, the content of which Midwife Cotton had recorded. No concerns had been raised by the Claimant regarding her midwifery care overnight. Midwife Cotton had found no signs of an unwell baby and had spent time feeding Imogen herself, making a feeding plan that Imogen ought to be fed again by 13:00. In fact, Imogen had been fed at 11:00. Midwife Cro had conceded that, applying the correct legal test, there had been no breach of duty in that approach. If the case as now put through cross-examination was that, in order to comply with her duty, Midwife Cotton had been required to have observed the Claimant's own effective feeding of Imogen, there had been no breach of duty. Midwife Cro's stated view had been that Imogen ought not to have been discharged until she had re-established her regular feeding pattern and been assessed as having been alert, waking for feeds, sucking well at the bottle and satisfied/contented after her feeds, which was not consistent with the case as now put. Midwife Cotton had so assessed Imogen and Midwife Cro had not maintained her view under cross-examination. In any event, it was possible that it had been the Claimant who had given Imogen her 11:00 feed and her assertion to Dr Kellett had been that Imogen was feeding. Any feeding problem had not been at a level which had required Midwife Cotton to have informed Dr Kellett about it and there had been no pleaded allegation in connection with Dr Kellett's examination at 10:35 on 28 May 2014. In Ms Ayling's submission, whatever steps might have been taken at midnight, or at 07:00, on 28 May, there had been no reason by 09:45, or prior to discharge, to have put in place a plan to undertake regular clinical observations, or to maintain a prolonged three to four hour plan which would have kept Imogen in hospital, bearing in mind that Midwife Cotton had planned for a second feed within three to four hours. None of the pleaded allegations of breach of duty (which did not extend to the Claimant's encounter with the midwife in the early hours of 28 May) had been made out.

109. As to the decision to discharge, the Claimant's case amounted to a contention that there had been a general duty to have kept Imogen in hospital for observation, in case

sepsis were to develop, in the absence of a clinical indicator of infection prior to discharge and in circumstances in which she had had a feeding difficulty overnight, but the issue had resolved to the satisfaction of the midwives and the Claimant. That was despite two feeds having been given in under two hours; the absence of concerns expressed by the Claimant or her family; a strong desire on the part of the Claimant to go home; and examination by a midwife, a paediatrician and a neonatologist. That contention put the duty too high and ought to be rejected. Neither the 2012 NICE, nor paragraph 17.4 of the Defendant's own, guideline applied so as to mandate monitoring in hospital. Paragraph 17.4 of the Defendant's guideline had not been applicable because Imogen had not had a risk factor and the Claimant had not contended that action for a symptomatic baby ought to have been taken. The Claimant's account of a sleepy, uninterested baby ought to be rejected, for the reasons previously summarised.

110. Regarding the advice to have been given on discharge, the only guidance relating to the baby was to be found at paragraph 1.2.2 of the NICE 2006 guideline. It had been the joint view of Midwife Cro and Ms Maddy that the Claimant ought to have been advised to call the postnatal ward should Imogen not feel well and of the signs of illness for which to observe. Those had been the generic signs of an unwell baby, rather than the more specific list in the 2012 NICE guideline. Discharge advice was a blend of oral and written advice. The oral and documentary evidence indicated that advice had been given and had been reasonable. The Claimant had stated that she could not remember the advice which she had been given. It was likely that initial advice had been given on 27 May, when discharge had first been planned; the Claimant had been given the Red Book, which had contained clear advice as to when to call the doctor; Midwife Cotton had given the usual general advice, stating that feeding would have been high on her list of priorities; that she would have advised the Claimant to contact the unit, or go straight to A&E, in the event of any concerns. She had given advice as to the signs of an unwell baby. On 28 May she had given further advice, documented in the discharge form. There was no basis upon which to assume that the advice set out in the Trust's discharge guidelines had not been given, by an experienced midwife, and Midwife Cro had accepted that, had it been given, it would have been reasonable. The need for bespoke, 2012 NICE guidance had not been triggered. In so far as Midwife Cro had contended for the need for additional advice, she had imposed too high a standard, which contradicted the advice which she had stated ought to have been given, as set out in Appendix 2 to her report. As Ms Maddy had stated, the advice ought to have been that demand-feeding ought to continue at three to four hourly intervals and, were there to be concerns about feeding, that the Claimant ought to call the unit for advice. This would have been standard advice and had been given by Midwife Cotton. No rigid feeding plan had been mandated.

111. The Claimant's account, as pleaded and in evidence, as to when Imogen had first exhibited signs and symptoms of sepsis had always been very vague, notwithstanding that it was for her to prove her case. The court could not be sure as to when Imogen had last fed, or in what quantity, and the Claimant's evidence had been inconsistent with her pleaded case. Similarly, the court could not be sure as to when Imogen had first exhibited other symptoms. The Claimant's evidence as to an ongoing deterioration throughout the day had been too imprecise to have been of assistance, as had the account given on admission on 29 May, of a baby who had become increasingly unwell over the preceding 16 to 18 hours. The marked deterioration which had caused the Claimant to have called her mother, had taken place at around

midnight on 29 May and had been inconsistent with the Claimant's pleaded case as to the timing of Imogen's last feed at 22:00. The inconsistencies in and vagueness of the Claimant's evidence meant that the court could be sure only of a deterioration prompting the midnight call and of a further deterioration which had resulted in the call to the hospital, at 05:21. In general, there had been insufficient evidence on the basis of which to establish when the deterioration had been sufficient to have triggered action had Imogen remained in hospital, or a return to hospital had she been reasonably discharged.

112. In the event that the court accepted that there had been a breach of the duty to have given reasonable discharge advice, the most that could be said was that there had been a deterioration prior to midnight and a further deterioration which had prompted the Claimant's call at 05:21 on 29 May 2014. Imogen's life would not have been saved but for the alleged breaches of duty. In order for Imogen's life to have been saved, antibiotic treatment would have been required before she had become critically unwell, that is by 23:30 on 28 May 2014. The infectious disease experts had been agreed that the relevant steps would have been completed within two hours of assessment by a paediatrician. Even if Imogen had remained in hospital, the court could not conclude, on the available evidence, that Imogen had had symptoms of sepsis by 21:30, such that antibiotics would have been administered by 23:30. The first significant deterioration in her condition had happened shortly before midnight. Even assuming that, at 21:30, the Claimant would have known, following earlier advice, to call the unit for advice, one option would have been for a community midwife to have attended and, if concerned, to have referred Imogen to hospital. That would not have led to the administration of life-saving treatment by 23:30.

113. In summary, notwithstanding the Defendant's regret and sympathy over Imogen's death; its acknowledgement of its failures to have given the correct advice in the course of the telephone call which the Claimant made at 05:21 on 29 May and to have documented the quantity of food taken by Imogen overnight on 27/28 May; and the lessons learned from those failings, it had not acted in breach of duty as alleged and liability was denied. The approach for which the Claimant contended was a counsel of perfection.

Discussion and conclusions

Ms Maddy as expert witness

114. I accept that Ms Maddy fulfils the requirements of an expert, such that her evidence is admissible. She had qualified, and had practised for many years, as a midwife, thereby having acquired the requisite knowledge and expertise. There is no requirement for her to have been a senior midwife at the time of material events, and she had occupied such a role at an earlier stage. She had had 35 years of experience in aspects of midwifery care, management, supervision, mentorship and direct care. She had been in practice at the time at which the 2006 NICE guideline had been introduced. Recognising that she had not been in practice as a midwife at the time at which the 2012 NICE guidelines had been in operation, I accept her evidence that signs of baby illness and formula feeding had not changed, over many years, in particular given Midwife Cro's acknowledgement that, prior to 2012, a midwife would have been alert to poor feeding and a failure to pass urine as signs of illness in

a baby for which to be observant. I considered Ms Maddy's evidence to have been given in a fair, considered and balanced manner. She was willing to give ground where she considered that to be appropriate and to acknowledge certain deficiencies in the Defendant's practices, whilst explaining, in cogent terms, why those deficiencies did not themselves serve to indicate inappropriate practice in connection with the issues to be determined. I reject Ms McArdle's submission that her evidence lacked independence.

Midwife Cro as expert witness

115. There is no suggestion that Midwife Cro was other than suitably qualified and experienced to act as an expert witness in relation to the matters on which she gave her opinion. Nevertheless, in my judgement, she was inclined to substitute for the *Bolam/Bolitho* test her own view as to best practice, or the way in which she would have acted in similar circumstances, the prime example of which being her approach, until pressed in cross-examination and following questioning from the court, to Midwife Cotton's actions at 09:45 on 28 May. I reject Ms McArdle's submission that she (Cro) had been asked a series of unclear questions, together with others having a false premise, which might have served to confuse her. The questions so characterised have not been identified and I am satisfied that no confusion was indicated or apparent. As observed by Ms Ayling, there were inconsistencies between the views stated in the body of her report and those apparent from Appendix 2. Her opinion of the need for action at midnight and, again, at 07:00 on 28 May, took as its premise that, as a question of fact, Imogen had not fed since 19:00 on 27 May and that the absence of a record of any feed equated with the absence of a feed. For all such reasons, I formed the view that her opinions needed to be treated with some care and did not always reflect the nature or extent of the duty incumbent upon the Defendant's clinicians, as a matter of law.

Issues (b) and (c): midwifery management of Imogen whilst in hospital and the decision to discharge her

116. No pleaded criticism is made of Imogen's management prior to midnight on 28 May 2014.

117. The NICE clinical guideline, entitled 'Postnatal care up to 8 weeks after birth' was published on 23 July 2006 and was in place at the material time. Under the heading 'Your responsibility', on the opening page, the following paragraph appears:

'The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.'

The characteristics of a healthy baby were identified at paragraph 1.4.1:

'Healthy babies should have normal colour for their ethnicity, maintain a stable body temperature, and pass urine and stools at regular intervals. They initiate feeds, suck

well on the breast (or bottle) and settle between feeds. They are not excessively irritable, tense, sleepy or floppy. The vital signs of a healthy baby should fall within the following ranges…'

118. The NICE clinical guideline entitled 'Neonatal infection: antibiotics for prevention and treatment' was published on 22 August 2012. Under the heading, 'Patient-centred care', it was stated that, *'This guideline offers best practice advice on the care of babies who are at risk of or who have an early-onset neonatal infection (that is, onset of infection within 72 hours of birth).'* Table 2 in the guideline identified clinical indicators of possible early-onset neonatal infection, including 'red flags'. It is not contended that Imogen had any red flag, or that she had any of the risk factors identified within Table 1 in the guideline. Of the 23 clinical indicators identified, only one of them; 'feeding difficulties', potentially applied. So far as material, the second bullet point of paragraph 1.2.3.2 of the guideline provided:

'In babies without red flags and only one risk factor or one clinical indicator, using clinical judgement, consider:

— *whether it is safe to withhold antibiotics, and*

— *whether it is necessary to monitor the baby's vital signs and clinical condition — if monitoring is required continue it for at least 12 hours (at 0, 1 and 2 hours and then 2-hourly for 10 hours).'*

119. Paragraph 17.4 of the Defendant's own guideline, entitled 'Care of the Newborn Baby' stated:

'Most babies with EOGBS present with symptoms shortly after birth, and 90% of cases present by 12 hours of age, therefore treatment where necessary should be started promptly, but long periods of observation are not necessary.

- ***Infants with symptoms at or shortly after birth, whether risk factors present or not***

  Symptoms:
  - *Respiratory distress*
  - *Low or high temperature*
  - *Lethargy*
  - *Poor feeding*
  - *Apnoea*

  Management
  - *The baby should be admitted to the neonatal unit.*
  - *Take blood from the baby for blood cultures and full blood count.* ***There is no place for cultures to be taken from cord blood.*** *More reliable results are produced if at least 1ml of blood can be obtained for cultures. If this is difficult consider asking for help.*
  - *IV Benzyl penicillin and gentamicin should be commenced promptly..*
  - *Culture results should be reviewed at 48hrs and antibiotics should be stopped if cultures are negative, unless infant remains clinically unstable*

or the degree of clinical suspicion was high initially.'

120. In my judgement, the purported distinction advanced by the Defendant between the terms 'poor feeding' and 'feeding difficulty' is, essentially, sterile. The 2012 NICE guideline uses the term 'feeding difficulty'. As both Midwife Cro and Ms Maddy recognised, the question is whether, at the material times, the Defendant's clinicians ought to have concluded that any apparent issue with Imogen's feeding had reached the level of a feeding difficulty (and, if so, with what consequence). As Midwife Cro acknowledged, that was a matter of clinical judgement. Furthermore, Professors Heath and Ladhani and Midwife Cro were all of the opinion that, in and of itself, a feeding difficulty would not raise concerns of, and had a poor predictive value for, sepsis and that the index of suspicion for early onset neonatal GBS infection would have dropped after day one.

121. It is common ground that there is and was no guideline indicating the quantities of and/or intervals between feeds for a neonate. Midwife Cro made no criticism of the retrospective recording of Imogen's feeds on 26/27 May and accepted that all had been well until 19:00 on 27 May. By that stage, Imogen had, in fact, fed on eight occasions, in a period just exceeding 24 hours: at 18:30 (20mls); 21:00 (20mls); 02:00 (10mls); 04:00 (45mls); 09:00 (45mls); an unknown time (30mls); 14:00 (30mls); and 17:10 (15-20mls). The second to fourth of those feeds had been recorded retrospectively, at 06:35 on 27 May; and the fifth to eighth at 18:00 on 27 May. At 19:00, Imogen had taken a 10ml feed; recorded at 22:45 that day. It is an inevitable consequence of retrospective record-keeping that any longer than ideal interval between any two feeds would not become known to, or recorded by, the midwife until the later stage at which the information from which the record made had been obtained.

122. Midwife Cro had no concern about Imogen's care up to 22:45 on 27 May and had been of the view that, prior to 19:00, there had been no indication of any need on the part of the midwife to have stepped in. She made no criticism of Midwife Hurwood's decision to let mother and baby sleep, on two occasions, at 05:40 and 06:50 the following morning. No satisfactory explanation was provided for Midwife Cro's stated opinion that a midwife ought to have checked on, and undertaken observations of, Imogen at midnight on 28 May, in circumstances in which the records as they had stood at 19:00 indicated that Imogen had fed on eight occasions by that stage and had taken a total quantity of 215 to 220mls of formula. No concerns had been raised by the Claimant at 22:45 and Midwife Cro's evidence (1) that, for a healthy neonate, feeding would be demand-led; and (2) regarding the flexibility in baby-led feeding was consistent with there having been no criticism of Imogen's management at that stage. To adopt Midwife Cotton's language, this had been a baby on a low-risk pathway. Furthermore, and as Ms Maddy observed, by that stage the Claimant and Imogen would have been discharged from hospital but for the heart murmur which had been detected and the associated need for further assessment. This was not a situation in which anyone had considered close monitoring of Imogen's feeding to have been required. In short, I do not consider that anything then known about Imogen's history or presentation required that a midwifery check be undertaken at midnight, still less a monitoring of her vital signs. In any event, had those signs been monitored (whether at midnight or, later, at 07:00), there is nothing to indicate that they would have been other than normal; as Midwife Cro acknowledged, there had

been no infection present at midnight and there is no evidence to indicate that bacteraemia would have been indicated by abnormal results at 07:00.

123. It is undoubtedly the case that the interaction between the Claimant and the unidentified midwife, at approximately 03:00 on 28 May, ought to have been documented, but it is important to have regard to the particulars of breach alleged by the Claimant and their pleaded foundation. Paragraph 23(a) of the Particulars of Claim asserts that, by about midnight, and, again, by about 07:00, on 28 May, a midwifery check and full set of observations ought to have been carried out, and a feeding plan made, *'in the light of Imogen not having fed since 19:00 hours on 27 May 2014'*. The same course of action is said to have been required at 09:00, *'in the light of the history of going all night without feeding'* (paragraph 23(b)). As a question of fact, I have rejected the underlying premise of paragraph 23(a), being the contention that Imogen had not, in fact, fed during that period, and, for the purposes of paragraph 23(b), the history as later reported to and recorded by Midwife Cotton had not indicated as much, but, in any event, Ms Ayling is right to observe that no breach of duty arising from the midwifery care administered at 03:00 has been pleaded and no application to amend the Particulars of Claim has been made. For the sake of completeness, had there been a pleaded breach of duty in connection with the care delivered at approximately 03:00, I would have accepted Ms Maddy's evidence that, given the history of a well baby, who had been recorded as having fed well and frequently up to that point and about whom no concerns had been expressed as recently as 22:45 on 27 May, it had been reasonable to limit the advice given at 03:00 to changing the teats. Had that not resulted in any improvement after a suitable period, it might well have been that a feeding assessment would have been called for at that time. Indeed, that is what Midwife Cotton undertook when she resumed responsibility for Imogen's care later that morning.

124. In the absence of a pleaded breach of duty arising from events at 03:00 on 28 May 2014, Ms Ayling was right to submit that the important question was what Ms Cotton had found and done when she had come back on duty at approximately 09:00, regarding which I have set out my findings of fact, above. In light of the account given by the Claimant, I consider that an attempt at that stage retrospectively to have recorded such formula as had been taken since 19:00 on the previous day would have been of limited utility and would have been likely to have resulted in a nebulous account of the quantity taken, prompting the responsible action which Midwife Cotton in fact undertook, having spoken to the Claimant, being to assess Imogen's ability to feed, and condition, for herself, over a period of 10 to 15 minutes. I am satisfied that, in feeding and observing Imogen herself and in planning for a further feed by 13:00, Midwife Cotton acted in accordance with a responsible body of midwifery opinion, capable of withstanding logical analysis, as Midwife Cro herself ultimately accepted. Midwife Cro expressly disavowed any suggestion that any clinical observations would have yielded results outside normal tolerances. The contention that Midwife Cotton ought to have observed the Claimant feeding her own baby is not supported by the evidence of Midwife Cro, who described such an approach as best practice, but not mandatory. The Claimant's assertion to the contrary is contradicted by her own expert midwifery evidence. In the event, Imogen fed again, consuming a substantial quantity, at 11:00, no longer than two hours after Midwife Cotton had fed her.

125. Midwife Cro stated that, nevertheless, she remained critical of the plan put in place by Midwife Cotton. She told me that one would have wanted Imogen's mother to have fed her and to have been satisfied that Imogen had been feeding effectively (irrespective of whether Imogen had fed overnight), meaning that a plan ought to have been put in place, over a 12 to 24 hour period, to ensure that feeding had been in a regular, established pattern, with the baby sucking well on the teat and taking milk down and the mother being able to carry that out. I prefer the opinion of Ms Maddy; by this stage, an issue with Imogen's feeding overnight had been reported to Midwife Cotton. Imogen had not been sleepy during that period; she had been awake and trying to feed, albeit, on the Claimant's account, with limited success. The records available to Midwife Cotton indicated that Imogen had apparently settled by 05:40, consistent with her having taken some formula after the change of teat, and she had then taken a substantial quantity of formula, given by Midwife Cotton herself, between 09:00 and 09:45. I am satisfied that Midwife Cotton's conclusion that any feeding issue which had occurred overnight had been temporary and had resolved to her satisfaction had been one which she had been entitled to reach in accordance with the *Bolam/Bolitho* test, and that she had also been entitled not to have considered it a feeding difficulty, such as to have constituted a clinical indicator for infection. Furthermore, and even if I am wrong about that, I am satisfied that she had been entitled to have concluded that monitoring, as set out in the 2012 NICE guideline, had not been required; a plan had been put in place that Imogen should feed again by 13:00. Had she not fed by then, a longer term plan might have been indicated at that stage. In the event, Imogen had fed at 11:00 and, thereafter, the Claimant had raised no feeding-related concerns with any clinician, nor had Imogen presented in a way which had given any clinician cause for concern prior to discharge. Indeed, it is not the Claimant's case that any feeding difficulty up to that point had, in fact, been caused by GBS, or that sepsis ought to have been identified or suspected prior to discharge. Subject to the conclusions which follow, I am satisfied that Midwife Cotton did not act in breach of duty in the approach which she adopted from 09:00 on 28 May and that her view that Imogen was fit to be discharged in the afternoon of 28 May had been one which had been reasonably open to her. It follows that I accept the Defendant's submission that Midwife Cotton had not been obliged to have concluded that Imogen should remain in hospital for ongoing monitoring, or subject to a feeding plan, which, in my judgement, had not been mandatory in all the circumstances.

The advice given on discharge

126. I have found that the Claimant received advice in relation to discharge at two stages; on 27 and on 28 May, and it is appropriate that that advice be considered collectively. Whilst I accept that the advice provided in writing is not a substitute for oral advice, neither is it to be disregarded as an additional source of information of which the Claimant was aware and to which she could refer in the event of concern.

127. I have found as a fact that, on 27 May, Midwife Cotton discussed infant feeding leaflets with the Claimant. I have set out, at paragraphs 59 and 60 above, the matters of which I am satisfied that the Claimant was advised by Midwife Cotton when discharged. That included advice: to feed Imogen on demand and regularly; regarding a baby's general wellbeing; and as to signs and symptoms of common problems and that which the Claimant ought to do in the event of concerns, including were she to be worried about Imogen's feeding (including its regularity), or that Imogen was acutely unwell. Midwife Cro acknowledged that such advice, summarised in the Defendant's

own guideline, would have been reasonable, if the midwife had been really clear as to the signs for which to be alert. I am satisfied that Midwife Cotton acted in accordance with that guideline. In the absence of a feeding issue which had obliged Midwife Cotton to consider that there had been a feeding difficulty and associated need for monitoring within the parameters of the 2012 NICE guideline, I do not consider that she was obliged to advise that a rigid feeding-plan be put in place. Nevertheless, I accept the evidence of both midwifery experts that the Claimant ought to have been advised that demand feeding ought to be taking place approximately every three to four hours. Advice to feed Imogen regularly, whilst consistent with that timescale, did not advert expressly to it.

Causation

Issues (e)(i) to (e)(iii)

128. Whilst the Claimant's evidence was of progressive deterioration in Imogen's condition following her discharge from hospital as the day had worn on, it is necessary to assess that evidence with some caution. First, in so far as it derives from the Claimant's stated recollection that Imogen would not feed at all, that position is inconsistent with her pleaded case, to the effect that Imogen would take only small quantities, or sips, and that, when calling the hospital on 29 May, she had said that Imogen had not fed since 22:00. For reasons previously set out, I have rejected similar assertions to the effect that Imogen had not taken any food whilst in hospital, and regarding the Claimant's assessments of the quantity of food in fact taken, as having been inaccurate. Secondly, I have previously rejected the Claimant's recollection of the way in which Imogen had presented prior to discharge, including her account of an unusual cry, tensing when handled etc. Against that background and in the absence of any detail as to the timing of particular aspects of Imogen's deterioration, in my judgement the only conclusion which may safely be drawn, on the balance of probabilities, is that some significant deterioration in Imogen's condition had prompted the Claimant to call her mother at around midnight on 29 May 2014, when she had not previously considered it necessary to do so, which had been followed by a further significant deterioration, shortly before 05:21, which had led the Claimant to call the hospital, reporting signs which had included a visible rash and mottled appearance. That was consistent with the paediatric infectious disease experts' jointly held view that overt meningitis had developed at around that latter time. As Ms Ayling was right to observe, there was no evidence to the effect that Imogen would have displayed any signs at the stage at which the blood/brain barrier was considered likely to have been breached (being 17:30 on 28 May). Beyond those findings, I conclude that it is not possible reliably to determine, on the balance of probabilities, when Imogen had exhibited signs and symptoms of sepsis and the Claimant has not discharged her burden to establish that matter.

129. Given my findings as to the advice which had been given to the Claimant at discharge, which I have accepted to have included information to the effect that, should the Claimant have any concerns about herself or her baby, she should call the unit and, if worried that her baby was acutely unwell, should go straight to A&E, I am satisfied that, had Imogen exhibited signs and symptoms of sepsis at a stage significantly earlier than the point at which she had called, respectively, (1) her mother; and (2) the hospital, she would have made each of those calls at a

concomitantly earlier stage and, thus, would have sought assistance at an earlier stage. Whilst I have found that the Claimant ought also to have been (but was not) advised that Imogen ought to feed, albeit on demand, approximately every three to four hours, I conclude that the failure to have given such advice had no causative potency in this case. First, the Claimant has not established, on the balance of probabilities, that Imogen did not take any feed within those intervals and the Claimant's pleaded account of a feed at 22:00 was of her immediately prior feed. Furthermore, she had been informed that Imogen should feed regularly. Accounts given on 29 May 2014 of Imogen's reluctance to feed at an earlier stage I have found to be unreliable. Secondly, if, as the Claimant contends, Imogen had also been showing other signs of illness by that stage, she had been suitably advised as to what to do, in that event.

130. On the basis of the above findings, in my judgement the Claimant has not established, as a question of fact, that (absent the only breach of duty which I have found) she would have returned to the hospital by 21:30, being (on the expert evidence of Professors Ladhani and Heath) the latest time by which she would have needed to have arrived in order for Imogen's life to have been saved.

Overarching conclusion

131. I make clear that, whilst I have rejected the Claimant's account of material events, where inconsistent with the evidence provided by the Defendant, that is not to suggest that I have concluded that she was other than doing her best to give an honest account of events, as she recalled and perceived them to be. In the tragic circumstances of a baby's death, particularly that of a baby born healthy, it is natural and understandable that a parent will search for anything which could have been done or prevented and for which someone might bear responsibility. In this case, as it seems to me, that has resulted in the Claimant's mis-recollection or misinterpretation of events as they had unfolded at the time, when viewed with hindsight. In my judgement, and notwithstanding the Defendant's record-keeping failings and the additional piece of advice which ought to have been given to the Claimant on discharge, from all of which it must learn, the Claimant has not established her claim. In summary, of the pleaded breaches of duty, she has established a single and limited breach on the part of the Defendant, which did not cause Imogen's untimely death.