EKUH commissioned two external reports from clinicians at neighbouring Dartford and Gravesham NHS Trust:

1. Dr Ali Bokhari Consultant Paediatrician and Director of Clinical Education, Dartford and Gravesham NHS Trust (report undated)

2. Mr Mark Waterstone Consultant in Obstetrics and Gynaecology at Dartford and Gravesham NHS Trust (report dated 7 June 2018).

I am not sharing the full reports to for reasons of Sarah Richford's privacy.

Dr Ali Bokhari's report concludes:

*"**Summary and conclusions***

27. Harry Richford was a term baby born at QEQM. His birth was as a result of the emergency Caesarean Section after a failed trial of forceps which itself was initiated after there was failure to progress. An instrumental delivery was not attempted as the forceps did not lock.

28. It is obvious from the notes that there were significant problems at birth with his resuscitation. He was born either in Primary Apnoea or terminal Apnoea (see Newborn Life Support- Resuscitation Council UK)

29. He required rapid management of airway such that his lungs were inflated with air. It appears that didn't happen until around 28 minutes after birth despite face mask and Neopuff ventilation.

30. Finally baby was intubated by the Anaesthetist at around 28 minutes of age and things improved afterwards. However major period of hypoxia did occur for a period of time before birth (evidenced by the baby's condition at birth) and after delivery with the failure to attain a successful airway by the Neonatal team.

31. There is also evidence of poor record keeping. I have not found any records kept by the Paediatric Registrar who would have led the resuscitation until the consultant arrived from home. There are also very poorly timed records kept by SHO and Nursing staff. This makes it impossible to ascertain whether the interventions mentioned were undertaken in a timely manner.

32. In my opinion this baby was born in a poor condition after a likely but unspecified and significant period of hypoxia. His initial condition is due to that insult.

33. The failure of the Neonatal team to establish a successful airway and ventilate this baby significantly contributed to ongoing hypoxia and ultimately to his demise.

34. While it is unclear whether the outcome would have been successful if airway and ventilation was established from birth due to unspecified hypoxic insult before baby's birth,

on the balance of probability it is highly likely that failures in neonatal ventilation played a major role in the disastrous outcome.

35. I would recommend a significant review of the abilities of the staff in hospital to establish and maintain an airway of a newborn baby including midwives, Neonatal nurses and all junior doctors. They all need to be competency checked such that at any one time several people on duty in Maternity and Neonatal services, both in and out of hours, are competent and confident about these airway skills.

36. Since NLS is the standard training system for Newborn resuscitation in UK, I would recommend that all senior staff in Neonatal and Maternity service have the NLS certificate and that there are regular drills across the maternity and Neonatal services to keep staff updated utilising Simulation and Human factors skills. Advanced airway skills should be taught to senior medical staff (Middle grade and beyond) and competency checked on regular basis.

37. I would recommend a review of the notes kept at resuscitations and that they are entered by all present and taking major part in resuscitation. There should be an assigned member of staff who records in a contemporaneous manner all that goes on during resuscitation and records with timing all interventions.

I recognise that some of this training perhaps already takes place, but wanted to make sure that Trust takes them forward if there are any gaps in the system."

The trust's internal Root Cause Analysis investigation of Harry's death concluded that staff had adhered to the relevant resuscitation guidelines.

Dr Bokhari questioned if this was the case:

"Also not recorded is whether a two person technique or a jaw thrust was applied to optimise the airway. I would consider it sub-optimal effort to maintain an airway if these efforts were not added. All NLS course teach these techniques and they are easy to perform."

Mr Mark Waterstone's report came to this conclusion:

"CONCLUSION

64. Mrs Richford had an uneventful pregnancy which resulted in augmented labour.

65. The care during the antenatal and intrapartum period up to delivery was reasonable (notwithstanding the inaccurate interpretation of the CTG).

66. The registrar correctly converted from instrumental delivery to caesarean section when the forceps blades did not lock.

67. The registrar persisted with attempts to extract the fetal head when he should have used alternative methodologies which may have resulted in earlier delivery.

68.There appears to have been inadequate neonatal resuscitation which requires the expertise of a neonatologist to review with authority."