

Case story: Neonatal Jaundice

Pregnancy

- Pauline is a Black British mother in her third pregnancy.
- Two previous uncomplicated spontaneous vaginal deliveries.
- No risks identified at booking.
- Attended Triage at 36+5 weeks with reduced fetal movements, the CTG was commenced within 15 minutes of arrival. She was discharged home after an Obstetric review with safety netting advice.



Good practice:
Birmingham Symptom specific Obstetric Triage System (BSOTS) guidance followed.

Day 0

- **4:00am:** Spontaneous vaginal delivery at 37+5 weeks. Apgar score 7 at 1 minute, 9 at 5 minutes and 9 at 10 minutes.
- No complications.
- Baby was briefly breastfed.
- Baby was discharged on the day of birth, following a NIPE check that showed nothing abnormal detected.



The NHS Race and Health Observatory (2023) recommends a systematic review to identify alternatives to the Apgar score for accurate assessment of Black, Asian, and minority ethnic neonates. See the [RHO Neonatal Assessment Report](#) for details.¹

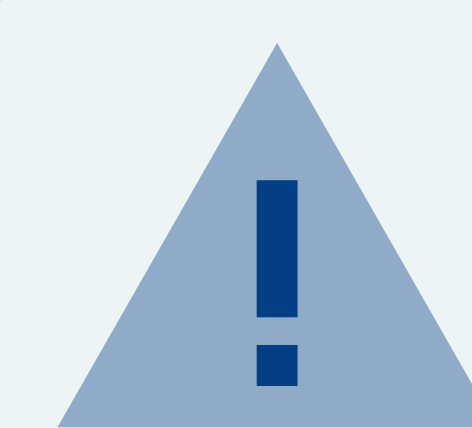
Postnatal - Day 2

- First community midwife visit at home - not seen since day of birth when discharged.
- Mother reported she thought the baby was jaundiced.

- Incomplete physical examination and no detailed documentation assessment for jaundice.
- No breast feeding assessment.

Postnatal - Day 3

No visit by the community midwives as planned on the previous day.



System issue:
The midwifery team had significant sick leave, increasing the number of visits required per midwife.

Postnatal - Day 4

- **9:00am:** Second community midwife visit at home.
- Mother reported she thought the baby was jaundiced, not feeding well and now very sleepy.
- The midwife advised that baby should be taken to hospital for a serum bilirubin (SBR) check as there was no transcutaneous bilirubinometer available. No urgency communicated.

- **15:00pm:** The baby arrived at hospital to have the first SBR when 107 hours old, the result was 404 mmols/l.
- This result was incorrectly plotted on the >38 weeks chart indicating phototherapy rather than exchange blood transfusion.
- Phototherapy was commenced and the SBR reduced when reviewed 6 hours later but still within the treatment line.



The baby was subsequently diagnosed with kernicterus and cerebral palsy.



System Engineering Initiative for Patient Safety (SEIPS) Model²

The SEIPS framework is used here to demonstrate the potential for learning from this claim to support system-wide improvement.

