	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** **1. Sheffield Teaching Hospitals NHS Foundation Trust**
1	**CORONER** I am Abigail Combes, assistant coroner, for the coroner area of South Yorkshire (West District)
2	**CORONER'S LEGAL POWERS** I make this report under paragraph 7, Schedule 5, of the Coroners and Justice Act 2009 and Regulations 28 and 29 of the Coroners (Investigations) Regulations 2013.
3	**INVESTIGATION and INQUEST** On 7 July 2021 I commenced an investigation into the death of Cassian Curry born on 3 April 2021. The investigation concluded at the end of the inquest on 22 April 2022. The conclusion of the inquest was:- Cassian Curry was born at the Jessops Wing, Sheffield on 3 April 2021. He was 28 weeks and very small even for his age. On 3 April 2021 an umbilical venous catheter was positioned in a sub optimal position and therefore required review within 24 hours. The review was not documented in Cassian's records or referred to in handover or ward rounds and as a result, not done. This resulted in Cassian's death on 5 April 2021. Cassian's death was contributed to by neglect. The medical cause of death was: 1a: Total parental nutrition-related cardiac tamponade 1b: Complications arising from central umbilical venous catheter insertion 1c: Prematurity 2: Maternal Arterial Malperfusion
4	**CIRCUMSTANCES OF THE DEATH** Cassian was born at the Jessops Unit, Sheffield on 3 April 2021. He was born at 28 weeks gestation weighing 750g. Despite that he was strong and appeared to be doing well. On 3 April 2021 an umbilical venous catheter was provided to Cassian. Unfortunately, the placement of this line took longer than they would have hoped and as a result Cassian's temperature decreased and the procedure had to be stopped. The line was left in a sub optimal position however it was acceptable to commence parental nutrition through it. The Consultant formed a plan to review, reassess and pull back the line within 24 hours. She did not document this or hand it over and the result was that Cassian's line was not pulled back. Unfortunately, this resulted in total parental nutrition-related cardiac tamponade and Cassian's death on 5 April 2022. I made the following findings in the inquest:- **1.** There were no systemic failures in the form of staffing issues which caused or contributed to Cassian's death. I say this on the basis of the evidence that I have heard that staffing at the Jessops Unit over the weekend of Cassian's birth and death were above the national requirements. Although there were a number of junior staff, they were appropriately qualified and able to support the Unit adequately. **2.** Cassian was in a dependent position and that a duty of cared was owed to him.

3. The placement of the Umbilical Venous Catheter was a complex procedure. The evidence which I have heard is that this was a routine procedure, and it was safe for this to be performed by Junior Doctors. That said the clear evidence of Dr [redacted] is that the placement of such a catheter is 'one of the most complex procedures in the neonatal unit'

4. The decision to pause the procedure to place the umbilical venous catheter on 3 April 2021 was reasonable and appropriate on the basis of the clinical picture of Cassian at the time. This includes the decision to leave the line in situ at that time and commence parental nutrition.

5. The Consultant Plan to review, reassess and pull back the line within 24 hours was equally reasonable and appropriate on the basis of the clinical picture.

6. The Consultant plan to review, reassess and pull back the umbilical venous catheter was not adequately recorded or communicated. The plan should have been reflected on the pink sheet. Dr [redacted] placed the pink sheet in front of Dr [redacted] who signed it but did not record any plan on that sheet. The need for the venous catheter to be pulled back was not communicated with Cassian's family. Dr [redacted] sought clarity about the position of the line from Dr [redacted] who confirmed she was aware, but this was still not sufficient for the plan to pull the line back to find its way into either Cassian's notes or the ward round. Dr [redacted] had a verbal handover from Dr [redacted] on 4 April 2021 and again, although Dr [redacted] handed over specific elements of Cassian's clinical picture, on the basis of her own evidence she 'forgot' to hand over the need to reassess the line.

7. The Consultant Plan should have been recorded in Cassian's notes

8. The Consultant Plan should have been communicated with Cassian's parents

9. The Consultant should have recognised that following Dr [redacted] query her plan may not have been sufficiently clear and the notes ought to have been reviewed and this plan prioritised during the ward round

10. The Consultant should have handed over the plan to the next Consultant on duty as part of the handover

11. The complexity of the initial placement of the umbilical venous catheter or indeed the procedure to pull this back is a red herring. The failing here is one of recording and communication.

12. There was a failure to record the Consultant Plan appropriately on Cassian's pink central line sheet. There were then subsequent failures to hand over the Consultant Plan to other members of the team and Cassian's parents.

13. The failure to adequately record and communicate the Consultant Plan was a gross failure of Cassian's care. To be satisfied that there was a gross failure of care for Cassian I do not need to be satisfied that there was one specific event which would amount to a gross failure. I am entitled to consider a number of failures which, when viewed collectively, amount to a gross failure. It could be said that the failures in this case were a number of individual failings, or one perpetuated failure started with the failure to record the Consultant Plan on the pink central line sheet and the continuing in failing to handover these matters to members of Cassian's care team in spite of a reminder from Dr [redacted].

	14. The failure to record and communicate the Consultant Plan to review, reassess and pull back Cassian's central line contributed to his death and contributed in a way which was more than minimal, negligible or trivial. I have reached this finding on the basis of the evidence from Dr [redacted] that but for this incident Cassian would not have died of what he died of when he died.
5	**CORONER'S CONCERNS** During the course of the inquest the evidence revealed matters giving rise to concern. In my opinion there is a risk that future deaths could occur unless action is taken. In the circumstances it is my statutory duty to report to you. The **MATTERS OF CONCERN** are as follows: – 1. Cassian's parents were not told about the Consultant Plan to review, reassess and pull back Cassian's central line. Whilst this was not Cassian's parents' responsibility, had they known about it they would have acted as a prompt for staff on a busy ward. 2. I heard evidence that the staffing levels on the Jessops Wing are over the national requirements. This therefore led to an assumption that staffing was not an issue or a factor which led to the failure to document Cassian's requirement for review. However, there is a possibility that the number of staff placed an additional burden on the consultant (more junior staff means more questions) and that fewer staff may have offered greater consistency. 3. I heard evidence that the pink sheets have been reviewed and redesigned following Cassian's death and are now more directive. I also heard evidence that these forms are more detailed than the national requirements. Again, there does not seem to have been consideration of whether the national form would actually meet the requirements of this unit and that less information may be preferable in these circumstances. 4. I heard about the Jessops Unit having responsibility, not only for babies already in the unit but also for some of the sickest and most premature babies in the region. I did not hear any evidence of how the Jessops Unit access support from colleagues across the region. I heard evidence of trying to access colleagues to support the Jessops Unit directly and a buddy system but there are other neonatology consultants across the Region who could provide remote assistance potentially if encouraged to think as a system.
6	**ACTION SHOULD BE TAKEN** In my opinion action should be taken to prevent future deaths and I believe your organisation have the power to take such action. I would ask that your responses specifically consider the following:- 1. Utilising the support of parents in the shared care of babies 2. Has overstaffing been considered as a possible factor in the confusion leading to the failure to handover and document the requirement to review Cassian? 3. Has the thoroughness of the form been considered as a factor leading to the failure to handover and document the requirement to review Cassian? 4. Additional and different staffing models have been considered but how are the rest of the system being brought together to support at times of particular pressure?
7	**YOUR RESPONSE** You are under a duty to respond to this report within 56 days of the date of this report, namely by 20th June 2022. I, the coroner, may extend the period.

	Your response must contain details of action taken or proposed to be taken, setting out the timetable for action. Otherwise you must explain why no action is proposed.
8	**COPIES and PUBLICATION** I have sent a copy of my report to the Chief Coroner and to the following Interested Persons: [redacted] and Sheffield Teaching Hospitals NHS Foundation Trust. I am also under a duty to send a copy of your response to the Chief Coroner and all interested persons who in my opinion should receive it. I may also send a copy of your response to any other person who I believe may find it useful or of interest. In this case I have sent a copy of this report to NHS England and to NHS Sheffield CCG and the South Yorkshire and Bassetlaw ICS as the legacy organisation for CCGs. The Chief Coroner may publish either or both in a complete or redacted or summary form. He may send a copy of this report to any person who he believes may find it useful or of interest. You may make representations to me, the coroner, at the time of your response, about the release or the publication of your response.
9	**25th April 2022**  Abigail Combes **Assistant Coroner**