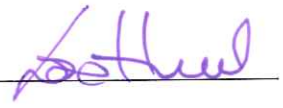
	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** **1. CRG Lead Commissioner** **2. Birmingham Women's and Children's NHS Foundation Trust**
1	**CORONER** I am Louise Hunt Senior Coroner for **Birmingham and Solihull**
2	**CORONER'S LEGAL POWERS** I make this report under 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 25/04/2018 I commenced an investigation into the death of Kiarah Faith Adora Allen. The investigation concluded at the end of an inquest on 20th August 2018. The conclusion of the inquest was: Kiarah died from an inadvertent fluid overload of TPN given via an UVC as a result of unsafe staffing levels, not correctly following procedure and failing to learn from a previous similar event. Her death was contributed to by neglect.
4	**CIRCUMSTANCES OF THE DEATH** Kiarah was born at 25 plus 5 weeks gestation on 09/02/18 at 20.00. She was admitted to the neonatal unit where she required medical support including Total Parenteral Nutrition (TPN) with starter vamin. On 10/02/18 at around 11.20 her TPN needed changing to Neo 12. At the time two junior sisters were involved. During the course of the change one junior sister was called away to another baby. During the change both types of TPN were inadvertently left attached to the baby via the umbilical venous catheter (UVC). The start-up Vamin continued to go through the pump however the Neo 12 was attached directly to the UVC. When the clamp to the UVC was removed the Neo 12 infused direct into Kiarah leading to fluid overload of 209mls. This caused her to collapse about an hour later requiring resuscitation. The fluid overload led to severe metabolic complications. She sadly died at 00.55 on 11/02/18. The root cause of this error was a combination of unsafe staffing numbers, a failure to follow correct procedure when changing the TPN and failure to learn from a previous similar incident. Following a post mortem, the medical cause of death was determined to be: 1a CONGESTIVE CARDIAC FAILURE 1b ACCIDENTAL TOTAL PARENTERAL NUTRITION FLUID OVERLOAD 1c VERY PRETERM (25/40), CONGENITAL BILATERAL BRONCHOPNUEMONIA, HYPOXIC-ISCHAEMIC BRAIN INJURY AND INTRAVENTRICULAR HAEMORRHAGE
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 will 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. I heard evidence in the inquest that at the time this incident occurred there were unsafe levels of nursing and clinical staff. The funding provided for nurses assumed the unit was only 85% full. Therefore when the unit was full, there was insufficient numbers of nurses and doctors. Consideration needs to be given to providing additional funding to enable the unit to be appropriately staffed for the very sick babies they care for.

6	**ACTION SHOULD BE TAKEN** In my opinion action should be taken to prevent future deaths and I believe you have the power to take such action.
7	**YOUR RESPONSE** You are under a duty to respond to this report within 56 days of the date of this report, namely by 16th October 2018. 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:- Kiarah's family I am also under a duty to send the Chief Coroner a copy of your response. 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 by the Chief Coroner.
9	21/08/2018 Signature  Louise Hunt Senior Coroner **Birmingham and Solihull Districts**