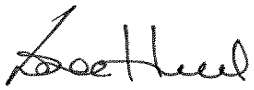
	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** **1. Dudley Group of Hospitals NHS Foundation Trust** **2. University Hospitals Birmingham NHS Foundation Trust**
1	**CORONER** I am Louise Hunt, Senior Coroner for **Birmingham and Solihull**
2	**CORONER'S LEGAL POWERS** 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 22/06/2016 I commenced an investigation into the death of Alfie Rose aged 17. The investigation concluded at the end of an inquest on 26th October 2016. The conclusion of the inquest was: Alfie died from complications of obstructive hydrocephalus. Earlier detailed MRI scan, admission and treatment at Queen Elizabeth Hospital neurosurgical unit on 16/05/16, 27/05/16 and the morning of 06/06/16 would, on balance, have avoided his death.
4	**CIRCUMSTANCES OF THE DEATH** The deceased had suffered from hydrocephalus as a child. He had not required any treatment during childhood. On 02/05/16 he presented to Russell's Hall Hospital complaining of a headache for two weeks. Scans revealed generalized ventricular dilatation compatible with likely arrested hydrocephalus. An ophthalmology examination found evidence of papilloedema resulting in an urgent referral to outpatients at Queen Elizabeth Hospital in Birmingham. He was seen in the neurosurgery hot clinic at Queen Elizabeth Hospital on 16/05/16 when doctors advised he should be admitted for further assessment and treatment. He refused admission so arrangement was made for further follow up in out patients clinics. On 27/05/16 he presented to his GP with headache of increasing severity. He was referred to Russell's Hall Hospital where further scans were undertaken which were unchanged from before. He was discharged home. He presented to Russell's Hall hospital emergency department at 11am on 06/06/16 complaining of further headaches. An MRI scan was undertaken which was unchanged from before and his symptoms resolved so he was discharged home. He returned to the emergency department at 22.22 complaining of a headache and vomiting. He was taken to the high dependency side of the department. At approximately 00.30 he had a sudden deterioration and respiratory arrest requiring full resuscitation. A further CT scan was undertaken confirming severe hydrocephalus. He was transferred as an emergency to Queen Elizabeth Hospital in Birmingham leaving at 04.38 and arriving at 05.34. An external ventricular drain was inserted immediately on arrival. Further assessment confirmed extensive brain infarction indicating a severe brain injury. He died at 11.33 on 09/06/16 following organ donation. Based on information from the Deceased's treating clinicians, the medical cause of death was determined to be: BRAIN STEM DEATH OBSTRUCTIVE HYDROCEPHALUS

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. There was **poor communication** between both hospitals in relation to Alfie's condition and care. Details of his neurosurgical review on 16/05/16 were not made available to Russell's Hall Hospital. His clinical condition was not relayed to QE hospital on 27/05/16 or morning of 06/06/16. These were vital missed opportunities to transfer him back to QE for treatment. Both Trusts need to look at their communication systems and identify areas for improvement and to clarify if the NORSE system is effective. I heard evidence to suggest that all the NORSE system entries cannot always be seen. 2. **Education**. It is important the clinicians in outlying hospitals understand how neurological referrals should be made and when. Better guidance and education is needed for outlying hospitals.
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 22nd December 2016. 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:- The family LOCAL SAFEGUARDING BOARD (as the deceased was under 18) NHS England CQC. 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	26/10/2016  Louise Hunt Senior Coroner **Birmingham and Solihull**