REGULATION 28: REPORT TO PREVENT FUTURE DEATHS (1)

	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** 1. Pennine Acute Hospitals NHS Trust 2. Department of Health
1	**CORONER** I am Lisa Hashmi, Assistant Coroner for the coroner area of Manchester North
2	**CORONER'S LEGAL POWERS** I make this report under paragraph 7, Schedule 5, of the Coroner's and Justice Act 2009 and regulations 28 and 29 of the Coroners (Investigations) Regulations 2013.
3	**INVESTIGATION and INQUEST** On 01/12/2011 the Senior Coroner commenced an investigation into the death of Jack William PARTINGTON, then aged 1 day. The investigation was concluded at the end of the inquest on 12/11/2013. The conclusion of the inquest was that Jack Partington developed Respiratory Distress Syndrome that necessitated management by way of nasal continuous positive airway pressure ventilation (CPAP). At 3:20 on the 26th November 2011, Jack developed a pneumothorax that was treated by way of drainage and intubation. He was given Atracuriam to facilitate the ventilatory process and treatment. Despite intubation, ventilation could not be achieved. Consequent to this, Jack's heart beat weakened, became ineffective and stopped. Jack died at 05:12 on the 26th November 2011. The medical cause of death being: 1a) Hypoxia 1b) Insufficient ventilation of the lungs consequent upon the prescription of Atracuriam and insufficient artificial ventilation 1c) Respiratory Distress Syndrome
4	**CIRCUMSTANCES OF DEATH** Jack Partington was born by way of a pre-planned lower segment caesarean section at 09:28 on the 25th November 2011. He cried almost immediately but within minutes of his birth stopped breathing. Neonatal resuscitation was commenced and was successful. Jack was taken to the special care baby unit (high dependency) for further treatment and monitoring. This treatment included nasal continuous positive pressure ventilation (nCPAP). Whilst he remained tachypnoeic overall, his other physiological parameters were satisfactory. At around 23:35 the nursing staff decided to take jack off ventilation for a trial period. This decision was supported by the duty paediatric Registrar when she reviewed Jack in the early hours of the 26th November. Initially he did well but he developed a requirement for oxygen and was therefore put back on nCPAP. By 3:20 his oxygen requirement and 'grunting' had increased. He was reviewed by the Registrar at around 3:45 and a diagnosis of pneumothroax was made. Oxygen therapy was put to 87% and the nCPAP pressure reduced to 2. The paediatric Consultant was called to attend, arriving at around 04:05. The pneumothorax was successfully

	'tapped' by the Registrar whilst the Consultant cannulated a vein. The planned treatment was to intubate, ventilate and insert a chest drain (further treatment for the pneumothorax). In order to facilitate intubation, Atracuriam (a muscle paralysing agent) was administered by bolus dose. Jack's vital signs deteriorated. Intubation was attempted by the Registrar but was unsuccessful. The Consultant immediately took over, inserted the ET tube and was content that it was correctly sited in the trachea. Jack's observations continued to plummet and the Consultant therefore extubated and reintubated. Again, he was satisfied that the tube was sited correctly. Advanced neonatal resuscitation was commenced, including the administration/introduction of the drugs Atropine and Adrenaline and cardiac massage. Jack's oxygen saturation and heart rate continued to drop. He died at 05:12 on the 26th November 2011.
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) That there was no 1:1 neonatal nurse/cotside 'handover' at shift change, no individualised neonatal nursing care plan in use and no routine checks of medical records for new neonatal admissions. 2) Nursing staff, rather than the multi-disciplinary team plus parents, took treatment/change of treatment decisions in isolation and without consulting all available information (such as medical records etc.) 3) That disposable exhaled carbon dioxide detectors (ET CO2) were not routinely used on the NNU (as an adjunct) and that they are not currently/routinely used in many NNUs throughout the country. 4) There are no national standardised policies, protocols or guidance on the management and administration of paralysing agents to neonates in need of intubation and/or the management of ventilation in neonates. 5) No single individual within the neonatal (resuscitation) team was allocated to oversee and monitor the ventilatory pressure dial following intubation. The dial in question was situated on the side of the incubator/cot, out of the direct line of sight of the clinician controlling the airway/ventilatory process.
6	**ACTION SHOULD BE TAKEN** In my opinion action should be taken to prevent future deaths and I believe you (AND/OR your organisation) 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 the 15th January 2014. I, the Assistant 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: Mr and Mrs [redacted] (via their legal representatives).

	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 from. 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 Assistant Coroner at the time of your response, about the release or the publication of your response by the Chief Coroner.	
9	21 November 2013.	Signed