Karen Dilks
Senior Coroner for the City of Newcastle upon Tyne

	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** **1. Sir James Mackey, Chief Executive of Northumbria Health Trust, North Tyneside Hospital, Rake Lane, North Shields, Tyne & Wear, NE29 8NH**
1	**CORONER** I am Karen L Dilks, Senior Coroner, for the Coroner area of the City of Newcastle upon Tyne
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 10 July 2017 I commenced an investigation into the death Maia Hazel Ann Strachan born on 6 July 2017 and died on the 7 July 2017. The investigation concluded at the end of the inquest on 17 April 2019. The conclusion of the inquest was: Medical Cause of death: 1a. Hypoxic Ischaemic Encephalopathy 1b. Complication of Shoulder Dystocia secondary to Macrosomia 2. Maternal Diabetes Narrative Conclusion: Died due to complications of shoulder dystocia to which missed opportunities to reduce the risks of and diagnose severe foetal macrosomia contributed.

4	**CIRCUMSTANCES OF THE DEATH** Maia Hazel Ann Strachan was born on the 6 July 2017. Her mother suffered from Diabetes and High Body Mass Index. Her Diabetes was uncontrolled before the pregnancy and in its early stages. This increased the risk of Foetal Macrosomia and consequently the risks of delivery. An ultrasound scan was performed on the 21 June 2017. The images were suboptimal, an incorrect formula used to calculate foetal weight and femur length inaccurate. This resulted in underestimation of foetal weight and a missed opportunity to plan Maia's delivery by Caesarean Section. A plan for induction of labour was implemented on the 4 July 2017. At approximately 10am on the 6 July 2017, an opportunity was missed for delivery by Caesarean Section at mother's request. Maia's delivery was thereafter complicated by Shoulder Dystocia and prolonged attempts to deliver her which led to Hypoxic Ischaemic Encephalopathy and her death within the Royal Victoria Infirmary, Newcastle upon Tyne on 7 July 2017 Maia was severely Macrosomic weighing 5.1 kilograms at birth. On the balance of probabilities, Maia would have survived if delivered by Caesarean Section.
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) The ability to store sequential scan data specific to each patient and provide alerts to the Sonographer. This would facilitate comparison and prompt further investigation potentially altering a patient's care plan and outcome. The Trust's plan to procure software to facilitate the above should be urgently implemented. (2) A system of joint obstetric and diabetic care operates without the facility for clinicians to access patients' obstetric and diabetic records whether manually or electronically.

	Accessibility is essential to inform clinical decisions and should be urgently addressed (3) Joint Decision Making: - Provision of advice and explanation of the risks of pregnancy and the risks/benefits of vaginal delivery or by Caesarean Section are essential to ensure informed decision making. The Trust should draft and implement a clear and comprehensive Local Joint Decision Making Policy/Protocol. (4) Foetal Scalp Electrode: The use of Foetal Scalp Electrodes (FSE) provide critical information in respect of foetal distress and the time implications thereof. The Trust should draft and implement a clear and comprehensive Local Policy/Protocol for FSE use. (5) Suboptimal Documentation: The Trust should implement a robust training and audit plan to address the risks of this occurring in the future. (6) The Findings and Conclusions of [redacted] (Independent Expert Witness): A redacted copy of [redacted] report and conclusions should be circulated to all obstetrics and gynaecology staff (both nursing and medical) and all midwives.
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 by 23 July 2019. 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 to the North Tyneside Local Safeguarding Board. I have also sent it to [redacted] who may find it useful or of interest. 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	**28 May 2019** ..... **HM Senior Coroner for the City of Newcastle upon Tyne**