Walsall Healthcare NHS
NHS Trust

Our Ref: [redacted]
Your Ref: Regulation 28 REPORT

Date: 23rd August 2016

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Dear Mr Siddique

Re: Tommi-Ray Vigrass (Deceased)

Date of Birth: **09/01/2016**
Date of Death: **13/01/2016**
Date of Inquest: **23/06/2016**

I am writing in response to your report under paragraph 7, Schedule 5, of the Coroners and Justice Act 2009 and regulations 28 and 29 of the Coroners (Investigations) Regulations 2013. I fully accept the Inquest verdict that Tommi-Ray Vigrass's death was contributed to by neglect.

I would like to take the opportunity to assure you that a formal policy for reporting and investigating serious incidents is embedded within the Trust and Tommi-Ray's case has been subject to this process. We have taken this case seriously and the Root Cause Analysis has been reviewed again following the Inquest to ensure that identified actions are being taken and completed in a timely manner. The learning from both the Inquest and the internal investigation will be shared with staff across the organisation.

Circumstances of Tommi-Ray's death

1. Baby Tommi-Ray was born on the 9 January 2016 at 28+2 weeks gestation and weighed 1.02kg. He had developed Respiratory Distress Syndrome and required ventilator support.

2. The Doctor responsible for his care described that the ventilator was showing a persistent leak and kept alarming throughout the evening of the 9 January into the morning of the 10 January. He decided to extubate Tommi-Ray and change the endotracheal tube (ET) to size 3 at 3.20am on the 10 January. The original tube was 2.5mm. Tommi-Ray was tried on BIPAP initially but his oxygen saturations began to drop and he required manual ventilation.

3. After the initial attempt at intubation with a size 3 ET tube, Tommi-Ray became bradycardic with low oxygen saturations and the tube removed. Cardiac compression was commenced. There was no response and he was intubated again. There was good chest movement but his response was poor. The ET tube was removed again.

4. The on call Consultant was crash bleeped at 4am on 10 January and within 20 minutes he arrived promptly on the Neonatal Unit. He described that the ET tube was in situ but Tommi-Ray was pale in colour. He checked the ET tube with a CO2 detector but it did not turn yellow. The tube was removed and bagging commenced. He confirms that the after intubation the tube became dislodged and further intubation was required. A size 3 ET tube was used.

5. Tommi Ray was eventually stabilised and blood gas showed a PH of 6.68 which is very acidotic. Tommi-Ray was administered adrenaline and chest compressions continued.

6. The Consultant confirmed that for premature babies weighing less than 1Kg in weight it was usual practice to use a 2.5mm ET tube and in theatre Tommi-Ray was not initially weighed. The priority was to insert the tube and stabilise him with further adjustments made in the Neonatal Unit. It could be risky using a tube that was too big which could lead to complications including stenosis. The Consultant also confirmed he wasn't consulted about the premature care plan, but was told by a colleague that a mother had been admitted to the ward with a premature baby (however this is not documented).

7. A tertiary specialist Hospital (New Cross Hospital-Level 3 Unit) was contacted but there were initial difficulties in contacting the Neonatal Consultant despite multiple attempts through the switchboard. A transfer to this tertiary Hospital was eventually accepted.

8. The Neonatal Consultant at New Cross Hospital described that when Tommi-Ray arrived on his Unit he took over his care on the 12 January and came to the conclusion that he had suffered significant brain damage due to the hypoxic episode following his cardiac arrest. Sadly, Tommi-Ray died the following day on 13 January 2016

Coroner's Concerns

During the course of the inquest the evidence revealed matters giving rise to concern and a risk that future deaths will occur unless action is taken.

The **MATTERS OF CONCERN** were identified as follows:

1. Evidence emerged during the inquest that the Paediatric Doctor in charge recognised that it was a mistake to extubate Tommi-Ray when he did. His words were: "What should have been a straight forward ET change turned into a nightmare". He also confirmed that he should have consulted the Consultant on call prior to making the decision and earlier use of the CO2 monitor would have made a difference.

2. In addition, it emerged that there were problems and delays in trying to contact the tertiary unit via the switchboard.

3 There was also evidence of an inadequate handover and preparation for the arrival of the premature baby with insufficient care plan details or consultation taking place.

Preventing Future Deaths – Action for Walsall Healthcare NHS Trust

A Serious Incident investigation was carried out following Tommi-Ray's death and a Root Cause Analysis report was formulated with a specific action plan. Actions including the development of a Standard Operating Procedure related to the difficult airway kit had been completed and handover processes formalised.

However, specific outstanding actions were identified at the conclusion of the Inquest and a Preventing Future Deaths report has been issued to the Trust:

1. **Although some improvements have been made by the Trust through the findings of the Root Cause Analysis (RCA) investigation, you may consider that expediting some of the action points in the RCA including training in the use of the CO2 indicator is made compulsory and further training for neonatal staff where deficiencies or gaps in knowledge have been identified.**

Action Taken

Neonatal staff have now undergone training on 'Difficult Airway Management' This includes the use of

- Oropharyngeal airways
- Nasopharyngeal airways
- Laryngeal mask airway (LMA)
- CO2 detector
- Introducer
- Robert Shaw blade
- Video laryngoscope
- Bougie

2. **You may also wish to consider expediting the process to establish a system to contact tertiary units within your area to minimise any delays in contacting the relevant staff for advice.**

Action Taken

The Regional Cot Locator service is now in place out of hours. This has negated the requirement for staff to search for level 3 cots.

3. **You may also wish to consider a review to ensure systems and procedures are in place to ensure that all relevant details/care plan are available for the Consultant in charge when a mother delivers a pre-term baby in an emergency**

Action Taken

All medical staff, Advanced Neonatal Practitioners and band 6 nursing staff now have access to the Maternal Badgernet System in addition to Neonatal system. This gives access to all relevant staff to view electronic records pertaining to antenatal care, intrapartum and postnatal.

More generally we have introduced work within the Trust around the development of a more safety focused culture which will encourage staff to be more aware of the potential for harm, risk management and the need to escalate concerns .This work is particularly focused on A&E, Maternity and Neonates and Paediatrics initially.

In addition a Maternity and Neonatal Task Force has been established to oversee the improvements made, reporting into the Quality & Safety Committee of the Trust Board

We fully acknowledge the serious nature of the failings during the management of a baby's airway and its potential to result in a fatality. The lessons learned from Tommi-Ray's case are to be shared with Neonatal staff through a bullletin, a team meeting and at the Paediatric Grand Round.

Finally, on behalf of the Trust, I would like to take the opportunity to offer our unreserved apologies for the delay in diagnosis and treatment to Tommi-Ray's family, along with our sincere condolences for their loss. I trust that the action already taken by the Trust along with the additional action set out in this letter will provide you with assurance that we have responded with the seriousness needed to improve the care we provide.

Yours sincerely

Richard Kirby
Chief Executive