REGULATION 28: REPORT TO PREVENT FUTURE DEATHS (1)

	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** **1.** The Chief Executive, Pennine Acute Hospital NHS Trust
1	**CORONER** Matthew Cox, 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 20 November 2018 an investigation was commenced into the death of Deborah Anne Hopkinson. The investigation was concluded at the end of the inquest on 24 April 2019. The conclusion of the inquest was that: "Against a background of suffering from Cushing's Disease and the development of pneumocystis pneumonia the deceased died from a recognised complication of a protracted stay on intensive care " The medical cause of death was: 1 a) Propofol Infusion Syndrome 2 Cushing's Disease, Pituitary Adenoma, Pneumocystis Pneumonia and Hypertension
4	**CIRCUMSTANCES OF DEATH** The deceased was seen at Fairfield General Hospital on 10 August 2018 with classical signs of Cushing's disease. She was referred to the endocrine team at Salford Royal Hospital and a pituitary MRI scan was requested. The deceased was admitted to Fairfield General Hospital on 17 August 2018 with problems of confusion and lethargy. An inpatient MRI scan confirmed a pituitary adenoma which was the likely cause of her Cushing's disease. She was discharged for further follow up on 22 August 2018. There was input from a consultant endocrinologist at Salford Royal Hospital on 28 August 2018 following which the deceased was started on metyrapone to lower her cortisol levels. The deceased was re-admitted to Fairfield General Hospital on 12 September 2018 and was treated for bilateral pneumonia. There was delay in obtaining a specialist opinion and the deceased's condition deteriorated resulting in her admission to the intensive care unit on 16 September 2018.

She was then ventilated and treated for confirmed pneumocystis pneumonia which is a recognised complication of Cushing's disease. Following input from specialists at the Christie Hospital from 17 September 2018 there was eventually improvement in the deceased's condition noted on 25 September 2018. However in the evening of 25 September and early morning of 26 September 2018 the deceased's condition suddenly deteriorated with severe metabolic acidosis and hyperkalemia which could not be treated. The deceased had a cardiac arrest and attempts to resuscitate her were unsuccessful. She died at Fairfield General Hospital in the morning on 26 September 2018.

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. The inquiry heard that there were numerous occasions when equipment failure occurred and this is likely to have had some impact on the treatment which the deceased received

   i. When the deceased was re-admitted to hospital on 12 September 2018 there was delay of some 6 days in involving the endocrine consultant at Fairfield Hospital and the reason given during the inquiry was that the computer system was down.

   ii. The inquiry heard the importance about controlling the cortisol levels yet there was evidence to the effect that the analyser for running the cortisol sample was down multiple times during the deceased's admission.

   iii. There was a significant deterioration in the deceased's condition in the evening of 25 September 2018 but a CT abdomen could not be performed because the CT scanner at Fairfield Hospital was not working.

   iv. When the deceased's was discussed at an MDT meeting on 13 September 2018 the MRI scan could not be viewed on the PACS system.

2. There was delay in obtaining advice from a specialist centre such as Salford Royal Hospital or the Christie Hospital despite a lack of expertise at Fairfield General Hospital as evidenced by the following:

   i. [redacted] Consultant Endocrinologist at Fairfield General Hospital explained to the deceased's husband [redacted] and her sister [redacted] that she was not a specialist in Cushing's disease when discussing the deceased's case on 17 September 2018.

   ii. In the Investigation Report the Trust accepted that there had been a delay in treatment for probable PJP because the medical team did not recognise the association between Cushing's disease and PJP due to lack of specialist knowledge.

On 21 August 2018 an MRI pituitary revealed a pituitary adenoma which was the most

	likely cause of the deceased's Cushing disease yet it was not until 28 August 2018 that [redacted] Consultant Endocrinologist at Salford Royal Hospital was contacted. Prior to the deceased's re-admission to hospital on 12 September 2018 she contracted pneumocystis pneumonia, a recognised complication of Cushing's disease. There was delay in obtaining advice from a specialist centre despite a significant deterioration in her condition and when there was involvement from a Consultant Endocrinologist at the Christie Hospital this was only achieved because of the intervention of the deceased's sister.
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 21 June 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 namely [redacted] the deceased's husband [redacted] the deceased's sister 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 coroner at the time of your response, about the release or the publication of your response by the Chief Coroner.
9	Date: 24/4/19 Signed: [signature]