Regulation 28: REPORT TO PREVENT FUTURE DEATHS

NOTE: This form is to be used **after** an inquest.

	REGULATION 28 REPORT TO PREVENT DEATHS **THIS REPORT IS BEING SENT TO:** **1 Royal Bolton Hospital**
1	**CORONER** I am Michael James Pemberton, HM Assistant Coroner for the coroner area of Manchester (West).
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 17 April 2024 I commenced an investigation into the death of Charlotte Ann ROSCOE aged 26. The investigation concluded at the end of the inquest on 19 November 2024. The conclusion of the inquest was Natural Causes, and the medical cause of death was: 1a Haemopericardium, 1b Rupture roof of Aorta 1c Dissection of Ascending Aorta
4	**CIRCUMSTANCES OF THE DEATH** The deceased attended the Royal Bolton Hospital on 22 January 2024, with chest pains and was suspected to have a chest infection. An ECG was performed and steps were taken to confirm a working diagnosis of whether there was a pulmonary embolism with a chest X-ray being performed. A scan was then requested to confirm if there was a pulmonary embolism, which was considered by a Radiologist. National Guidance was followed and a VQ test or a CTPA could be undertaken. Evidence was provided that a CTPA could have been undertaken but was not, because a VQ test was available and either of them was an approved manner of determining whether there was a Pulmonary Embolism. After considering clinical factors, a VQ test was done which confirmed that there was no Pulmonary Embolism. This test would not detect any cardiac anomalies whereas types of CT scan probably would do and be likely to lead to other tests. No follow up occurred on the chest x ray result which showed a cardiomegaly (enlargement of the heart) 14/25cm on the basis that a visual inspection of the image was considered normal. A clinical assessment leading to discharge was undertaken on 23 January just before 5:00pm and observations were considered normal. These observations were last taken at 7:11am and two sets of observations that should have occurred in the intervening period where not done, the discharge decision was therefore based on outdated observations and notes of the consultation were not accurate. She returned to her home address [redacted] with a suspected lower respiratory tract infection, but no formal diagnosis having been made. On arrival home, the deceased went to bed feeling sick and had not arisen by the time her parents went to work the following day. On her father's return home at approximately 3:00pm, she was found to be deceased with her death being verified at 3:38pm by paramedics.

	A post mortem examination found that she had died as a consequence of a dissection of the ascending aorta and ruptured root of aorta leading to haemopericardium. This is a rare condition, which would have been likely to have been detected by a CTPA scan and subsequent CTAA scan that would be indicated, however this was not specifically requested and the VQ test was reasonable with reference to the guidance from the Royal College of Radiologists to explore whether there was a pulmonary embolism. Whilst there was a missed opportunity to detect the unidentified Aortic Dissection by undertaking a CT scan, it cannot be said on balance of probabilities that this would have prevented death given the catastrophic nature and low survivability rate.
5	**CORONER'S CONCERNS** During the course of the investigation my inquiries 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: (brief summary of matters of concern) 1. During the course of evidence Royal College of Radiographer guidance was referred to, specifically that a CTPA scan or VQ scan where equally appropriate when considering diagnosis of a Pulmonary Embolism. A first draft of an After Action Report which was concluded without Radiographer attendance at the after action review meeting wa sprovided at the first part heard inquest hearing on 1 August 2024. This made reference in the actions section of the report to the need to consider whether VQ scans should be replaced by CTPA's for all patients suspected of having a Pulmonary Embolism. This action was not included in an Amended After Action report provided at the resumed inquest. It is unclear whether this matter has been considered. 2. Evidence was received from a doctor who referred the deceased for a scan, that she had thought she had requested a CTPA to be undertaken, but the form that was used was a request for an 'acute pulmonary embolus investigation' which meant that the request would be vetted and an appropriate mode of scan arranged following consideration by a radiologist. It was stated by the doctor that it would not be normal to speak to radiology regarding a request for a scan. 3. In evidence from a radiologist it was stated that a medical clinician would be expected to speak to a radiologist if there was any preference for a type of scan to be undertaken so this could be discussed. It appeared to me that the use of the correct form, need to be specific, provide rationale for a specific type of scan request, and liaising with radiology as appropriate was not appreciated in this case. As above, given that there was no radiographer involved in the After Action Report or action raised, it is unclear if this matter has been considered, or any actions taken to prevent future confusion.
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 16 January 2025. 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] I have also sent it to The Royal College of Radiologists who may find it useful or of interest. I am also under a duty to send a copy of your response to the Chief Coroner and all interested persons who in my opinion should receive it. I may also send a copy of your response to any person who I believe may find it useful or of interest. 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	**Dated: 20 November 2024**  **Michael James Pemberton** **HM Assistant Coroner for** **Manchester (West)**