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 Department of Health and Social Care** **39 Victoria Street, London SW1H 0EU** **2 National Institute for Health and Care Excellence** **Redman Place, London E20** **3 Royal College of Anaesthetists** **Churchill House, 35 Red Lion Square, London WC1R 4SG** **4 Academy of Medical Royal Colleges** **10 Dallington Street, London, EC1V 0BD** **5 National Infusion and Vascular Access Society** [redacted] **6 Association of Anaesthetists** **21 Portland Place, London, W1B 1PY**
1	**CORONER** I Peter Merchant Assistant Coroner for the coroner area of West Yorkshire (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 14 July 2021 the death of Maxwell Frame was reported to the Coroner for West Yorkshire (West). An inquest was opened on 28 July 2021. An inquest was heard between 9 and 11 October 2023. The medical cause of death (accepted from a report in lieu) was 1a) Acute Ischaemic Strokes (Multifocal); 1b) Inadvertent Insertion of a Central Venous Cather in the Common Carotid Artery;2 Perforated Acute Appendicitis Leading to Septic Shock. The conclusion was one of misadventure contributed to by neglect.
4	**CIRCUMSTANCES OF THE DEATH** Mr Frame had presented to the A&E department at Huddersfield Royal Infirmary (Part of Calderdale and Huddersfield NHS Foundation Trust- the Trust) in the early hours of 24 June 2021. Investigations identified a pelvic abscess and bowel obstruction as the source of sepsis which was not amenable to radiological drainage. He underwent an emergency laparotomy the same day with findings of a pelvic abscess from a perforated gangrenous appendix and non-viable adjacent colonic tissue and small bowel obstruction. This required drainage of the abscess, removal of the gangrenous tissue and bowel and formulation of a stoma. As part of the pre-surgical preparations for post operative care the placement of a central

	venous catheter (CVC) was undertaken using the right subclavian vein. A landmark approach was used. There was no use of ultrasound to assist placement of the CVC despite this being available. As part of the checks to ensure correct placement of the CVC a check chest x-ray was undertaken. Other checks in the form of an arterial blood gas and transducing the intra-vessel pressure wave via the CVC were not undertaken even though the necessary equipment to do so was available. The check chest x-ray was incorrectly interpreted as showing correct placement into the vein whereas, in fact, the CVC had been incorrectly placed into the artery. The check chest x-ray was not reviewed by the consultant who had undertaken the procedure until a later point after discovery that the CVC had been incorrectly placed. Whilst the evidence identified incorrect placement of a CVC was a recognised complication, it was accepted that the various steps detailed above that would have reduced this happening were not undertaken. The incorrect placement of the CVC was identified on 27 June 2021. Following this Mr Frame was transferred to the Bradford Royal Infirmary. On 1 July 2021 he underwent a procedure to remove the misplaced CVC. In the course of this procedure some clot adherent to the CVC dislodged and embolised into his brain circulation causing stroke damage, the extent of which was such that, following discussions with Mr Frame's family, he was commenced on palliative care. He was extubated and died on 13 July 2021.
5	**CORONER'S CONCERNS** During 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 **MATTER OF CONCERN** IS as follows: **Absence of a national policy on the placement of CVC's** Over the course of the inquest hearing, oral evidence was provided by several anaesthetic/ ICU doctors ranging from experienced consultants, specialty Dr's and a Core Trainee 2 all of whom had experience to varying degrees of placing CVC's. These Dr's had worked in several hospitals predominantly across the Midlands and North of England. The Trust had a policy entitled Central Venous Access Device which identified the steps that I have identified earlier should have taken place but were not. I was advised by the Dr's who gave evidence that there was no single standard policy that they had encountered nationally for the placement of CVC's. The Trust in this case following their internal investigation of Mr Frame's case had felt it necessary to revise their policy. Further, I was advised by some of the Dr's who gave evidence that they felt a national policy regarding the placement of CVC's would be beneficial.
6	**ACTION SHOULD BE TAKEN** Accordingly, considering the matter of concern and the evidence given, consideration should be given to the introduction of a national policy for the placement of CVC's. 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 January 09, 2024. 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

	The family of Mr Frame **Bradford Teaching Hospitals NHS Foundation Trust** **Weightmans LLP acting for the Trust** [redacted] 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: 14 November 2023** **Peter Merchant** **Assistant Coroner** **West Yorkshire (West)**