REGULATION 28: REPORT TO PREVENT FUTURE DEATHS

	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** **1. Chief Executive, Matthew Hopkins, Barking, Havering & Redbridge University Hospitals NHS Trust. Executive Offices, Queens Hospital, Rom Valley Way, Romford, Essex, RM7 0AG.**
1	**CORONER** I am Nadia Persaud, Senior Coroner for the Eastern Area of Greater London
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. http://www.legislation.gov.uk/uksi/2013/1629/part/7/made
3	**INVESTIGATION and INQUEST** On the 27th February 2014 I commenced an investigation into the death of Mary Catherine Bloom. The investigation concluded at the end of the Inquest on the 30th October 2015. The conclusion of the Inquest was a short form conclusion of natural causes.
4	**CIRCUMSTANCES OF THE DEATH** Mary Catherine Bloom suffered from dementia. There was a 12 month history of cognitive decline and reduced oral intake. She was admitted to Queens Hospital on the 3rd February 2014 with a history of 3 weeks of significantly reduced oral intake and rapid change in her left leg over 4 hours that morning. The initial impression was that Mrs Bloom was suffering from probable ischemia in the leg, hypovolemia and general decline. She was admitted under the care of the vascular surgical team. The plan in place was for her to receive intravenous fluids, antibiotics and heparin. She was not considered to be a candidate for surgery. The heparin was not expected to reverse the thrombosis but to prevent further deterioration. A loading dose of 5000units of heparin was administered at 17:40 and an infusion of 20,000 units put up at 18:30. Mrs Bloom's weight was not recorded prior to the administration of heparin or at all during her admission. The infusion rate was not calculated on the basis of her weight, as it should have been. The Trust policy requires baseline bloods to be taken and then APTT ratios to be checked every 6 hours. Baseline bloods were not taken, as bloods were haemolysing in A & E. They also haemolysed when an attempt was made by the surgical registrar. There was no attempt to repeat bloods after hydration had commenced. There was no consultation with the consultant haematologist in view of Mrs Bloom's very low weight of 30 kilograms. The haematologist is likely to have advised a reduced loading dose and a reduced infusion rate. Mrs Bloom was admitted to the ward at 20:00 hours and was noted to have a reduced blood pressure at 21.50. The nurse caring for her also questioned the possibility of melena. A doctor attended the ward to review Mrs Bloom and considered that the drop in blood pressure was due to dehydration. Fluids that had been written up previously were not ongoing and therefore he re-sited the cannula and advised that fluids be recommenced at a slightly

	increased rate. At around 23:45 the nurse caring for Mrs Bloom noted that her condition was deteriorating. She was noted to have passed away at 00:50 on the 4th February 2014. CPR was not attempted as a DNAR order had been put into place by the consultant in charge of her care. There was no discussion with the next of kin prior to placing the DNAR order in her notes. The pathologist who carried out the post-mortem examination did not find any evidence of bleeding and did not consider that excessive administration of heparin had contributed to Mrs Bloom's death. The pathologist gave a cause of death 1a dementia and II coronary artery atheroma; mitral valve disease and acute limb ischaemia
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. There was a failure to comply with the Trust's policy relating to the administration of heparin, by failing to weigh Mrs Bloom prior to commencing the infusion of heparin. 2. There was a failure to consult a haematologist before the infusion of heparin in view of Mrs Blooms' very low weight of 30 kilograms. Again, this is required by the Trust policy. 3. It was not possible to take baseline bloods before the commencement of heparin, however, attempts should have been made to retake bloods after hydration had commenced. The Trust policy requires baseline bloods to be taken and for the APTT to be checked after 6 hours. The consultant haematologist who gave evidence from the Trust confirmed that he should have been consulted, the weight should have been clearly recorded and bloods should have been attempted post-hydration. He agreed that a specially tailored administration of heparin form, requiring the documentation of the patient's weight and APTT ratio would improve the safe administration of the drug. The poster for the administration of heparin include a direction that: *An obese/underweight patient who weigh over 131 kilograms and under 40 kilograms should be treated on an individual basis. Please seek haematology advice.* This direction is written in very small writing at the bottom of the heparin administration poster. It appears to have been missed by 2 doctors involved in the prescribing of heparin to Mrs Bloom. There is concern that this may have been missed as it was not sufficiently visible on the poster.
6	**ACTION SHOULD BE TAKEN** In my opinion action should be taken to prevent future deaths and I believe you and 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 29th December 2015. 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] (son). I am also forwarding a copy of the report to the Care Quality Commission and to [redacted] (director of public health) 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	**30th October 2015 [SIGNED BY CORONER]**