REGULATION 28: REPORT TO PREVENT FUTURE DEATHS

	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO: the Chief Executive of Manchester University NHS Foundation Trust (MFT)**
1	**CORONER** I am, Christopher Murray, Assistant Coroner, for the Coroner area of South Manchester
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 24th November 2016 I commenced an investigation into the death of Edwin Hooper. The investigation concluded on the 27th September 2017 and the conclusion was one of **Accidental Death**. The medical cause of death was 1a) Traumatic Intracranial Haemorrhage II) Decompensated heart failure, Atrial fibrillation, Chronic liver/kidney disease and Peripheral vascular disease.
4	**Circumstances Of Death:** The initial death report reads as follows:- Mr. Hooper came to Trafford General Hospital on the 5/5/2016 complaining of lethargy, shortness of breath on exertion and nausea. It was noted that he was recently treated for biliary sepsis at UHSM and following this was admitted and treated for 3 days at Royal Oldham Hospital for Right basal pneumonia and discharge on Doxycycline (4/5 days). Past Medical History of: Atrial fibrillation, End-stage Heart failure (EF<25%), Pacemaker implantation, Myocardial infarction, CABG, Type 2 Diabetes Mellitus, Aortic aneurysm, Sever Peripheral vascular disease, Aortic stenosis, Mitral and Tricuspid Regurgitation, Asthma, Chronic kidney disease Stage 3, Gout, hyperthyroidism, Chronic Cholecystitis, ERCP and Sphincterotomy. Issues identified on admission: 1. Decompensated heart failure 2. Acute on chronic kidney disease 3. Sepsis – possibly biliary due to derange liver function 4. Peripheral vascular disease – pain left leg 5. Left foot ulcer 6. Ischemic Heart disease He was treated for decompensated heart failure, acute on chronic kidney disease and sepsis (origin biliary/respiratory). Initially treated with intravenous antibiotics and diuretics. Central venous line was inserted as he continued to deteriorate with no significant improvement in heart failure symptoms. The treatment given improved the heart failure symptoms and the infection resolved and physiotherapy sessions recommenced. During this time he complained of pain in his left arm and further investigations (USS Doppler) confirmed deep vein thrombosis of

left arm. Haematology department was liaised with who advised to start treatment with treatment dose heparin and stop Apixaban.

He sustained an injury to his left should after becoming off balance in the toilet, with no head injury of loss of consciousness. X-ray done showed no fracture or dislocation. There was a bruise present which was increasing in size, an ultrasound scan confirmed presence of an underlying haematoma. He complained of pain in his left arm and tingling sensation and further investigations (CT PA) confirmed left brachiocephalic deep vein thrombosis whilst being on treatment dose of low molecular weight heparin. Vascular team at Manchester Royal Infirmary was liaised with and initial plan was to treat with heparin infusion for the 24-48 hours, if remains stable then manage on treatment dose heparin however if deteriorates then liaise with vascular team to transfer to Manchester Royal Infirmary for possible Embolectomy under local anaesthesia.

Mr Hooper underwent the procedure on the 01/09/2016 and transferred back to Trafford General Hospital on the 4/9/16.

Issues on re-admission:
1. Assessment for possible coagulopathy/haemophilia
2. Pain in both legs especially during physiotherapy sessions
3. Previous long-standing left foot wound

Mr Hooper remained fairly stable with on-going physiotherapy sessions however complained of pain in left leg initially which initial settled with analgesia but later became bilateral worse on activity (physiotherapy sessions) and not relieved by analgesia. The feeling he described was of pins and needles and numbness. He had several weeks' history of ischaemic wounds to LD2, L calcaneus and R HAV and was already under the vascular team. XR Left Foot was requested that showed changes and in keeping with possible osteomyelitis. He was already on treatment for left foot wound infection with Clindamycin and if osteomyelitis confirmed then consider switching to Doxycycline. Mr Hooper complained of excruciating pain in his left leg sudden in onset and assessment was in-keeping with acute limb ischemia and duplex ultrasound scan confirmed occlusion the Left Superficial Femoral Artery. Vascular team was liaised with and Mr Hooper was transferred over to MRI for angiogram and further management. He underwent a diagnostic angiogram (10/10/16) with evidence of full length Superficial Femoral Artery occlusion following which SFA reconstruction and full length Superficial Femoral Artery stent was done (13/10/16). He was transferred back to Trafford General Hospital on the 14/10/16. Three days post-procedure Mr Hooper became septic and was treated as per protocol. Blood cultures were positive VRE and hence commenced on antibiotics (ciprofloxacin and tecoplanine). He improved with the treatment however felt weak and was not ready to recommence physiotherapy sessions. The wound on the left foot continued to improve and regularly reviewed by diabetic foot team.

Mr Hooper had a fall in the late hours of night (unwitnessed) and was found on the floor by staff nurse. He informed that he did not know how he got out of bed and when he fell he hit his head but did not lose consciousness. He was assessed by the nursing staff and then by the Consultant, who requested an urgent CT head as Mr Hooper was on anticoagulants (restarted after SFA reconstruction) hourly observations and GCS, stopping anticoagulation. He was transferred to Manchester Royal Infirmary for the CT scan head, which unfortunately showed intracranial bleed not causing mass effect or mid-line shift. Neurosurgical team (SRFT) was liaised who consider him not fit for immediate surgical intervention however if he continued to remain stable then the plan would be a repeat CT scan in 2weeks and possibility of Burr hole evacuation of clot/bleed. However Mr Hooper progressively deteriorated with fluctuating GCS, losing his ability to speak and swallow within 48 hours. Speech and Language team assessed him and confirmed he had very poor swallow, at high risk of aspiration and nasogastric tube should be considered. Mr Hooper did not tolerate the nasogastric tube and pulled it out. Owing to the progressive decline and poor prognosis in light of all his pre-existing medical conditions frank discussion took place with the daughter and partner who both agreed that Edwin had been

	through a lot and agreed for palliative care. Palliative team (McMillan) were informed of this. Mr Hooper passed away on the 15/11/2016 due to the intracranial bleed.
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. – Please can you confirm what measures have been put in place to ensure patients with head injuries, especially those taking anti-coagulant medication, undergo CT scanning in accordance with NICE guidelines, particularly where there are service issues with CT scanners on site.
6	**ACTION SHOULD BE TAKEN** In my opinion action should be taken to prevent future deaths and I believe you 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 13th March 2018. 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] daughter of the deceased, 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	**Christopher Murray** **HM Assistant Coroner** **16/01/2018**