REGULATION 28: REPORT TO PREVENT FUTURE DEATHS

	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** **The Chief Executive, Barnsley Hospital NHS Foundation Trust**
1	**CORONER** Christopher Dorries, senior coroner for South 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. (1) Where – (a) A senior coroner has been conducting an investigation under this Part into a person's death and (b) Anything revealed by the investigation gives rise to a concern that circumstances creating a risk of other deaths will occur, or will continue to exist, in the future, and (c) In the coroner's opinion, action should be taken to prevent the occurrence or continuation of such circumstances, or to eliminate or reduce the risk of death created by such circumstances, the coroner must report the matter to a person who the coroner believes may have power to take such action. (2) A person to whom a senior coroner makes a report under this paragraph must give the senior coroner a written response to it. (3) A copy of a report under this paragraph, and of the response to it, must be sent to the Chief Coroner
	INVESTIGATION and INQUEST On 30th June 2015 I commenced an investigation into the death of Captain James Michael Bedforth. The investigation concluded at the end of the inquest on 7th September 2016. The conclusion of the inquest was that Captain Bedforth died from *1(a) Cerebral haemorrhage* *1(b) Significant pulmonary embolus and paradoxical embolus to the brain (treated)* *1(c) Deep vein thrombosis (left)* A narrative conclusion was recorded as follows: *Captain James Michael Bedforth died at the Barnsley Hospital on 30th June 2015 in consequence of treatment given to him, in accordance with the hospital protocol, for a pulmonary embolus including a paradoxical embolus to the brain.*

4	**CIRCUMSTANCES OF THE DEATH** Captain Bedforth was a senior long haul airline pilot. Such an occupation obviously involves prolonged seated immobility although there is some opportunity for movement. On the 18th April 2015 he attended the hospital at Barnsley with pains in his left leg around the knee. Appropriate investigations were made (in accordance with NICE guidelines) which included scanning of the upper but not lower leg. Nothing was found and Captain Bedforth was discharged. On 29th June 2015 Captain Bedforth collapsed at his home some hours after a flight from China. He was admitted to the hospital with classical symptoms of a DVT and much was said at the inquest about the promptness or otherwise of initial examination and diagnosis. The Trust were represented at the inquest and a full reasoned conclusion was subsequently given so those matters are not covered in detail here but will be mentioned in section 5 of this report below. The captain further collapsed at approximately 1445 and was treated with Alteplase. A CT scan showed pulmonary embolus and an early left sided cerebral infarction due to a paradoxical embolism. Heparin treatment was subsequently given (and stopped at 2235). The Captain deteriorated markedly after a seizure at 2345,. A further CT showed an unsurvivable left sided acute cerebral haemorrhage. The inquest found a strong inference that this had arisen from over-anticoagulation with Heparin (again see section 5 below). Death occurred at 1145 the following morning 30th June 2015.
5	**<u>CORONER'S CONCERNS</u>** 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 **MATTER OF CONCERN** are as follows: 1. The inquest heard that the scanning practice followed after the first attendance was in accordance with NICE guidelines (indeed possibly a little in excess of the guidance) which did not include scanning of the lower leg. This was said to be on the basis that not all lower leg DVTs will be visible. Yet it became apparent that that there is mixed practice on this point, some hospitals clearly consider that lower leg scanning is worthwhile. Hindsight strongly suggested that Captain Bedforth was developing clots in the left lower leg at the time of the first visit. The inquest found that a full leg scan might have provided the hospital with an opportunity to treat Captain Bedforth although it was accepted that no-one could be certain of this. Whilst a separate Regulation 28 report is being sent to the Secretary of State for Health seeking further consideration of the NICE guidelines on lower leg scanning, the Trust may wish to consider their own practice on this point in the meantime. The Trust may also wish to consider whether discharge after a negative scan may be more closely supervised by a doctor in certain circumstances 2. The evidence of 'safety-netting' after the first attendance (and/or subsequent attendance for scans) was poor and of considerable concern. As made clear in my written findings this was possibly of relevant as to Captain Bedforth's subsequent decision on seeking medical attention in or upon return from China. 3. Whilst it is accepted that Emergency Departments are often busy, and sometimes exceptionally so, there was criticism at the inquest of the priority given to Captain Bedforth on his second admission when he was displaying classical symptoms of a DVT/PE. It appears that he was not medically assessed for at least two and a half hours after admission by ambulance. Dalteparin was not prescribed until

	three hours post-admission and there was no evidence as to exactly when it was given (although likely shortly thereafter). 4. An expert witness (an ED physician) was critical of the placement in AMU and clerking in by a medical student although it is not suggested this of itself made a difference as to survival. 5. There was no criticism of the use of 50mg Alteplase but there was a lack of clarity as to whether this was followed by an infusion. A further expert witness (a haematologist) criticised the subsequent use of unfractionated Heparin and a test of Heparin level seems to have taken a long time from sampling to delivery to the laboratory and later result. The evidence was strongly suggestive of over-anticoagulation by Heparin. 6. A number of issues were raised as to note-keeping or clarity of note-keeping, most particularly as regards delivery of medications.
6	**ACTION SHOULD BE TAKEN** In my opinion action should be taken to prevent future deaths and I believe the Trust has 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 4th January 2017. I may extend this period, if asked, particularly given the Christmas break. 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 Captain Bedforth The Care Quality Commission The Civil Aviation Authority British Airways 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 at the time of your response, about the release or publication of your response by the Chief Coroner.
9	**18th October 2016** ***Christopher P. Dorries*** **OBE** HM Senior Coroner South Yorkshire (West)