REGULATION 28: REPORT TO PREVENT FUTURE DEATHS

	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** **1. Chief Executive, Russells Hall Hospital, Dudley Group NHD Foundations Trust** **2. Care Quality Commission**
1	**CORONER** I am Zafar Siddique, Senior Coroner, for the coroner area of the Black Country.
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 the 14 March 2018, I commenced an investigation into the death of Mrs Natalie Billingham. The investigation concluded at the end of the inquest on 13 July 2018. The conclusion of the inquest was a narrative conclusion of: Narrative: Following the Deceased's admission to hospital, a working diagnosis of Deep Vein Thrombosis was made based on the history and positive D-Dimer test. Her condition deteriorated rapidly and she was in disproportionate pain throughout her stay in hospital and she developed necrotising fasciitis. There were failures to inspect abnormal blood test results at an earlier stage and she did not receive appropriate treatment with antibiotics. Although this reduced her chances of survival, the extent to which this contributed to her death remained unclear. The cause of death was: 1a Multiple Organ Failure b Beta-haemolytic Streptococci Group A c
4	**CIRCUMSTANCES OF THE DEATH** i) Mrs Billingham initially attended Sandwell Hospital, Sandwell on the 27 February 2018 with complaints of pain to her right foot. An x-ray confirmed no fracture or significant bruising or swelling and her observations were within normal range. She did complain of pain and was discharged home with a prescription for pain relief medication. ii) She was then admitted to the Emergency Department of Russells Hall Hospital, Dudley, on the 28 February 2018 at 17:27 with worsening pain. She was suffering with symptoms of significant pain to her foot. iii) A D-Dimer test was performed which was positive and a working diagnosis of Deep vein thrombosis was made by the Registrar Doctor. Despite this working diagnosis no anticoagulant treatment was commenced.

iv) The NEWS score was incorrectly calculated and there was a delay in starting the sepsis pathway when abnormal blood tests were available.

v) There was no cubicle availability in the Emergency Department at the time due to capacity issues and she was given morphine for pain relief.

vi) At around 20:09 hours, laboratory results showed a rise in creatinine levels which may indicate an acute kidney injury. These results were telephoned through to the department but were not referred to the relevant medical staff or details of the relevant staff member accurately recorded.

vii) She was administered further morphine throughout the evening and still had significant and disproportionate pain.

viii) Efforts were made by nursing staff to escalate this to Clinicians and during the morning of 1 March 2018 she deteriorated rapidly and black lesions/blisters developed with necrotising fasciitis being diagnosed.

ix) Antibiotics had been prescribed at 1:38am but not given until after 3am.

x) Emergency surgery was necessary for debridement of the infected tissue and a through knee amputation.

xi) Despite the intensive treatment and surgery she sadly passed away on the evening of the 2 March 2018.

xii) An internal investigation report highlighted the following issues:

- The following care and service delivery problems were highlighted:
- Registrar used another doctors IT login
- CSW's used a staff nurse IT login
- Poor documentation on NEWS chart
- Incorrectly calculated NEWS
- No Sepsis screening performed at point of trigger
- No assessment of capillary refill time in either leg recorded by Registrar on initial review
- Anticoagulation therapy not commenced when working diagnosis DVT
- Time zero for red flag sepsis not identified and sepsis 6 not commenced
- Detail on Laboratory system does not provided sufficient detail to identify who the results were phoned through to in ED
- Elevated INR results not recognised
- CRP and U&E results not accessed on Soarian by ED Registrar

	• No documentation to support the decision for the fluid challenge in ED • No escalation that anticoagulation treatment not prescribed or commenced • No escalation of concerns raised by CSW by the staff nurse or Nurse in Charge to the Registrar • Flucloxacillin 2gms not given when prescribed, delay in prescribing further antimicrobial therapy **The following contributory factors were highlighted:** • Pain disproportionate to injury/diagnosis • Blood results not accessed on Soarian • Sepsis 6 not commenced due to miscalculation of NEWS • Blood results phoned to ED and not escalated to medical staff **The investigation undertaken concluded that the root cause(s) are:** • Failure by ED senior doctor to adequately assess the patient and record findings. • Failure to assess and interpret blood results, despite multiple opportunities. • Failure to calculate the NEWS correctly • Failure of the nursing and medical staff to recognise the deteriorating septic patient. • Failure of medical staff to assess patient when concerns were escalated by nursing staff
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. Evidence emerged during the inquest that there was inadequate communication

	and delays in assessing the blood results when available. There were also missed opportunities for administering antibiotics at an earlier stage and recognising the development of sepsis.
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. 1. You may wish to consider further reviewing the action plan submitted and whilst it is recognised that some progress has been made, you may also wish to consider reviewing the communication and training issues identified during the course of the inquest and in particular recognition of sepsis.
7	**YOUR RESPONSE** You are under a duty to respond to this report within 56 days of the date of this report, namely by 20 September 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; Family, CQC. 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	**27 July 2018** **Mr Zafar Siddique** **Senior Coroner** **Black Country Area**