	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO: University Hospitals Birmingham NHS Foundation Trust**
1	**CORONER** I am Simon Brenchley, Assistant Coroner for Birmingham and Solihull
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 11 July 2024 I commenced an investigation into the death of Rachael Alicia Elizabeth RYAN. The investigation concluded at the end of the inquest. The conclusion of the inquest was; Natural causes
4	**CIRCUMSTANCES OF THE DEATH** **Miss Ryan was discharged from Birmingham Heartlands Hospital on 27th February 24 following a period of treatment after a fall at her home against a background of osteoarthritis. On discharge she was cared for at home in bed with a package of care provision and was also receiving district nursing input for some moisture associated skin damage to her buttocks which had developed post discharge from hospital. She was also receiving treatment from her GP for suspected cellulitis in her legs. On 25th March 2024 she was readmitted to Heartlands Hospital because she was in great pain. When assessed after her admission to A and E, it was found that she now had a Category 3 pressure ulcer on her buttocks/sacral area. On 26th March tests revealed she had a deep vein thrombosis in her left leg and a scan on 27th March revealed a pulmonary embolism. Subsequently, on 5th April it was suspected that her pressure ulcer may be infected so she was started on antibiotics. A scan on 9th April revealed that she now had contracted osteomyelitis. Advice was subsequently received on 23rd April from the infectious diseases consultant that Miss Ryan needed a deep tissue biopsy in order to best inform the correct anti-biotic therapy. Despite a number of different specialities being contacted to facilitate this, the biopsy could not be carried out until 21st May at which point the most appropriate anti-biotic therapy for the particular type of infection she had was then identified and started. Although her skin began to heal, she deteriorated on 11th June and despite continuing ongoing treatment she passed away on 21st June 2024.** Based on information from the Deceased's treating clinicians the medical cause of death was determined to be: **1a Osteomyelitis** **1b Infected Sacral Pressure Sore** **1c** **1d** **II Frailty of Old Age**
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 **MATTERS OF CONCERN** are as follows. – 1. On 23rd April Miss Ryan's treating consultant geriatrician received advice from the infectious diseases team that a deep tissue biopsy was strongly recommended to best guide the antibiotic therapy for her infection. 2. Despite him liaising with/going back and forth between the Tissue Viability Nurse service, the Trauma and Orthopaedic team and the Plastic Surgery team (based at the Queen Elizabeth Hospital) between 23rd April and 1st May, none of these teams could, for different reasons, facilitate this procedure. As a result, it was not until 2nd May that assistance was sought from the interventional radiology team who agreed to help. 3. The procedure was initially due to take place on 7th May but had to be put off due to Miss Ryan being on warfarin and there were then further delays due to non-availability of the relevant specialist as well as the need to stop her existing antibiotics for 24 to 48 hours before the procedure. It was finally carried out on 21st May. 4. On 22nd May, a new anti-biotic regime was commenced with it being noted that one of the bacterial organisms identified from the biopsy, namely Morganella morganii, was resistant to co-amoxiclav, the antibiotic which Miss Ryan had most recently been receiving from 15th April until 19th May. 5. Although I heard evidence that the delay in starting the new antibiotic regime was unlikely to have altered the sad outcome in this case in part due to Miss Ryan's existing frailty and poor prognosis, I am concerned that in the absence of any existing protocol regarding the correct specialism for the biopsy procedure, no Multi-disciplinary meeting bringing together specialists from the different disciplines was offered or held in this case to agree the best way forward. This led to a delay and a lack of collaboration between teams which could, if repeated, result in an avoidable death.
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 10 January 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: FAMILY OF MISS RYAN I have also sent it to the Medical Examiner, 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	**15th November 2024** Signature: **Simon Brenchley** **Assistant Coroner for Birmingham and Solihull**