University Hospitals Birmingham
NHS Foundation Trust

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2nd January 2025

Mr Brenchley
Assistant Coroner for Birmingham & Solihull

By way of email only: [redacted]

Dear Mr Brenchley

Inquest touching the death of Rachael Alicia Elizabeth Ryan
Response to Regulation 28 Report to prevent future deaths

I am writing in response to the Regulation 28 notice issued following the conclusion of the inquest on 5 November 2024, into the death of Miss Ryan on 21 June 2024 at Birmingham Heartlands Hospital.

We have carefully considered the concerns raised within your report to prevent future deaths and our response is set out below. Whilst the concerns raised relate to care at Birmingham Heartlands Hospital, the actions arising from this and the wider case review will be shared across UHB (referred to as 'the Trust').

On 23 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.

Despite him liaising with the Tissue Viability Nurse service, the Trauma and Orthopaedic team and the Plastic Surgery team (based at the Queen Elizabeth Hospital) between 23rd April 2024 and 1st May 2024, none of these teams could, for different reasons, facilitate this procedure. As a result, it was not until 2nd May 2024 that assistance was sought from the interventional radiology team who agreed to help.

The procedure was initially due to take place on 7th May but had to be postponed 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. The procedure was finally carried out on 21st May 2024.

On 22nd May 2024, a new antibiotic regimen 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.

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.

In response to this, the Trust has undertaken a number of actions to determine what measures need to be taken in order to prevent an avoidable death from the issues outlined.

- A multidisciplinary learning response (round table) was conducted on 18 December 2024 to review all aspects of Miss Ryan's care at UHB during her admission, incorporating the Regulation 28 notice issued.
- The existing relevant Trust guidelines (CG-1164: Surgical Management of Pressure Sores and CG-195: Guidelines for Pressure Ulcer Prevention and Management) were reviewed as part of the above.
- Correspondence has also been received from the Clinical Delivery Group lead encompassing Interventional Radiology which has been incorporated into the planned actions.
- The Medical Director and Lead Nurse for Tissue Viability retrospectively reviewed learning from Trust cases of pressure ulcers complicated by osteomyelitis to ensure this was captured to inform the required measures.

Through this process, the root causes of the issues outlined within the coronial review plus other factors which influenced the delay in performing of the deep tissue biopsy were identified to inform the measures to be undertaken. These were:

- Lack of clarity from the parent ward team as to the goal of treatment of Miss Ryan's deep pressure ulcers and subsequent small focus of osteomyelitis. In circumstances such as this in frail patients when offloading of the pressure areas and debridement cannot be performed, and soiling is unavoidable, there is a high risk of failure with antibiotics regardless of microbiologically-targeted therapy and suppression or palliation would be appropriate.
- The majority of the infection service reviews were carried out remotely without seeing Miss Ryan and not as part of an MDT, contributing to this lack of clarity.
- Without a clear goal of treatment, it was harder for the parent ward team to be clear whether orthoplastics should be contacted as per CG-1164, or musculoskeletal radiology as per CG-195. It was agreed that Interventional Radiology were the specialty to be contacted to undertake deep tissue biopsies in cases such as Miss Ryan's. The guidance however within CG-195 was not felt to be specific enough and referred to MSK Radiology rather than Interventional Radiology.
- The terms 'sharp debridement' and 'deep tissue biopsy' were used interchangeably by the requesting parent team, leading to a lack of clarity from the specialist teams as to what was actually being requested.

By way of assurance on measures to address the concerns raised by the coronial process and incorporating the factors above, the following has taken place:

- There has been a refreshing of consistent medical leadership on ward 30, which had been dependent on locum senior medical staffing. Ward staff, including the Ward Manager present at the Round Table on 18 December 2024, reported that multidisciplinary working had improved considerably since this measure in November 2024, with improvement in goal-setting for treatment and care plans.

- The pathway and means of contacting Interventional Radiology for deep tissue biopsies has been clarified by the department.
- The Infection Service will reiterate via their Morbidity and Mortality meeting that in cases of complex pressure ulcers, a bedside review of the patient should take place to obtain a holistic view of the most appropriate goal of treatment and form part of the multidisciplinary meeting with the ward team and Tissue Viability. Those cases involving osteomyelitis where the appropriate goal is cure rather than suppression will be taken by the Infection Service to the complex bone MDT of which they are a core member.
- Appendiceal guidance to supplement the existing Trust guidelines will be written by the Infection Service, Healthcare of Older Adults, Tissue Viability and Interventional Radiology. A draft should be complete by February 2025. This will include the following points:

1. A decision-making aid to determine goals of treatment for complex pressure ulcers
2. How and when to contact the Infection Service and what can be expected from them
3. The process of requesting a deep tissue biopsy via Interventional Radiology and who to contact to discuss and vet the request
4. Clarification of the difference between sharp debridement and deep tissue biopsy

This supplementary guidance will be launched via a Lesson of the Month safety notice. I would like to assure you that the concerns raised within the Regulation 28 Report have been taken extremely seriously, which I hope is demonstrated in the steps that have been taken following Miss Ryan's death.

Yours sincerely

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Chief Executive