University Hospitals Birmingham
NHS Foundation Trust

Trust Headquarters
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[redacted]

Monday 15 December 2025

For the attention of Mr Adam Hodson
Area Coroner for Birmingham and Solihull

[redacted]

Dear Mr Hodson

Inquest touching the death of John Rust
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 2 October 2025 touching the death of Mr Rust who died on 29 March 2025 at the Queen Elizabeth Hospital Birmingham (part of University Hospitals Birmingham NHS Foundation Trust (UHB)).

The Trust was deeply saddened by Mr Rust's tragic death, which occurred as a consequence of an intracerebral bleed caused by excessive cerebrospinal fluid (CSF) drainage via a lumbar drain inserted for cardio-thoracic surgery. Following Mr Rust's death, the Trust protocol for the care of aortic surgical patients was updated and we introduced an automated, electronic monitoring system (Liquoguard) for patients requiring lumbar drains after cardio-thoracic surgery. The automated system replaced manual monitoring and drainage via a gravity-based manometer which was the system in use at the time of Mr Rust's surgery. At the inquest, we were not in a position to fully outline our plans for a sustainable and comprehensive programme to train staff in the cardiac critical care unit and cardiac operating theatres to use the automated system.

We have now carefully considered the concerns raised in your report and provide the following update:

1. Automated electronic monitoring is now in place for all CSF drains in the cardiac critical care unit (Critical Care D) and cardiac theatres.
2. To date, 91 out of 122 (75%) of relevant staff have completed training on the Liquoguard system, including both medical and nursing staff.
3. Training for the remaining 31 staff is scheduled for completion by 31 January 2026.
4. Enhanced training has been developed for nursing staff who choose to specialise further in cardiac critical care; these individuals will act as core trainers for new staff.
5. There are currently nine core trainers, comprising senior educators, Band 7 nurses, and Advanced Critical Care Practitioners, ensuring sustainability of training delivery including for new staff rotating into the service.
6. The cohort of trained staff is now sufficient to ensure that whenever these devices are used (approximately 10–12 times per year), appropriately trained personnel are present.

7. A reference guide for nursing and medical staff has been developed and will be kept at the bedside for all patients requiring automated CSF drainage.
8. Training in the use of the Liquoguard system is now a core competency within the cardiac critical care unit and is mandatory for all new staff.

We trust this demonstrates the steps taken to address the concerns raised and our commitment to patient safety.

Yours sincerely

Deputy CEO and Chief Medical Officer
University Hospitals Birmingham NHS Foundation Trust