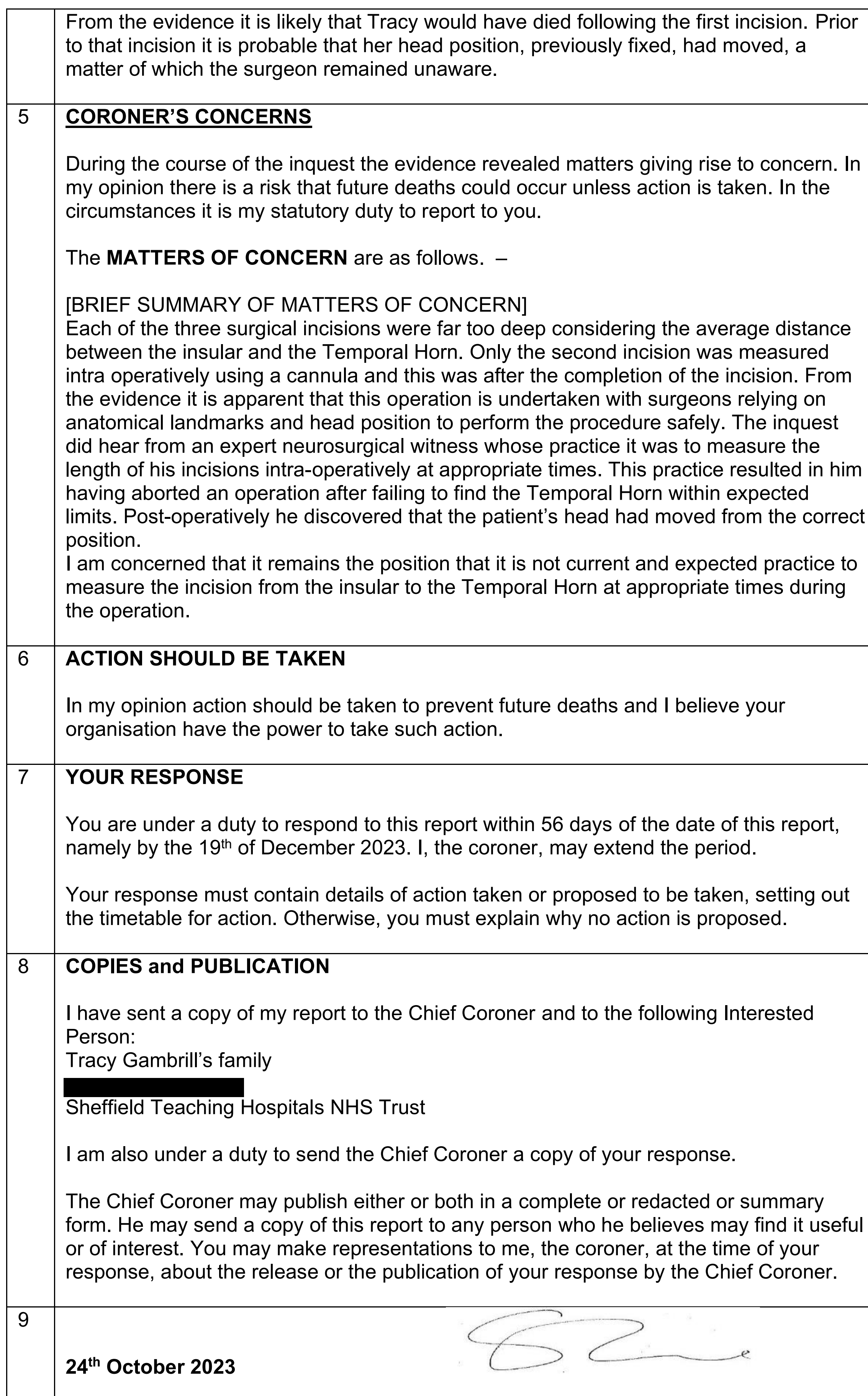
REGULATION 28: REPORT TO PREVENT FUTURE DEATHS (1)

*NOTE: This form is to be used **after** an inquest.*

	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** **1. The Royal College of Surgeons of England** **2. The General Medical Council** **3. NHS England** **4. The Society of British Neurological Surgeons**
1	**CORONER** I am Susan EVANS, Assistant Coroner for the coroner area of 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.
3	**INVESTIGATION and INQUEST** On the 29th of November 2016 I commenced an investigation into the death of Tracy Gambrill. The investigation concluded at the end of the inquest on 20th October 2023. The conclusion of the inquest was On the 7th of November 2016 Tracy Gambrill underwent a neurosurgical operation at the Royal Hallamshire Hospital, intended to ameliorate her seizure symptoms of epilepsy. An incision made from the insular and intended to find the temporal horn was made at the wrong trajectory. Prior to that incision it is probable that her head position, previously fixed, had moved, a matter of which the surgeon remained unaware. The incision made was excessively deep and caused significant damage to Tracy's brain. Two further attempts were made at different trajectories to locate the temporal horn with the last utilising a neuro-navigation system to assist. Both were excessively deep. On being woken from the anaesthetic it was immediately apparent that Tracy had sustained serious brain injury. She died in hospital on the 19th of November 2016. On the balance of probability, it is likely that Tracy would have died as a result of the damage caused by the first incision. The cause of death was recorded as: 1a Cerebral oedema and focal infarction 1b Iatrogenic damage to diencephalic and brain stem structures 1c Refractory epilepsy (operated 7th November 2016)
4	**CIRCUMSTANCES OF THE DEATH** On the 7th of November 2016 Tracy Gambrill underwent an amygdalohippocampectomy using the Trans-Sylvian approach. The Sylvian fissure was opened without incident. From there the surgeon made three incisions from the insular, intending to find the Temporal Horn. The first incision was measured from post-mortem images as being 5-6cm in length. Having not found the Temporal Horn a second incision was made at a different trajectory. This again failed to find the Temporal Horn and was measured (post-mortem) at 6-7cm. The third trajectory was made with the assistance of a neuronavigational system and measured (post-mortem) 5cm. Tracy died following the operation.



	From the evidence it is likely that Tracy would have died following the first incision. Prior to that incision it is probable that her head position, previously fixed, had moved, a matter of which the surgeon remained unaware.
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 could occur unless action is taken. In the circumstances it is my statutory duty to report to you. The **MATTERS OF CONCERN** are as follows. – [BRIEF SUMMARY OF MATTERS OF CONCERN] Each of the three surgical incisions were far too deep considering the average distance between the insular and the Temporal Horn. Only the second incision was measured intra operatively using a cannula and this was after the completion of the incision. From the evidence it is apparent that this operation is undertaken with surgeons relying on anatomical landmarks and head position to perform the procedure safely. The inquest did hear from an expert neurosurgical witness whose practice it was to measure the length of his incisions intra-operatively at appropriate times. This practice resulted in him having aborted an operation after failing to find the Temporal Horn within expected limits. Post-operatively he discovered that the patient's head had moved from the correct position. I am concerned that it remains the position that it is not current and expected practice to measure the incision from the insular to the Temporal Horn at appropriate times during the operation.
6	**ACTION SHOULD BE TAKEN** In my opinion action should be taken to prevent future deaths and I believe your organisation 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 the 19th of December 2023. 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 Person: Tracy Gambrill's family Sheffield Teaching Hospitals NHS Trust 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	**24th October 2023**

CONTROLLED