David Pojur
Assistant Coroner for North Wales (East and Central)

	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** 1. Minister for Health and Social Services 2. Betsi Cadwaladr University Health Board (BCUHB)
1	**CORONER** I am David Pojur, Assistant Coroner for North Wales (East and Central)
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 26.3.18 an investigation was commenced into the death of Vivienne Greener (DOB 24.8.53) who died at Glan Clwyd Hospital on the 20.3.2018. A narrative conclusion was recorded in the following terms: 1. **Ruthin Coroner's Court** 2. **Inquest of Vivienne Greener** 3. **Conclusion - Box 4 of The Record of Inquest 18.12.23.** 4. On the 19 March 2018, Mrs Vivienne Greener was taken by ambulance to the Glan Clwyd Hospital in response to vomiting blood at her home. She arrived at 00:21 hours. 5. Despite ambulance technicians seeking to have her admitted into the emergency department, they were told by hospital staff that there were no beds available. The emergency department was overrun, with insufficient numbers of medical staff. Corridors were full of patients as were the waiting areas in addition to up to 14 ambulances waiting to offload. There were around 83 patients. The Health Board Clinical Site Manager was never alerted. 6. There was no effective triage system whilst Mrs Greener was waiting outside the hospital. She had been vomiting blood. At 00:38 hours, her

National Early Warning Score (NEWS) was 6 and at 01:11 hours, it worsened to 12 and she needed immediate attention. The Health Board failed to escalate her situation to senior staff and failed to go to the ambulance to examine her. The Health Board failed to admit her at 00:38 hours and give her clinical attention.

7. She was admitted into the emergency department at the further request of WAST at 01:20 where she continued to vomit blood and pass blood rectally. There was an unacceptable delay in the Health Board providing blood products to her because there were insufficiently trained staff available to access the blood safe, located in another part of the hospital, together with a doctor who preferred to wait for crossmatched blood, as opposed to emergency O negative blood.
8. The nurse in the resuscitation unit escalated the matter and Mrs Greener was then attended by the hospital medical registrar. There were insufficient suitably available doctors to help the registrar with resuscitating Mrs Greener.
9. Mrs Greener ought to have had emergency blood products at the earliest available opportunity when she entered the emergency department, and the delay in giving blood products was a missed opportunity to render care.
10. Junior doctors failed to escalate Mrs Greener's serious condition to their on-call Consultants who would have been able to more quickly appreciate that she was on the verge of dying.
11. The Health Board failed to provide or resource an out of office hours endoscopy procedure. It also failed to follow the Massive Haemorrhage Pathway. Given that this was catastrophic bleeding, the Health Board should have summoned the Medical Emergency Team which ought to have brought together the medical registrar, surgical registrar, surgical junior doctor, anaesthetist junior doctor and intensive care unit nurse practitioner or a mixture of them, but failed to do so. These were significant missed opportunities to provide care to a patient who was suddenly dying, aware of it and frightened. Her treatment in the resuscitation unit was an acceptable venue for it and no less than she would have received in the Intensive Treatment Unit.

12. At the time, the source of the bleeding could not be identified. Had resuscitation occurred sooner when the opportunity presented, it could have been done more aggressively up to 01:30. This would have given her more chance of remaining alive for longer in the hope that an upper gastrointestinal surgeon would have come into the hospital during business hours and been able to operate on her.
13. Mrs Greener had been taking prescribed Naproxen, a non-steroidal anti-inflammatory, which stripped the lining of her stomach. Just as fast as the medical registrar was putting blood products into her, they were coming out. As a result, Mrs Greener never achieved haemodynamic stability, and any surgical intervention would have carried a mortality risk of up to 80% as she would not have been able to withstand anaesthetic or sedation.
14. An endoscopy would only have seen redness and not the source of the bleed. The only alternative would have been for a gastrectomy, the removal of the stomach. It is a very rare operation with a very high mortality risk.
15. I record the admitted failings of the Health Board and find the Health Board:
16. Failed to transfer the patient to the emergency department as Mrs Greener was on the ambulance for one hour;
17. Failed to provide documented evidence of triage with a member of emergency department staff attending the patient on the ambulance;
18. Failed to recognise a deteriorating patient;
19. Failed to trigger the massive haemorrhage pathway following the first set of observations in the emergency department;
20. Failed to recognise the early instigation and relevance of the major haemorrhage pathway;
21. Failed to document clinical review within medical records;
22. Failed to escalate the situation earlier, internally to on call consultants;
23. Failed to obtain blood products urgently.
24. Even given the ideal standard of care, Mrs Greener would not have survived the catastrophic bleeding.
25. Mrs Greener died due 1a multi organ failure due to 1b massive upper gastrointestinal haemorrhage due to 1c therapeutic use of Naproxen which led to her death at Glan Clwyd Hospital on 20 March 2018.

4	**CIRCUMSTANCES OF THE DEATH** As per the above narrative conclusion.
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. An out of hours emergency endoscopy is still not available at Clan Clwyd Hospital or in this area of North Wales as the provision has 'collapsed' at Wrexham Maelor Hospital, so no referrals can be made; 2. There are insufficient doctors and nurses and space available to cope with the number of patients coming into the Emergency Department; 3. There is an ineffective triage and record of triage of patients arriving at Glan Clwyd Emergency Department by ambulance; 4. There is not a clear understanding of when the Emergency Treatment Team should be called; 5. There is not a clear understanding of when the Major Haemorrhage Pathway should be engaged; 6. The Health Board's Upper GI Bleeding Management and Principles of Care 2022 is no longer fit for purpose; 7. Any learning from the Health Board's Investigation Report is not adequately shared with its practitioners; 8. A part of the Health Board's Investigation Report changed in different versions and obscured the reason why the provision of blood products was delayed meaning issues are not sufficiently identified and actioned; 9. Ambulances and paramedics are being kept at the Emergency Department as an extension of the hospital and its staff, due to WAST being unable to get their patients admitted into the Emergency Department and back on active duty.
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 12.2.24 I, David Pojur, Assistant 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 Family of the Deceased and to the Chief Coroner. I will also send a copy to the Welsh Ambulance Service NHS Trust and the Clarence Medical Centre. 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	Dated 18.12.23  Signature David Pojur Assistant Coroner for North Wales (East and Central)