Ymddiriedolaeth GIG
Gwasanaethau Ambiwlans Cymru

Welsh Ambulance Services
NHS Trust

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CHAIR AND CHIEF EXECUTIVE'S OFFICE

Ein Cyf/Our Ref: JK/5260

10 February 2020

PRIVATE AND CONFIDENTIAL
Mrs J M Lees
Assistant Coroner
H M Coroner's
County Hall
Wynnstay Road
Ruthin
Denbighshire
LL16 1YN

Dear Mrs Lees

Inquest relating to Ms Samantha Brousas

I am writing in response to the Regulation 28 that you issued to the Welsh Ambulance Services NHS Trust (the Trust) dated 20 December 2019, following the sad death of Ms Samantha Brousas in February 2018. In the report you raised concerns in relation to three matters.

Coroner Concern 1 – Absence of a pre-alert

At the time that the incident occurred, the Trust did not have pre-alert guidance in place. This was rectified in December 2018. The guidance was developed in conjunction with the Clinical Directors from each Health Board Area in Wales and Royal College of Emergency Medicine Wales. [ref Clinical Notice 16/2018]

The 2017 Joint Royal Colleges Ambulance Liaison Committee (JRCALC) Supplementary Guidelines stated a pre-alert should be given for suspected sepsis, a message that was further reinforced on the Trust's pre-alert guidance. In addition, the updated 2017 sepsis guidelines were covered during the 2018/19 mandatory training

cycle with the importance of the pre-alert message being further advocated to all emergency medical services staff through an agreed national education session. The session enabled crews to be able to identify the red flags for sepsis whereby a pre-alert would be expected.

The pre-alert guidance, as well as the mandatory training session, served to reinforce the key role the Trust's crews have in identifying and then informing the hospital through the pre-alert that they suspect sepsis for a given patient. Nevertheless, JRCALC is itself a guideline, not a policy, and is not designed to be everything to every patient but a readily applicable framework to assist in clinical decision-making. JRCALC will frequently, in the text, refer the reader to local processes where required within their guidance.

The 2019 JRCALC is accessible to crews either through Trust provided subscription to the JRCALC Plus App, available on a personal smartphone or tablet device. Trust crews who did not opt for the App were issued with the 2019 pocketbook.

It would not be feasible to create a policy which dictated all circumstances in which a pre-alert is needed as, by logical extension, doing so would also create a (longer) list of conditions that do not require pre-alert.

For example, a patient's pre-existing condition may mean that what is considered as "normal" for them would result in a high National Early Warning Score (NEWS). As such, elevated NEWS in these circumstances would warrant the crew to make a discretionary decision regarding the pre-alert. Nevertheless, we would expect that crew to explain the rationale for their decision in the narrative section of the Patient Care Record. Therefore, mandatory pre-alert policies are not recommended on the grounds of complexity, and that it would not be possible to write an exhaustive list which is applicable in all circumstances.

Coroner Concern 2 – paramedic administration of anti-biotics

The Trust recognises the importance of the role of the paramedic to identify sepsis, initiate treatment and pre-alert to the Emergency Department, as evidenced by the reference in the pre-alert guidance and the continuous professional development (CPD) training. The administration of antibiotics by paramedics in sepsis has been subject to a small number of studies, when findings may affect our current practice.

East Midlands Ambulance Service undertook a feasibility study to determine whether paramedics could appropriately deliver an antibiotic to 'red flag' sepsis patients and calculate the blood culture contamination rate when blood was drawn in the pre-hospital environment by paramedics. Twenty paramedics took part in the study. The results indicated that paramedics could safely deliver pre-hospital antibiotics to patients with 'red flag' sepsis and obtain blood cultures prior to administration, with a contamination rate comparable with local hospitals, following a short training course.

[Ref Chippendale J. et al 2018. The feasibility of Paramedics delivering antibiotic treatment pre-hospital to 'red flag' sepsis patients: a service evaluation. British Paramedic Journal Volume 2, Issue 4, pages 19-24 https://www.ingentaconnect.com/content/tcop/bpj/2018/00000002/00000004/art00003?crawler=true]

The PhRASe (Prehospital Recognition and Antibiotics for 999 patients with severe Sepsis) study was designed to determine if it was feasible for Trust paramedics to select and screen eligible patients, then randomise them to usual care or intervention (blood culture collection and administration of IV antibiotics). The main purpose of the study was to gather evidence, to inform the feasibility of a definitive study that could examine the effectiveness of prehospital antibiotics. This study is in the final stages of data analysis of anonymised follow-up via the SAIL databank.

[ref Moore C., et al 2018, Prehospital recognition and antibiotics for 999 patients with Sepsis: protocol for a feasibility study Pilot and Feasibility Studies 4:64 https://pilotfeasibilitystudies.biomedcentral.com/articles/10.1186/s40814-018-0258-8]

The large scale PHANTASi Trial indicated that the early administration of antibiotics for patients with Sepsis by paramedics in Holland did not lead to improved survival, regardless of illness severity, but training prehospital staff did improve early recognition and care in the whole acute care chain. In this study, the median time for receiving antibiotics was 26 minutes prior to Emergency Department arrival for the intervention group. For the control group, the median time for antibiotic administration was 70 minutes after arrival at the Emergency Department, compared with 93 minutes before training of the prehospital personnel.

The key message from this study is that education and providing usual care (oxygen and fluid therapy) are central to improving early recognition and care, rather than the timing of the antibiotics.

[Ref: Alam N, et al. 2018, Prehospital antibiotics in the ambulance for sepsis: a multicentre, open label, randomised trial. Lancet Respiratory Medicine Volume 6, ISSUE 1, P40-50, January 01, 2018 https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(17)30469-1/fulltext]

Therefore, the current evidence base is not strong enough to demonstrate the benefits of out-of-hospital administration of antibiotics in sepsis by all paramedics, including time taken to train, the costs involved to purchase the additional medications and equipment, and maintain competency in the use of the drugs. In addition, controlled use of antibiotics is considered best practice to prevent antimicrobial resistance, which is on the increase.

The Trust advocates that any administration of antibiotics for patients with red flag sepsis should be initiated within the Emergency Department and not in the back of an Emergency Ambulance. For patients held in the back of ambulances due to excessive

delays who require antibiotic treatment, this can be initiated by Health Board Emergency Department staff who are qualified to prescribe the medication, can select the most appropriate antibiotic to use depending on local patterns of antibiotic resistance and can collect the necessary blood specimen for cultures.

Coroner Concern 3 – escalation of concerns when delayed at hospital.

Patients in the Emergency Department or held in the back of the Emergency Ambulance on the forecourt are recognised in the 2016 Welsh Health Circular as the responsibility of the Health Board. As such, at all times, Trust crews should be able to escalate any clinical concerns directly to the Emergency Department via the ambulance triage nurse, nurse in charge or other senior clinician and reasonably expect action to be taken. Given the findings of the inquest, the Trust are actively designing an agreed escalation process that crews can use on the occasions that their concerns are not felt to be acted upon by staff in the Emergency Department.

I would like to extend my sincere condolences to the family of Ms Brousas on their sad loss. I would also like to extend the offer to meet with you to discuss our response in more detail and to provide you with any further assurance you may require regarding our commitment to continuous improvement to support the prevention of future deaths.

Yours sincerely

Dr Brendan Lloyd
Executive Medical Director

Encs: Clinical Notice 16/2018
Action plan