

15 January 2024

Coroners Court
Jack Judge House
Halesowen Street
Olbury
B69 2AJ

For the attention of Joanna Lees

Dear Madam,

**Regulation 28 Report to Prevent Future Deaths
Inquest into the death of Lauren Page**

We acknowledge receipt of your Regulation 18 Report to Prevent Future Deaths.

We have considered the Report and have sought to provide you with an overview of the training programme undertaken at the University of Wolverhampton on the BSc (Hons) Paramedic Science (Professional Pathway) programme.

The key points as they relate to the University of Wolverhampton are points 9 and 13.

In respect of Ms Smith, we have reviewed our admissions data and Ms Smith has no known affiliation to the University of Wolverhampton and did not undertake her paramedic training at the University of Wolverhampton.

Student paramedic [REDACTED]

Student paramedic [REDACTED] undertook her Associate Ambulance Practitioner (AAP) course with West Midlands Ambulance Service University NHS Foundation Trust (WMAS) prior to starting her BSc (Hons) Paramedic Science (Professional Pathway) programme at the University of Wolverhampton. The AAP programme is a level four apprenticeship that is run by WMAS against the agreed apprenticeship standards.

The apprenticeship standard and teaching around ECG interpretation materials are included for completeness (Appendix A and Appendix B). It should be noted that ST-elevation is discussed on slide 40 and pathological Q waves are discussed on page 42 of item 2. [REDACTED] would have undergone these sessions when she was undertaking her AAP training with WMAS. Also included at Appendix C, is a copy of the PowerPoint presentation on ECG arrhythmias used by WMAS, and at Appendix D, an ECG workbook used by WMAS.

██████████ commenced her education at the University in June 2022, and is not due to complete her studies until January 2024. It is important to emphasise, that ██████████ is not a registered paramedic and will not be eligible to apply for professional registration until such time as she has met all of the outcomes of her current programme of study. As a student, ██████████ does not have all of the competencies and skills of a registered paramedic so would be working with a practice educator who is there to support and supervise her as she develops those competencies and skills. It is not expected that she would be making independent decisions on patient care whilst in her role as a student paramedic. The practice educator will always have the ability to override the decision of a student should they deem the proposed course of action to be sub-optimal for the patient.

It should also be noted that on the 6 January 2023, ██████████ was working as an employee of WMAS and was not there in her student capacity. ██████████ was working within the remit of an associate ambulance practitioner.

At the time of the incident, ██████████ had not undergone the full ECG interpretation sessions so it may be reasonable for her to say that she did not have the full understanding of the meaning of the ECG at that time. The uncontrolled nature of paramedic placements means that it is not uncommon for students to encounter situations in practice where they have not yet had the training. Placements are spread throughout the programme and the focus for development changes as the student progresses. The risks associated with this are ameliorated by placing a student with a registered paramedic who is responsible and accountable for the clinical care of all patients.

The sessions on 12-lead ECG interpretation were delivered on the 30 June 2023. Appendix E is the scheme of work for the level 6 module on the Paramedic Programme currently being sat by ██████████. The scheme of work provides an outline of what is taught in relation to cardiac physiology and ECGs, although it should be noted that ECGs are re-visited throughout the teaching as and where appropriate. Particular note should be taken of sessions 6 and 29, which identify specific teaching around the ECG and its relation to emergency conditions. Also appended is Appendix F, which is combined presentations on ECGs and taught across multiple sessions. You will note that the ECG in relation to cardiac emergencies commences from slide 161 with ST-elevation myocardial infarction discussed from slide 165 and specific reference to pathological Q-waves on slide 166. There are other slides that discuss pathologies impacting the QRS complex as well as the other waves of the ECG. Please note, these are not didactic teaching sessions, the presentation is there to support learning.

Please be assured that ECGs are summatively assessed in practice (appendix G) by a student's Practice Assessor and do therefore feature within the University of Wolverhampton programme. Practice assessors are registered healthcare professionals (usually Paramedics) who have undertaken additional training to support and assess students. A Registrant must meet the Standards of Proficiency of the Health and Care Professions Council (HCPC) in order to remain on the Register, so it is reasonable to conclude that they have the skillset to assess trainee paramedics.

To provide assurance to the Coroner the assessment process in practice is described below with a table showing how the modified Bondy system is used in clinical practice.

Assessment Process - Formative and summative assessment

The assessment of each competency consists of formative assessment and summative assessment. Formative assessment refers to what is learnt and how it is learnt. This should involve a continuing and systematic appraisal of the students' performance throughout their clinical placement to determine the degree of mastery of the given learning task. It also helps to focus on the particular learning necessary to achieve mastery of the required competences. Formative assessment is linked to the initial and midpoint interviews and is part of the continuous assessment. The purpose of the

interviews is to identify the learning needs and to discuss the student's progression. This will allow the student to observe, discuss and practice the skill in preparation for their summative assessment.

Summative assessment refers to what to learn and what counts. This is linked to the final interview, and this will determine whether the student can competently and consistently undertake the competence without direct supervision in a safe, effective manner to ensure they are fit to practice at the point of registration with the Health and Care Professions Council as a Registered Paramedic.

The key point, within the summative assessment, is highlighted and noted above and goes to the point that a student is deemed to be fit to practice at the point of registration with the Health Care Professions Council as a Registered Paramedic.

Assessment of Learning - Educational Taxonomy

To determine the achievement of competences the assessment process is based on the Bondy (1983) criterion-referenced definitions for rating scales in clinical evaluation. This system allows mentors to evaluate student performance against the standard of procedure (safety and accuracy), the quality of the performance, and the level of assistance required by the student. The Practice Assessment Document (PAD) allows the student to show continuing progression throughout the placement period and encourages mentors to allow sufficient time for students to demonstrate competence over a wide range of presentations and patient groups before signing off a student as 'independent'. The more evidence that is generated for each competence, the more robust the decision so it is usual for students to continue to work through each of the competences even when they have been signed off at the appropriate level on a number of occasions. This will help to ensure that standards are maintained and that students are not signed off too early when there is insufficient evidence available.

Figure 1. The Five-Point Bondy Rating Scale

	Level	Standard of Procedure	Quality of Performance	Level of Assistance
Independent	5	<ul style="list-style-type: none"> ▪ Safe and accurate each time ▪ Achieved intended outcome Behaviour is appropriate to context 	<ul style="list-style-type: none"> ▪ Proficient, coordinated and confident ▪ Occasional expenditure of excess energy ▪ Within an expedient time period 	Without supporting cues
Supervised	4	<ul style="list-style-type: none"> ▪ Safe and accurate each time ▪ Achieved intended outcome Behaviour is appropriate to context 	<ul style="list-style-type: none"> ▪ Efficient, coordinated and confident ▪ Some expenditure of excess energy ▪ Within a reasonable time period 	Occasional supportive cues
Assisted	3	<ul style="list-style-type: none"> ▪ Safe and accurate each time ▪ Achieved most objectives for intended outcome ▪ Behaviour generally appropriate to context 	<ul style="list-style-type: none"> ▪ Skilful in part of the behaviour ▪ Inefficiency and incoordination ▪ Expend excess energy ▪ Delayed time period 	Frequent verbal and occasional physical cues in addition to supportive cues
Marginal	2	<ul style="list-style-type: none"> ▪ Safe only with guidance ▪ Not completely accurate ▪ Incomplete achievement of intended outcome 	<ul style="list-style-type: none"> ▪ Unskilled, inefficient ▪ Considerable expenditure of excess energy ▪ Prolonged time period 	Continuous verbal and frequent physical cues

Dependent	1	<ul style="list-style-type: none"> ▪ Unsafe ▪ Unable to demonstrate behaviour ▪ Lack of insight into behaviour appropriate to context 	<ul style="list-style-type: none"> ▪ Unable to demonstrate behaviour/procedure ▪ Lacks confidence, coordination and efficiency 	Continuous verbal and physical cues
Not Observed	x			

Adapted from Bondy, K. N. (1983). Criterion-referenced definitions for rating scales in clinical evaluation. *J Nurs Educ*, 22(9):376-382.

Fitness to Practice

In response to point 13 regarding Fitness to Practice (FtP), it is pertinent to state that the University of Wolverhampton has its own robust FtP processes that relate to all students registered on courses of study that lead to provisional or full registration with an appropriate statutory or regulatory body or which confer a professional qualification or entitlement to practise a particular profession or calling. For courses leading to eligibility to apply for registration with the HCPC, students are required to adhere to the Guidance on Conduct and Ethics for Students (HCPC, 2016) throughout their programme. Students also work towards achieving the Standards of Proficiency required to meet the HCPC criteria, but they are not expected to demonstrate competence in all of these Standards until close to the point of registration.

At the time of the incident, [REDACTED] was working as an employee of WMAS and not in her capacity as a student on placement. As such, WMAS did not notify the University of the incident and we remained unaware of it until two days prior to the receipt of the Regulation 28 report. Had we known earlier, we may have considered whether a referral to an FtP panel was appropriate, but it seems unlikely that the event would have met the criteria for referral. [REDACTED] still had over 15-months of her programme remaining (including the sessions on ECGs), and she was working with a registered paramedic who held overall responsibility and accountability for the decisions made.

Steps taken by the University of Wolverhampton

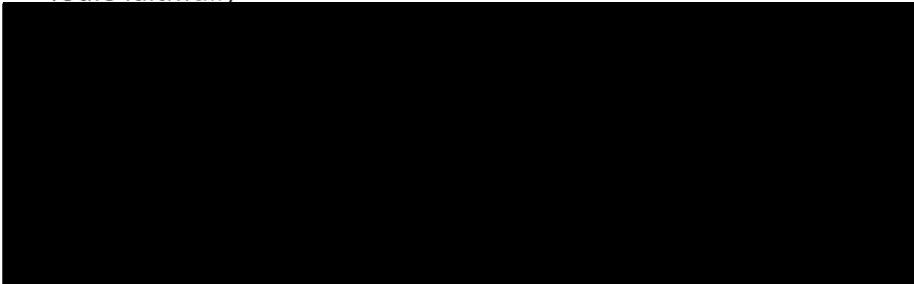
The University understands and accepts without reservation that its training must be effective. We have reviewed all of the ECG training and assessment that takes place on the programme and are confident that our teaching fully covers the abnormalities found in the ECG in this case, the pathological implications of such findings, and the appropriate course of action to be taken.

However, we are completely committed to ensuring the safety of the public so will implement additional steps to further minimise the risks associated with the failure to accurately interpret a 12-lead ECG.

- Evidence from the case will be presented to students to exemplify the potential harm from inadequate understanding of the ECG and the implications for the patient – we would welcome a copy of the ECG if this is possible
- Interpretation of 12-lead ECGs will be incorporated into one or more of the Objective Structured Clinical Examinations that students sit throughout their programme. This will supplement rather than replace the current assessments in practice.
- Members of the paramedic team are liaising with local coronary care units to obtain anonymised 12-lead ECG readings from real patients to further enhance the teaching

- A 12-lead ECG interpretation workbook will be added to the virtual learning environment for completion by students. Students who do not complete the activity will be followed up by their personal academic tutor
- The University will organise continuing professional development ECG masterclasses to offer to registered paramedics

Yours faithfully



Chief Operating Officer