89 (17.0%) patients were offered pharmacological thromboprophylaxis. No VTE events were recorded in this group. However, in 435 (83%) patients who did not receive prophylaxis, 5 VTE events were recorded, including 3 proximal thrombi. We found no evidence of major or clinically relevant non-major bleeding.

A frequency histogram of derived TRIP (Cast) score values is shown in figure 3. A threshold of <sup>3</sup>6 for prophylaxis would result in 111 (21.1%) patients being offered prophylaxis, with all 3 of the proximal VTE events potentially prevented.

In conclusion, use of the TRIP (Cast) score in our ED population appears to outperform current risk assessment practice, at a small overall increase in the population eligible for prophylaxis.

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INCIDENCE OF HYPEROXIA IN TRAUMATICALLY INJURED PATIENTS RECEIVING PRE-HOSPITAL EMERGENCY ANAESTHESIA: A 5-YEAR RETROSPECTIVE ANALYSIS

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10.1136/emermed-2022-RCEM.41

Aims/Objectives/Background Previous studies have demonstrated an association between hyperoxia and increased mortality in various patient conditions. In the present study, we aim to investigate the incidence of hyperoxia in trauma patients receiving PHEA, and we aim to determine factors that may help guide prehospital oxygen administration.

Methods/Design A retrospective cohort study was performed of all patients who received PHEA by a single helicopter emergency medical service (HEMS) service between 1 October 2014 and 1 May 2019 and who were subsequently transferred to one major trauma centre (MTC). Patient and treatment factors were collected from the electronic patient records of the HEMS service and the hospital. Hyperoxia was defined as a PaO2 >16, based on the first arterial blood gas analysis upon arrival to hospital.

Results/Conclusions On presentation to the MTC, the majority of the patients (90/147, 61,2%) had severe hyperoxia, 30 patients (20.4%) had mild hyperoxia, 26 patients (19.7%) had normoxia, and 1 patient (0.7%) had hypoxia. The median [IQR] PaO₂ in the first ABGA after HEMS handover was 36.7 [18.5–52.2] kPa, with a range of 7.0–86.0 kPa. SpO2 readings before handover were independently associated with presence of hyperoxia. An SpO2 ≥97% was associated with significantly increased odds of hyperoxia (OR 3.99 [1.58–10.08], and had a sensitivity of 86.7 [79.1–92.4]%, specificity of 37.9 [20.7–57.8]%, positive predictive value of 84.5 [70.2–87.9]% and a negative predictive value of 42.3 [27.4–58.7]% for presence of hyperoxemia.

HEMS oxygenation strategies are effective; trauma patients who have undergone PHEA often have a profound hyperoxemia upon arrival in hospital. In the prehospital setting where ABGA is not readily available, target SpO2 of 94–98% as recommended in BTS Guidelines should guide FiO2 titration to reduce risk of tissue hyperoxia. Predeparture checklists should include an agreed system to adjust FiO2 according to a patient's SpO2 rather than fixed concentration.

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## VIRTUAL PLATFORMS FOR LEARNING: BALANCING PANDEMIC NEEDS SPRINGBOARDS FUTURE EDUCATIONAL SUCCESS

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10.1136/emermed-2022-RCEM.42

Aims/Objectives/Background The current Covid-19 pandemic poses many unprecedented educational challenges. Virtual learning is a recognised and increasingly validated modality that has been strategically adapted to facilitate pandemic educational delivery. Balancing platform usage with fewer available face to face sessions could facilitate clinical competency development and progression for all workforce colleagues and beyond.

Methods/Design This prospective cross-site large DGH survey, powered at an 8% margin of error with 95% confidence intervals, aimed to identify colleague perceptions of virtual learning platforms.

80 colleagues (41 males, 39 females) participated in survey monkey questionnaire completion over a designated threeweek period following governance approval.

Demographic data was collated on job title/grade, sex, age bracket and whether the respondent currently worked in ED. Likert scale referenced statements on knowledge, confidence, utility and enjoyability were transcribed into metric data for analysis (1- strongly disagree, 2- partially disagree, 3- neither agree or disagree, 4- partially agree, 5- strongly agree).

Results/Conclusions Survey participants at undergraduate and postgraduate levels believed virtual platforms are useful (3.80, p<0.002) and had confidence in them (3.90, p<0.001) despite face to face preferences (4.23, p<0.001). Respondents believed virtual mapping facilitated competency development and portfolio completion with high utility and system knowledge (3.68–4.08, p<0.001). Whilst preferring platform variety and pre-determined guidance, subgroup analyses showed Foundation and Core EM Trainees had highest enjoyment levels (3.85–4.88, p<0.001). Trainees preferred receiving virtual learning on one platform (4.78, p<0.001). Perceptions on needing traditional classroom teaching were neutral (3.2, p<0.01).

Overall, themes relating to respondent's perception of virtual platforms were positive. This survey provides a valid, transferable platform for developing and exploring future balanced use of virtual platforms as resources for educational progression and development.

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EARLY AND DELAYED TRAUMATIC INTRACRANIAL
BLEEDING IN THE ANTICOAGULATED HEAD INJURED
PATIENT: A SYSTEMATIC REVIEW AND META-ANALYSIS

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10.1136/emermed-2022-RCEM.43

Aims/Objectives/Background Patients taking anticoagulant medication frequently attend the Emergency Department following head injuries. Whilst previously these patients were taking warfarin, they are now increasingly taking DOACs. Both classes of anticoagulant are believed to increase the incidence of traumatic intracranial haemorrhage (tICH). However, it is unclear whether DOACs confer the same risks as warfarin. There are also concerns that anticoagulated

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