

negative predictive value for COVID-19 of 100%, two greens 98% and three reds a positive predictive value for COVID-19 of 44%.

**Results/Conclusions** This diagnostic aide was applied from August 2020 within the Trust Emergency Departments and Acute Medical Units to aide cohort decisions. A retrospective application to all 213 patients with positive swabs admitted from August to November 2020 demonstrated that 69% were highlighted as at least two 'red lights' and only 1.4% were erroneously highlighted as three 'green lights'. The aide is an example of a rapidly developed evidence based tool and, particularly if updated with data from other centres, could be widely employed in low-resource healthcare settings.

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### DOES FIBRINOGEN CONCENTRATE IMPROVE OUTCOMES IN MAJOR TRAUMATIC HAEMORRHAGE? A SYSTEMATIC REVIEW

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**Background** Acute traumatic coagulopathy (ATC) is present in a quarter of severely injured patients and is associated with worse outcomes.(1–3) Fibrinogen is the first clotting protein to become deficient in ATC and there is a suggestion that supplementary fibrinogen may improve outcomes in these patients.(1, 4, 5) This review aimed to explore the efficacy and safety profile of fibrinogen concentrate (FC) administration to patients suffering from traumatic haemorrhage.

**Methods** A comprehensive search of Medline, Embase and the Cochrane Library databases was performed. Studies were included if they compared FC administration with a suitable comparator group in adults suffering from traumatic haemorrhage. Only randomised controlled trials, quasi-experimental or cohort studies were included at the screening stage. Included papers were analysed by narrative review.

**Results** 271 studies were identified and screened of which 8 were included. Mortality data was conflicting and of poor overall quality. Four of the studies reported a survival benefit with FC administration,(6–9) one reported a higher ICU mortality,(10) and the remaining studies found no significant difference relative to the comparators.(11, 12) All studies exploring the effect of FC on plasma fibrinogen levels found a significant increase to normal levels in the FC group at 2 hours post intervention.(11–13) One study demonstrated that this effect lasted for twelve hours after receiving FC.(11) There was no increase in the incidence of thromboembolic events in patients treated with FC compared to standard care.

**Conclusion** FC is effective at reversing hypofibrinogenaemia in the setting of ATC and does not appear to increase the risk of thromboembolic events. Mortality data remains conflicted and of poor overall quality, therefore it is unclear if these affects correspond to improved clinical outcomes. Randomised controlled trials adequately powered to detect a mortality difference are recommended before the clinical efficacy of FC in traumatic haemorrhage can be established.

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### IMPROVING DIAGNOSIS AND APPROPRIATE SPECIALTY REFERRAL WITH A SYNCOPE PATHWAY

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**Aims/Objectives/Background** Syncope is a common presentation to ED. Patients with an underlying cardiac cause have increased risk of adverse outcome. Initially, aetiology can be unclear leading to high admission rates and associated costs. In August 2018, a syncope pathway was introduced at the Royal Infirmary of Edinburgh (RIE) ED to aid diagnosis and direct patients to appropriate services. Our aim was to assess the impact of this pathway on syncope diagnosis, admission rates, patient outcomes and specialty input.

**Methods/Design** A search of electronic patient records (EPR) eight months before and after the pathway's introduction was conducted to identify patients presenting with 'fainting episode +/- loss of consciousness'. EPR's were reviewed and non-syncope presentations excluded. Two reviewers consecutively sampled from both groups. Remaining patients had their EPR's scrutinised to determine history, examination findings, immediate and 1-year outcomes and referrals to specialities.

**Results/Conclusions** Our search identified 1055 pre-pathway and 1073 post-pathway patients. Following exclusion of non-syncope diagnoses, 673 patients remained in the pre-pathway group and 480 in the post-pathway group. Consecutive sampling from these groups generated 199 patients pre-pathway and 102 patients post-pathway with a median age of 65 (range 13–100).

A greater proportion of patients were admitted or referred to outpatient services following the pathway's introduction (46.1% versus 30.2%). Of these, 25.5% were referred to outpatient clinics compared to 20% pre-pathway. Of those admitted, 77.1% received specialty input related to their syncope compared to 25% in the pre-pathway group. After 1-year follow-up, 8.8% of patients had alternative diagnoses for their syncope compared to 2.5% pre-pathway. Post pathway, there were two syncope related deaths – both situational syncope causing falls.

Following the introduction of our syncope pathway there was no significant reduction in unscheduled care admissions. However, we have seen more specialty input and improved diagnosis with importantly, no significant increase in syncope related deaths.

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### HOW EMERGENCY PHYSICIANS MAKE THEIR CAREERS SUSTAINABLE ON THE SHOP-FLOOR AND AWAY FROM IT: RESULTS FROM AN ETHNOGRAPHIC AND INTERVIEW-BASED STUDY

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**Aims/Objectives/Background** This study aims to understand how emergency physicians work sustainably in an increasingly challenging environment in the context of a retention crisis across all grades of emergency physician.

Senior clinicians provide better care in the emergency department; performing fewer unnecessary investigations, receiving fewer complaints and making fewer errors. Seniority is dependent on retention. Exodus from training and consultant grades is expensive.

The problems of staffing an emergency department has not been previously addressed by focusing on how those who work in them manage to do so.

**Methods/Design** Ethnography conducted at a UK emergency department for 12-weeks, totalling nearly 200-hours of observation. A second site was planned but not possible due to COVID-19.

Interviews with emergency physicians of all grades from the two initially planned sites, with doctors who have left emergency medicine, and with individuals working for stakeholder organisations. 40 interviews in total, averaging 45 minutes.

Systematic scoping review of the relevant academic and policy literature.

Reflexive thematic analysis of the ethnographic field notes, interview transcripts and literature.

**Results/Conclusions** Emergency physicians are active in managing their working day to mitigate the labour and environment. These actions have multiple overlapping motives but are demonstrably forms of retention work. They utilise objects and the environment in creative ways (materialities), for example completing paperwork in the resuscitation room because it is calm and air-conditioned.

They utilise humour in a primarily self-deprecating manner and prioritise education as a means of valuing other staff and creating variety in their workday. Emergency physicians describe teamwork as vital to retention, but this is disparate and developed over long periods of time and therefore better described as *community*.

The principle sustainability strategies employed limit exposure to shop floor working. This is achieved through less-than-full-time working and portfolio careers. These strategies predate policy which describes them in terms of flexible working.

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## SECURE -A MULTICENTER SURVEY OF THE SAFETY OF EMERGENCY CARE IN UK EMERGENCY DEPARTMENTS

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10.1136/emered-2022-RCEM.38

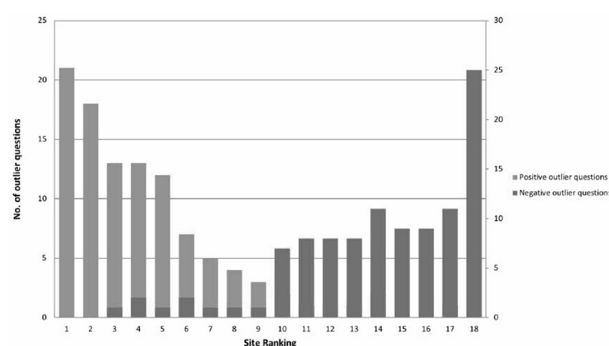
**Aims/Objectives/Background** According to safety theory, frontline staff are often best informed to identify problems that

threaten safety in their workplace. Surveying emergency department (ED) staff is a straightforward method to assess safety culture including investigating risks, identifying solutions and evaluating interventions. This study's aim was to validate an ED safety questionnaire specifically for use in the UK and provide an overview of safety culture and risks. Differences between doctors and nurses' perception of safety were also analysed.

**Methods/Design** According to safety theory, frontline staff are often best informed to identify problems that threaten safety in their workplace. Surveying emergency department (ED) staff is a straightforward method for investigating risks, identifying solutions and evaluating interventions. Safety culture has been the focus of a succession of high-profile reports, including the Francis Report. This study's aim was to validate an ED safety questionnaire specifically for use in the UK and provide an overview of safety culture and risks. Differences between doctors and nurses' perception of safety were also analysed.

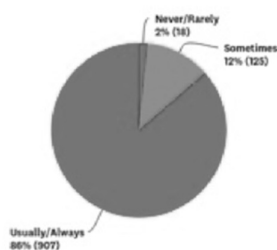
Using groupings similar to the US safety questionnaire, Cronbach's Alpha was calculated across five categories as an estimate of reliability. Simple descriptive statistics were used to identify risks or good practice. Chi Square test compared individual sites' results with national results to highlight outlier questions (i.e. the department's strengths and weaknesses). Chi Square was also used to identify significant differences between responses from nurses and doctors.

**Results/Conclusions** 1060 participants were recruited across 18 sites (see attachments). Analysis highlighted risks posed by interruptions, negative effects of targets, deficient mental health care (especially compared to critical care) and ED crowding. Identifying outlier sites provided opportunities to learn from excellence. Comparing doctors and nurses' responses highlights additional support is needed for nursing staff. This study provides the first step towards assessing ED safety culture and describing risks in the UK.



Abstract 748 Figure 2

Q33 The critical care team provide support in a timely manner



Abstract 748 Figure 1

Q38 Patients receive timely access to mental health care

