This study aimed to describe discharge practices, examining consistency and quality of safety-netting advice (including bronchodilator plans) when discharging children with wheeze or asthma, and identify opportunities for improvements

Method and Design This two-phase study was conducted across PERUKI registered sites between June 2020 – September 2021. Phase 1 consisted of single site survey responses regarding departmental discharge practices for acute wheezy presentations. During phase 2, discharge instructions provided for caregivers underwent formal review. Data abstraction tools were developed based upon existing literature regarding written wheeze safety-netting information, BTS/SIGN 2019 asthma guidelines, NICE safety-netting recommendations and the BTS Asthma Discharge Bundle.

Results and Conclusion This two-phase study was conducted across PERUKI registered sites between June 2020 – September 2021. Phase 1 consisted of single site survey responses regarding departmental discharge practices for acute wheezy presentations. During phase 2, discharge instructions provided for caregivers underwent formal review. Data abstraction tools were developed based upon existing literature regarding written wheeze safety-netting information, BTS/SIGN 2019 asthma guidelines, NICE safety-netting recommendations and the BTS Asthma Discharge Bundle.

National comparison of discharge practices and written safety-netting information for wheezy children attending EDs showed wide variation. This highlights the need for evidence-based guidance to improve and standardise care, providing consistent discharge and safety-netting advice for carers.

Abstract 1804 Table 1 Analysis of written safety-netting information (n=61)

Type of leaflet	
1. Discharge – Normal (expected) recovery path	50 (81.9)
2. Combined discharge and AAP	33 (54.1)
- Combined discharge (normal - Combined discharge (normal recovery) and AAP	16 (26.2)
3. Discharge – with a Normal (expected) path AND abnormal (unexpected/ deterioration) recovery path	31 (50.8)
4. PAAP/ plan for future episodes only	11 (18.0)
General Information provided to caregivers*	
Inhaler and Spacer technique	33 (54.1)
Overview of information about wheeze	23 (37.7)
How inhalers work	19 (31.1)
Expected time course for recovery	18 (29.5)
Advice on what to do overnight:	16 (26.2)
- Do not wake to give inhalers overnight	9 (56.3)
- Continue to administer overnight including waking if sleeping	6 (37.5)
- Administer only if felt required	1 (1.6)
Signs of improvement	7 (11.5)
Inhaler side effects	3 (4.9)
Red Flags *	
Unable to speak	52 (85.2)
Respiratory distress	51 (83.6)
Inhalers not lasting 4 hours	49 (80.3)
Audible wheeze	40 (65.6)
Coughing	37 (60.7)
Fast breathing or short of breath	36 (59.0)
Poor feeding or drinking	32 (52.5)
Looks pale	31 (50.8)
Not improving after specified period	26 (42.6)
Drowsiness	25 (40.9)
Caregiver is worried	8 (13.1)
Escalation- how to seek help*	
Contact GP	47 (77.1)
Call 999	45 (73.7)
Call / reattend hospital	25 (40.9)
Call 111	19 (31.1)
No advice given	7 (11.5)
Where is red flag and escalation advice described	
Within PAAP/future episodes information only	31 (52.5)
Within discharge recovery information	28 (47.5)
None described	2 (3.3)
GP Follow-up recommended	
GP Follow-up (any)	38 (62.3)
Within 48hr	28 (45.9)
Within 1 week	4 (6.6)
Within 72 hr	3 (4.9)
Other timeframe	2 (3.3)
Within 2 weeks	1 (1.6)
Other support*	
Smoking cessation support offered	15 (24.6)
Specialist Nurse	8 (13.1)
Asthma Clinic	4 (6.6)
Open access (OA)	3 (4.9)
Community Nursing Team (CNT)	3 (4.9)
General Paediatric Clinic	1 (1.6)

* Percentages may be greater than 100% as more than one could be selected

1690 CAN TRIAGE BASED INTERVENTIONS REDUCE LENGTH OF STAY IN A PAEDIATRIC EMERGENCY DEPARTMENT? A LITERATURE REVIEW

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10.1136/emermed-2022-RCEM2.34

Aims, Objectives and Background In a busy paediatric emergency department triage decisions are critical to patient flow (see figure 1). In addition to sorting patients by acuity the initiation of early interventions at triage is pivotal. Effective use of triage has the potential to significantly reduce lengths of stay.[1,2]

Method and Design Adhering to PRISMA guidelines, we utilised the key words 'children', 'triage' and 'length of stay' to search the MEDLINE and COCHRANE databases for relevant studies. Inclusion and exclusion criteria allowed a focused interrogation of the literature over the last two decades. Bibliographies & specialist journals were also searched to prevent important omissions.

Results and Conclusion Nine studies (two randomised controlled trials, seven non randomised) were found. Interventions included; reallocated staff for triage, a paediatrician in triage and a series of triage nurse initiated treatments, investigations and protocols. Average reductions in emergency department length of stay ranged from four to forty four minutes per patient.

The common principle identified was early decision making. Statistical significance was demonstrated with few exceptions. Estimates of bias were low. The quality of evidence was high.

Limitations included; uneven benefit (e.g. whilst overall length of stay was reduced, some patients waited longer) and over treatment. Triage nurse initiated treatment stood out as

as having the most impact with the least additional cost. There were no adverse incidents.

Triage based interventions are an important strategy in reducing the length of stay for children attending an emergency department. Doing so represents a proactive step in tackling the growing problem of overcrowding in the paediatric emergency department.

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RCEM Moderated Papers

1767 A SURVEY TO DEFINE THE PRE-HOSPITAL BLOOD RESUSCITATION PRACTICES OF UK AIR AMBULANCES

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Aims, Objectives and Background The use of pre-hospital blood components in the early resuscitation of patients with life-threatening bleeding is becoming more common. Understanding the national utilisation of pre-hospital blood is key to developing research strategies in these systems. The aim of this study was to report the blood resuscitation practices of UK Air Ambulances (AAs).

Method and Design Two sequential surveys were emailed to all UK AAs using the REDCap (research electronic data capture) system. Data were collected for 12 months during 2019 including: number of patients transported, timings, products carried, and number of patients transfused by aetiology. Data are reported as number (percentage), and mean (± standard deviation).

Results and Conclusion Nineteen (95.0%) AAs responded, and transported a total of 12,170 patients to hospital during 2019. The mean pre-hospital time (999-call to hospital arrival) was 92.2 (±18.6) minutes. 18 (94.7%) AAs routinely carried blood products, including combinations of red cells, thawed plasma, freeze-dried plasma, and fibrinogen concentrate, table 1. The mean units of red cells and plasma carried were 2.6 (±0.9) and 3.0 (±1.1) respectively.

Abstract 1767 Table 1 Blood component combinations carried by UK Air Ambulances in 2019, *n*=19

Blood component combinations	Number of Air Ambulances (% of total)
Red cells and freeze-dried plasma	7 (36.8%)
Red cells and thawed plasma*	6 (31.6%)
Red cells only	3 (15.8%)
Freeze-dried plasma only	1 (5.3%)
Red cells in thawed plasma (RCP)**	1 (5.3%)
No products	1 (5.3%)

* One air ambulance carried fibrinogen concentrate in addition to a combination of red cells and thawed plasma. ** RCP was being carried as part of a feasibility trial during 2019.

709 (5.8%) adult patients received a prehospital transfusion, of which n=669 (94.4%) had a traumatic aetiology; n=384 (57.4%) and n=183 (27.4%) were transfused ≥2 and ≥4 units respectively. Forty adults received prehospital blood for non-traumatic aetiologies, including: n=18 vascular, n=10 gastrointestinal, n=6 obstetric, n=6 other. In addition, n=24 paediatric patients received a prehospital transfusion; n=23 (95.8%) following trauma.

Fifteen (79.0%) UK AAs surveyed wanted to take part in future research investigating the effectiveness of whole blood transfusion.

This survey defines current pre-hospital blood transfusion practice in the UK. The majority of AAs carry a combination of red cells and plasma, which are predominantly utilised following traumatic injury. Over three-quarters of UK AAs showed interest in participating in future whole blood research.

1790 LONGITUDINAL COAGULATION PROFILES IN PATIENTS PRESENTING WITH ACUTE SEVERE TRAUMATIC BRAIN INJURY (TBI): A PROSPECTIVE OBSERVATIONAL STUDY

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Aims, Objectives and Background Patients who have sustained a traumatic brain injury (TBI) can have disturbances in coagulation that are distinct from other traumatic bleeding states.1 Coagulopathy is a risk factor for exacerbation of the primary injury, and these patients have less favourable outcomes and increased mortality compared to non-coagulopathic patients.1 Little is known about the longitudinal coagulation changes following TBI.

The aim of this pilot study was to investigate the coagulation profiles of patients presenting with severe TBI over the first 7 days following injury.

Method and Design Design: Prospective observational study

25 patients presenting to an UK major trauma centre with TBI between August 2021-March 2022 were recruited <24 hours following injury. Professional and family consultee assent was gained and serial blood samples were collected up to three times per day up to day seven.

Coagulation was assessed using thromboelastographs (TEGs) and conventional coagulation tests including Hb, Plt, PT, aPPT and fibrinogen. Pre-hospital, clinical, laboratory and imaging data were collected during the patient admission.

Coagulopathy was defined as having an INR >1.2. The longitudinal changes in the coagulation parameters were plotted for the first seven 7 days and graphically represented. This is a pre-liminary analysis.

Results and Conclusion 25 patients with severe TBI (GCS <12) were recruited. Patients were stratified by their admission INR. 18 patients had an admission INR <1.2 (62% n= 18), and 7 had INR >1.2 (38% n=7). 7 patients who did not have INR >1.2 on their first admission blood test later developed coagulopathy (with an INR >1.2).

Further exploration of the trends seen in conventional coagulation tests and TEG's over time is required and to understand how these changes correlate to the clinical and imaging findings. The utility of viscoelastic studies such as