by panel adjudication. Quantitative expression of 29-signature mRNAs was measured on a NanoString nCounter® SPRINT system. The classifier BVN version 3 (IMX-BVN-3) was applied to generate scores, which fall into four discrete interpretation bands (very unlikely, unlikely, possible, very likely). Sensitivity, specificity, and corresponding nominal likelihood ratios were calculated with 95% confidence intervals for each interpretation band.

Results and Conclusion 360 patients (54.4%) were consensus adjudicated to have a bacterial infection (range: 37.9–81.2%) and 153 (23.1%) to have a viral infection (range: 15.3–44.1%). Pooled likelihood ratios of the interpretation bands for bacterial infections were (from 'very unlikely bacterial' to 'very likely bacterial') 0.082 (0.039–0.176)/0.333 (0.264–0.419)/2.244 (1.598–3.152)/9.459 (5.808–15.404), associated with a rule-in specificity of 0.947 (0.915–0.967) and a rule-out sensitivity of 0.981 (0.960–0.991) in the outer interpretation bands. Pooled likelihood ratios of the interpretation bands for viral infections were (from 'very unlikely viral' to 'very likely viral') 0.182 (0.102–0.324)/0.292 (0.181–0.471)/0.956 (0.593–1.540)/6.021 (4.636–7.821), associated with a rule-in specificity of 0.884 (0.853–0.909) and rule-out sensitivity of 0.928 (0.876–0.959).

The IMX-BVN-3 classifier exhibits strong performance in a combined cohort of patients from different geographies and settings to rule-in and rule-out patients presenting to EDs with suspected bacterial and viral infections.

1456 FATAL PROPRANOLOL OVERDOSES REPORTED TO THE UK NATIONAL POISONS INFORMATION SERVICE (NPIS) OVER 5 YEARS 01/01/2017–31/12/2021

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Aims, Objectives and Background Propranolol is widely prescribed and between 2007 and 2017 dispensing in the UK increased by some 41%. In the same period, deaths in England and Wales following propranolol overdose increased by 205%.

Method and Design We retrospectively reviewed cases of fatal propranolol poisoning reported to the UK NPIS, between 01/01/2017 and 31/12/2021 to understand the demographics of these exposures, the doses involved and treatments administered.

Results and Conclusion There were 46 fatalities (aged 14–70 years) with 57% (n=26) of them being less than 40 years of age, and the majority of these being female (77%; n=20). Thirteen cases involved propranolol only and in the 33 cases of mixed overdose the mean number of co-ingestants was two, with a maximum of 13. An antidepressant was co-ingested in 21 cases. The reported dose of propranolol ingested was documented in 23/46 cases, median 3,200 mg (IQR 1,920–4,480 mg) and in three patients exceeded 7,000 mg. Cardiac arrest prior to contact with the NPIS was recorded in 41/46 cases. Fourteen (34%) occurred in hospital and twenty-three out-of-hospital (56%). Patients received: sodium bicarbonate (n=30, 65%), glucagon bolus and/or infusion (n=38, 83%), high dose insulin/dextrose (n=36, 78%), inotropes or vasopressors (n=36, 78%), intralipid (n=25, 54%) and ECMO was commenced in two cases. The dose of insulin administered was known in 15 cases (median dose 4 unit/kg/hour). Doses more than or equal to 8 unit/kg/hour were given in 7 cases (maximum 10 unit/kg/hour in three cases).

Young adults particularly females accounted for the majority of fatalities. In almost half of all cases an antidepressant was co-ingested. Clinicians should be aware of the potential for rapid deterioration and severe clinical outcomes following propranolol overdose. Rapid access to expert clinical advice is available through the National Poisons Information Service and is strongly recommended in order to optimise use of available treatments.

APEM Lightning Papers

1655 THE 'CCHILDS' SCREEN: A PRACTICAL GUIDE TO A CONSULTATION WITH REFUGEE AND ASYLUM SEEKING CHILDREN WITHIN THE PAEDIATRIC EMERGENCY DEPARTMENT (PED)

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10.1136/emermed-2022-RCEM2.31

Aims, Objectives and Background The number of refugees worldwide has increased, especially in recent times, due to wars, political instability and economic insecurity with Iran, Eritrea, Albania, Iraq and Syria being the top five countries for asylum applications. Consequently, there are increasing numbers of refugee and asylum-seeking children entering the

Abstract 1655 Figure 1

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United Kingdom who face significant barriers to accessing healthcare services. These children often face health risks and therefore have complex health needs. Hence, it is vital for healthcare professionals in the emergency department to adopt a holistic approach to their care as this can have widespread positive implications beyond their clinical presentation and may shape their transition into a new country. This opinion article was undertaken with the aim of highlighting and summarising current best practice recommendations for addressing the needs of this complex patient group.

Method and Design A step-by-step screening tool (figure 1), CCHILDS (Communication, Communicable diseases, Health – physical and mental, Immunisation, Look after (safeguarding), Deficiencies, Sexual health) was formulated. This was created following a review of the literature, consultation with paediatric emergency clinicians and the use of current protocols in related disciplines (e.g. HEADDSS assessment tool). This tool can be used in the emergency setting by healthcare professionals in the assessment of refugee and asylum-seeking children and can serve as an aide memoire to cover the key aspects of a consultation.

Results and Conclusion This opinion article summarises three main aspects in the assessment of a refugee or asylum-seeking child in the paediatric emergency department. Firstly, the key considerations regarding the child's background prior to entering the UK and the barriers they may encounter to accessing healthcare. Secondly, the healthcare assessment upon arrival to the emergency department and a framework that could be used for clinical assessment. Finally, the consideration of their long-term healthcare needs and the importance of empowering these young individuals to lead a healthy lifestyle.

1657 TRAUMA IMAGING APPROPRIATENESS IN PAEDIATRIC PATIENTS CONVEYED TO A TRAUMA UNIT COMPARED TO A MAJOR TRAUMA CENTRE – A RETROSPECTIVE OBSERVATIONAL STUDY

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Aims, Objectives and Background Appropriate and timely imaging improves trauma outcomes. In adults, the default is whole-body computed tomography (CT). However, in children more selective imaging should be used. In those requiring CT, the national standard is imaging ≤30mins of arrival. The aims of this study were to compare appropriateness of CT and time to initial CT in paediatric trauma patients conveyed directly to a major trauma centre (MTC) with those initially treated in a trauma unit (TU) and then transferred to an MTC.

Method and Design A retrospective observational study in the East of England MTC (2015–2020). All paediatric trauma patients meeting Trauma Audit Research Network (TARN) criteria who arrived at the MTC ≤24hr of injury and underwent CT imaging within 12 hours of arrival were included.

Abstract 1657 Table 1 CT appropriateness and timing associated with transfer status at a single MTC

	Primary Attendance to MTC	Secondary Transfer to MTC
CT <12 hours of hospital arrival/*n*(%)	93 (41%)	136 (59%)
Age in years/median [IQR]	9.8 [5.4 – 14.1]	9.3 [3.5 – 13.8]
Male sex/n (%)	58 (62%)	96 (71%)
Injury Severity Score/median/[IQR]	18 [10 – 29]	16 [15 – 25]
Hospital arrival to first CT interval (minutes)/median [IQR]	35 [26–75]	75 [47–108]
CT whole body (% of CT at TU/MTC)	47 (51%)	47 (35%)
CT focussed (% of CT at TU/MTC)	46 (49%)	89 (65%)
CT appropriate (% of CT at TU/MTC)	77 (83%)	104 (76%)

Abbreviations: CT = Computed Tomography; IQR= Interquartile Range; MTC = Major Trauma Centre; TU = Trauma Unit.

Data were obtained from the MTC trauma office and clinical records were independently reviewed by two authors. The Royal College of Radiologists guideline for paediatric trauma was used to assess the appropriateness of the CT imaging strategy.Combined data were stored in a Microsoft Excel sheet and analysed in Prism 9 for macOS (GraphPad). Data are reported as number (percentage), and median [inter-quartile range]. Proportions were compared with a Fisher's Exact test; differences between median values were compared with a Mann-Whitney U test.

Results and Conclusion In the study period n=315 patients were identified. 229 (72.7%) underwent CT <12hrs and were included in the analysis: n=93 MTC, n=136 TU, table 1. CT imaging was judged as appropriate in n=77/93 (82.8%) MTC and n=104/136 (76.5%) TU scans, p=0.32. The median time to first CT was 35.0 [26.0–75.0] minutes MTC, and 76.0 [48.0–109.0] minutes TU, p<0.0001.

We have demonstrated room for improvement in paediatric CT trauma imaging appropriateness across the network, but this is not significantly different between the MTC and TUs. However, time to initial trauma CT was significantly shorter in the MTC.

1804 SURVEY OF DISCHARGE PRACTICE AND REVIEW OF SAFETY-NETTING INSTRUCTIONS FOR CHILDREN ATTENDING EMERGENCY DEPARTMENTS IN THE UK & IRELAND WITH ACUTE WHEEZE OR ASTHMA: A PERUKI STUDY

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Aims, Objectives and Background Acute wheeze is one of the commonest reasons for childhood Emergency Department (ED) attendances. Ongoing recovery following discharge should be supported with robust safety-netting advice including advice for ongoing bronchodilator use. Evidence for recovery bronchodilator dosing is lacking, likely leading to variation in advice across the UK and Ireland.

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