There are many implications of using an estimated weight, including errors in drug doses, fluid bolus, maintenance fluids, ventilator settings and assessment of urine output. In this cohort the estimated weight that followed them throughout their admission has implications on their immediate resuscitation and extended inpatient care and highlights the importance of obtaining an accurate weight at the time of arrival.

What can we do differently? We have implemented the use of a pat-slide weighing scale by *MARSDEN* to get an accurate weight from time of arrival. This device enables a rapid weight to be obtained during patient transfer to the trolley.

G246(P) 'SEE IT, EAT IT, A&E IT' – ACCIDENTAL POISONINGS IN A PAEDIATRIC EMERGENCY DEPARTMENT

¹A Norton, ¹T Malik, ²M Naravi. ¹School of Medicine, University of Leeds, Leeds, UK; ²Emergency Department, Bradford Royal Infirmary, Bradford, UK

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Aims Many common household items, which may not be perceived as 'poisons', can have serious consequences if ingested by a curious toddler. Between 2012/13 – 2016/17, 25,591 children under five were hospitalised for accidental poisoning in England. Unfortunately, recent UK data is scarce and focuses mainly on fatal poisonings. This study aimed to understand the aetiology of all accidental poisonings presenting to a single Emergency Department (ED), in order to guide preventative advice.

Methods Electronic patient records were searched for children under 16 attending a paediatric ED with a coded diagnosis of 'Accidental Poisoning' over an eight-month period. Sixty four cases were identified for analysis.

Results Most cases (84%) occurred in children under five but accidental poisoning was most prevalent in children aged one year (34%). Medications were responsible for half of all poisonings (51%) and household products responsible for 33%. Medication was usually intended for the child themselves (31%), the child's parents (22%) or grandparents (22%). Two children had previous admissions for accidental ingestion in the four months prior to the study. Children were generally clinically well. Thirty percent were discharged directly from the ED and the average length of hospital stay was 8 hours 18 minutes. Only one child was hospitalised for over 24 hours. Four children (6%) required active treatment for poisoning. Safeguarding concerns were documented in 6% of cases and referrals to Health Visitors were suggested in 39%. Families were given advice on preventing poisoning in 44% of cases.

Conclusions Accidental poisoning is a common cause of paediatric ED attendance, but cases are generally mild, requiring only a period of observation and limited investigations. Children presenting with accidental poisoning are at risk of further poisoning, yet strategies within the ED to prevent future incidents are variably applied. The young age of children suggests that unsafe storage plays an important role in the causation of accidental poisoning, so preventative strategies should focus on educating families, including grandparents, on safe storage of medications and other poisons. Health Visitors should be involved in the assessment of the home environment and an information leaflet should be distributed to all families.

G247(P) VENTILATOR ASSOCIATED PNEUMONIA- ARE WE (UNDER) ESTIMATING?

¹P Khemka, ¹R Thomas, ²S Thompson. ¹Pediatric Critical Care Unit, Sheffield Children's Hospital, Sheffield, UK; ²Microbiology, Sheffield Children's Hospital, Sheffield, UK

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Background and Aims Ventilator associated pneumonia (VAP) is the second most common healthcare associated infection and is associated with substantial morbidity, mortality, increased hospital stay and cost of healthcare. Despite this, VAP is often under recognized and under reported and there is a lack of data on VAP in UK children. We aimed to determine VAP rates in a tertiary Pediatric Intensive Care unit by tracing positive microbiological specimens for invasively ventilated patients.

Methods This was a retrospective observational study. All patients who were admitted to the pediatric critical care unit between 01/01/2017 to 31/12/2017 and invasively ventilated for more than 48 hrs were included. All positive respiratory tract specimens for the study period were identified and followed by a review of relevant case notes, nursing charts and investigations. Denominator data was collected from the hospital database. VAP was diagnosed using a combination of clinical, radiological and microbiological criteria adapted and simplified from Centers for Disease Control pneumonia flowcharts for pediatric VAP diagnosis.

Results There were 8 microbiologically confirmed cases of VAP, and 2066 ventilator-days, giving a VAP rate of 3.8/1000 ventilator days. The positive microbiological specimen was endotracheal aspirate in all the cases. Few BALs had been performed and none were diagnostic of VAP. The causative agents in all these cases were bacterial; no fungal or viral pathogen was identified. Gram negative bacteria were identified in 7 out of 8 cases (87.5%), *Escherichia coli* being most common (3 cases), followed by *Haemophilus influenzae* (2), *Pseudomonas aeruginosa* (2) and *Staphylococcus aureus* (1 case). Mero-penem or piperacillin-tazobactam were used for treatment in nearly all cases (7/8). VAP was diagnosed and recorded contemporaneously in only 1 of 8 patients.

Conclusion This study defined the VAP incidence in our institution. VAP cases without microbiological confirmation were not detected and the incidence is therefore likely to be an underestimate. Prospective surveillance using clinical criteria is planned. VAP cases were associated with very broad spectrum antibiotic use in our population. Surveillance for, and interventions to prevent, VAP will be beneficial from an antimicrobial stewardship perspective.

G248(P) INTRODUCING LIVE WAITING TIMES ONLINE AS A SERVICE IMPROVEMENT FOR THE PAEDIATRIC EMERGENCY DEPARTMENT (PED)

¹V Menon, ²C Wong. ¹Foundation Doctor, Queen Elizabeth Hospital, University Hospitals Birmingham, Birmingham, UK; ²Paediatric Emergency Department, Warrington and Halton Hospitals NHS FT, Warrington, UK

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Aims Waiting times in Emergency Departments (ED) is a national problem. Using advancements in technology current live ED waiting times can be made available to the public, so that patients can decide whether to attend an ED or are better off seen in the community.

Currently the hospital website displays live wait times for the adult ED but not for paediatric ED (PED). Seeing as the PED works as a separate entity to adult ED, it beckons the question, 'Is there a need for live PED wait times to be displayed to the public?' with the aim to introduce a service improvement to provide the information if required.

Methods This audit comprised of a mixed methods analysis. The audit recruited accompanying adults of child attendees at the hospital's PED. A questionnaire discussed the use of any other healthcare services and any existing knowledge of current wait times. Analysis included descriptive statistics and cross tabulation with χ^2 test of independence.

Results Sixty participants completed the questionnaire. 53.2% had not used any other healthcare service before arrival. 93.5% did not know the wait time before attending and 77.4% answered it would be useful to know. More than 60% said that had they known that the website was providing information on wait times they would have checked it before coming to the ED. The association between displaying wait times online and checking the hospital website before attending was significant, χ^2 (1, N = 61) = 6.18, P = 0.01.

Conclusion This audit recognised the need to add PED live waiting times onto the hospital website as a service improvement.

The advantages to knowing about current PED waiting times include:

- Choosing to attend ED if the problem was urgent, or seek help from other services
- Reduced attendance reduces the number of breeches and pressure on the department
- Happier patients who at least know what to expect before attending
- Incorporation of live wait times on the hospital website for the PED is currently being designed.

G249(P) ABSTRACT WITHDRAWN

G250(P) A RETROSPECTIVE STUDY EXAMINING THE EFFECTIVENESS OF DIFFERENT DEXAMETHASONE DOSES IN CHILDREN PRESENTING TO EMERGENCY DEPARTMENTS IN THE NORTHWEST

¹CE King, ²CW Wong. ¹Department of Surgery, Liverpool University Hospital Trust, Liverpool, UK; ²Emergency Department, Warrington Hospital, Liverpool, UK

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Background Croup is a common childhood illness, three per cent of children are diagnosed each year. It is usually a self-limiting illness; however, it creates a large burden on the healthcare system particular emergency departments. The use of steroids has been shown to improve clinical symptoms in children when compared to a placebo. The current guidelines advise the use of dexamethasone, with dosage having recently changed from 0.6 mg/kg to 0.15 mg/kg. However, not all emergency departments have updated their local protocols.

Aim The aim of this study was to examine retrospective data from paediatric emergency departments in the North West of England examining the efficacy of current dexamethasone doses used in the management of croup in the different departments.

Methods This was a multicentre retrospective chart review conducted in paediatric departments in both secondary and tertiary centres in the North West of England. Data was collected between November 2017 to December 2018, with patients aged between 0–18 years eligible to be included. Eligible patients had to match the inclusion criteria of having a clinical diagnosis of croup. The primary outcome was reattendance to the emergency department with the same aetiology.

Results There were three sites that submitted data with a total of 175 patients, of these 170 had received a dose of dexamethasone in the emergency department. Croup severity was classified in 128 of patients, with the 78% being classified as mild croup. Of the patients given dexamethasone, 44% were given a dose of 0.15 mg/kg with seven patients reattending, 12% had 0.3 mg/kg with three reattendances, and 44% were prescribed 0.6 mg/kg with three reattending. There was no clinical significance between the different doses of dexamethasone and likelihood to reattend.

Conclusion This retrospective study emphasises that patients can safely be prescribed a lower dose of dexamethasone as a single dose for the management of croup and that local departments in the North-West should move to adopting 0.15 mg/kg as their standard dose in their croup management guideline in line with current NICE guidelines.

G251(P) WHICH CALCIUM IS BEST IN PAEDIATRIC RESICITATION? CALCIUM CHLORIDE VERSUS CALCIUM GLUCONATE FOR THE TREATMENT OF HYPOCALCEMIA IN ACUTE SETTING: AN EVIDENCE BASED SYSTEMATIC REVIEW

^{1,2}C Kanaris, ³A Janjanam, ³S Palaniappan. ¹Paediatric Intensive Care Unit, University Hospital North Midlands, Stoke-on-Trent, UK; ²North West and North Wales Transport Service, Manchester University FT, Warrington, UK; ³Paediatric Intensive Care Unit, Royal Manchester Children's Hospital, Manchester University FT, Manchester, UK

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Introduction/Objective A 2-year-old girl admitted with severe Group A streptococcal septic shock was resuscitated with blood products and polyinopressor support. She had persistent refractory hypocalcaemia despite multiple corrections with calcium gluconate which prompted us to do a systematic literature review for evidence regarding the usage of Calcium Gluconate and Calcium Chloride in the management of acute hypocalcemia, especially to ascertain if one confers a faster rise in iCa when used in an emergency. Secondary objectives we looked at included the pharmacokinetic basis, therapeutic efficacy, adverse event profile and physiological implications, again intending to clarify if there should be a clinical preference of one over the other in emergencies.

Methods Literature review using Cochrane library, Embase and Medline OVID interface. Papers published between January 1980 and October 2019

Results It is purported that Calcium Gluconate requires hepatic metabolism to release ionised Calcium, precluding its use in conditions of shock, cardiac arrest and hepatic impairment, presumably due to lower bioavailability and suboptimal biochemical effect. On the other hand, it is suggested that Calcium Chloride supposedly has rapid ionisation time, and could, in theory, provide ionised Calcium more quickly. This physiological reasoning is why historically, Calcium Chloride has been preferred in clinical situations where a rapid iCa is required like the scenarios mentioned above. However, the