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G249(P) ABSTRACT WITHDRAWN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

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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 RESUSCITATION? CALCIUM CHLORIDE VERSUS CALCIUM GLUCONATE FOR THE TREATMENT OF HYPOCALCEMIA IN ACUTE SETTING: AN EVIDENCE BASED SYSTEMATIC REVIEW

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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

evidence for this seems to be mixed and inconclusive. Additionally, Calcium Chloride appears to be worse an irritant comparatively and is more likely to cause tissue necrosis with extravasation, thereby rendering Calcium Gluconate a safer option when used peripherally.

G252(P) ABSTRACT WITHDRAWN

G253(P) 4HS AND 4TS – COULD YOU MANAGE THEM ALL?

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Background Cardiac arrests, although rare in Paediatrics, are extremely high-pressure, high-stakes situations. Identifying any reversible causes, commonly referred to as the 4Hs and 4Ts, is an important step in the management of cardiac arrest. Ascertaining the cause more quickly has the potential to improve our currently poor outcomes.

Aim To evaluate how quickly and accurately healthcare professionals can recall the reversible causes of cardiac arrests and their ability to narrate the management of each of these.

Methods Using a standardised proforma, 38 APLS providers (nurses, APNPs, junior doctors and consultants) were asked to recall the 8 reversible causes of cardiac arrest whilst being timed. Next, they were asked to describe management of each. Participants were told this was a competition and therefore asked not to discuss with others.

Results Only 12 of the participants were able to recall all 8 reversible causes with their times ranging from 16 to 95 seconds. There was little correlation between seniority or experience of cardiac arrests with ability to recall all 8 causes; half of those able to recall all causes were foundation or ST1–3 level doctors. The order of recall was also recorded. Despite hypoxia and hypokalaemia being the most common causes, tamponade was the most commonly recalled (86.6%) in this survey. Qualitative data showed that overall participants were able to manage hypoxia, hypovolemia, and hypothermia with some confidence but were less able to describe management of the remaining causes.

Conclusion Healthcare professionals are not always able to recall all reversible causes, and as such there is potential for delay in cause identification in emergency situations. A simple aide-memoire has the potential to improve speed of identification of cause of arrest and possibly save lives and improve outcomes. This is being developed to trial locally.

G254(P) INCIDENCE OF FIREWORK RELATED INJURIES AT ROYAL HOSPITAL CHILDREN FOR GLASGOW

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Aims and Objectives

- Annual incidence of firework related injuries from 2015–2018. (Injuries included those sustained from fireworks, sparklers and bonfires.)

- To assess if incidence of firework related injuries is increasing.
- To assess relationship between firework injuries and SIMD index

Methods Data was collected from nurse led burns clinic attendees and A&E attendees between 31st October and 10th November from 2015–2018. The type of injury; site of injury; age when injured; gender; severity of burn; and postcode were collected. Postcode data was then inserted into Scottish Index of Multi Deprivation Index (SIMD) database to extract SIMD index.

Results 30 children were injured by fireworks, sparklers or bonfire between 2015 and 2018, 9 females and 21 males. Ages ranged from 2–15 years. The most common body part injured was the hand (n=17) and the majority of injuries happened on bonfire night (n=16). Fireworks injured the most people (n=18), followed by sparklers (n=8) and then bonfires (n=4). The majority of injuries were superficial (n=15). Firework related injuries also seem to be on the increase, and this is depicted in table 1 below. Lower SIMD indices had higher indices of burns (p=0.0015) and this is depicted in table 2.

Abstract G254(P) Table 1

Injuries per year	Frequency
2015	4
2016	7
2017	6
2018	13

Abstract G254(P) Table 2

Injuries by SIMD Quintile	Frequency
SIMD 1	14
SIMD 2	6
SIMD 3	4
SIMD 4	5
SIMD 5	0

Conclusions Firework related injuries increased by almost double in 2018 compared to 3 previous years. Lower SIMD quintile ranking also had significantly more firework related injuries. This could suggest a link between deprivation and likelihood of firework injury. This information could be used to target more deprived areas with firework safety campaigns, as well as overall increase in campaigning in 2019 to assess if injuries can be reduced in 2019.

G255(P) FROM A&E TO THE COMMUNITY, PARENTS LEARN TOGETHER THROUGH ABC

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Problem and Aims Our A&E department assesses 45,000 children every year, 40% of these could be self-managed or treated in primary care. This proportion of inappropriate presentations