who were coagulopathic on admission versus 3.2% (range 0%–6%) in those with normal coagulation studies. Data regarding risk factors and additional outcomes such as transfusion requirements and thrombosis were limited.

Conclusions Acute traumatic coagulopathy is present in around one third of severely injured paediatric patients and is associated with increased mortality, particularly in individuals with isolated brain injuries. The incidence of the condition in the wider paediatric trauma population who do not require admission to intensive care remains largely unknown but may be less common. There was limited data regarding the risk factors and additional outcomes associated with acute traumatic coagulopathy.

G333 RAISE STUDY; A MULTICENTRED STUDY OF INFANTS PRESENTING TO UK EMERGENCY DEPARTMENTS THAT ARE INVESTIGATED FOR SKULL FRACTURES

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10.1136/archdischild-2018-rcpch.323

Background Head injury in a young child is a common presentation to emergency departments. Skull fractures in young children often generate concern regarding possible non-accidental injury (NAI). Guidelines produced by the Royal College of Radiology recommend a skeletal survey and CT head in children under 2 years of age, if abusive head injury is suspected. We hypothesise that there are significant variations in practice across the UK with regards to radiological investigations performed, safeguarding referrals, assessments, and follow up.

Methods All hospitals within the PERUKI network were invited to submit data. The study population were children under 2 years who presented to the emergency department and underwent radiological investigation for a suspected skull fracture. Retrospective data was collected for presentations between January 2012 to December 2014 inclusive. Data was collected on the purported mechanisms for the injury, clinical findings, the investigative processes undertaken and subsequent follow-up.

Preliminary results 20 UK emergency departments submitted data. Data was collected for 1583 infants who underwent radiological imaging for a suspected skull fracture. 478 of these (30%) had a confirmed skull fracture. 107 (7%) had a likely or definite cause of NAI. Data analysis is ongoing; by February 2018 we will have results of variations in practice across the UK, demographics on event information, symptoms, signs, investigation results of children investigated for skull fractures, and statistical differences in the subgroups of 'no fractures found', 'fractures', and 'fractures likely caused by NAI'.

Conclusion This study will create an extensive database of children less than 2 years old presenting to emergency departments that were investigated for skull fractures. The study aims to produce evidence to inform guidance, enhance clinical decision making in determining the likelihood of skull fractures being found, and NAI as the underlying cause for the skull fracture.

G334 TAKING THE 'OUCH!' OUT OF EMERGENCY: USING ILLUSTRATIVE AND DIGITAL ARTS TO GUIDE, REASSURE AND ROLE MODEL BEHAVIOURS AT THE CHILDREN'S EMERGENCY DEPARTMENT, EVELINA LONDON CHILDREN'S HOSPITAL

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10.1136/archdischild-2018-rcpch.324

Background Visiting the Emergency Department (ED) can be an emotive and stressful time for children and their families. A rebuild of The Children's Emergency Floor at Evelina London saw the space transformed to create an environment to help with the delivery of healthcare. Breaking away from traditional fantasy graphics, a new art-scheme aims to bring reassurance and stimulation to families and children, role-modelling behaviours and acceptance.

Clinicians worked alongside 'Art In Site', using interactive storytelling to demystify the service. After conducting an environmental psychological study, the design team observed the workings of the department and held workshops with staff, psychologists, patients and families, forging strategic and design prototypes. The project was funded by Guy's and St Thomas's Charity and the art-scheme was installed in late 2016.

Outcomes The project incorporates the following features:

- 'Information Slices': strategically placed text, informing patients at points of need, in simple, jargon-free language.
- A 'gang' of illustrated characters feature in an interactive app, helping demystify the Emergency process through:
 - Interactive animations explaining common procedures
 - Stories depicting common causes of visits to ED
 - Interactive X-ray visualisations of broken bones (and how they'll be fixed)
 - Advice to teens on healthy-living, sexual and mental health
 - Parental advice about accident prevention and managing illness at home
- Characters integrate with the environment, 'popping out' from doorways, across walls, creeping onto ceilings, and appearing on stickers given to children. They function as information-givers throughout the patient journey.
- 'Bodypaint': a digital interactive installation projected onto a waiting room wall. Dynamic colours and shapes move in response to body movements.

A detailed evaluation is underway but the new scheme has been transformative. The waiting room is calmer, and children and families have a better understanding of their journey through ED. Stress and anxiety have reduced with a subsequent improvement in efficiency.

Conclusions Characters in apps and digital art can role-model clinical scenarios for children. This increases efficiency by reducing anxiety and improving interactions between clinicians, children and their families. Modelling other scenarios, such as common accidents, has potential to educate children and families and may have longer-term public health benefits.