and electronic records were checked to see if this imaging took place.

**Results** 246 children had a skeletal survey as part of a child protection investigation in our hospital. 41 of these were excluded as they were referred from another health board to tertiary services in the hospital and follow up notes could not be accessed. Of the remaining 205 children 170 (83%) received either a follow up skeletal survey or chest X-ray at 14 days. A new injury was identified in 28 (13.7%) of children who underwent recommended imaging as part of a child protection investigation. The initial skeletal survey identified a new injury in 23 (11.3%) children, a further 5 (2.4%) children had injury demonstrated on secondary imaging with negative first skeletal survey. Of the 170 children that underwent follow up imaging a new fracture was found in a total of 11 (6.5%) cases (5 where original skeletal survey was negative; 6 where original skeletal survey was positive).

**Conclusion** Adherence to local and national standards could be improved, with 35/205 (17%) of children not having had follow up radiological imaging. The positive results from skeletal survey (13.7%) and follow up imaging (6.5%) suggests that these investigations have an important role in the assessment and identification of potential abuse.

**G146 CAN A VIRTUAL REALITY COMMUNICATION SCENARIO BE USED TO TEACH GENERAL PRACTITIONERS AND TRAINEES HOW TO RECOGNISE AND MANAGE SAFEGUARDING ISSUES?**

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**Background** Immersive reality has been demonstrated to be an exciting educational tool in clinical consultations. Research groups internationally continue to explore new uses for this technology.

Safeguarding is a challenging area of practice where we must listen to the child, and tackle difficult conversations with parents. As it is unethical to ask children to role play being abused, computer generated characters could have a key role in educating healthcare professionals on how to manage difficult scenarios.

**Aim** To assess the interaction between doctors and a vulnerable child in a virtual reality safeguarding scenario.

**Methods** All doctors at several local GP practices were offered inclusion in the study in early 2017. They were placed in an immersive virtual reality consultation where we tested their ability to pick up covert safeguarding cues within a consultation with an adult patient.

After the consultation, they typed up their notes electronically as they would in their day-to-day practice. We have analysed their videoed consultations with the child and used a team of experts to rank their notes on how well they managed the safeguarding concern.

**Results** We recruited 63 participants in total; 37 GPs and 26 trainees, and 73% identified the safeguarding element of the consultation.

Following the consultation only 14% of GPs identified asking the vulnerable child in the scenario about his relationship with his father. Negative responses ranged from comments such as ‘No, I thought the ‘agenda’ item was the letters’ to ‘I could/should have asked him directly if everything was ok at home’ to ‘I wasn’t sure that I should ask Tom questions without a parent present as he is only 6’.

**Conclusion** The fact that 73% of participants identified the safeguarding element shows that it was identifiable within the consultation and highlights the usefulness of immersive reality as a training tool.

However, it also demonstrates a need for further training to increase the recognition rate. The range of interactions with the child demonstrates that some GPs are clearly skilled at interacting with children and others less confident. Their videoed virtual reality consultations would be a useful safeguarding training tool.

**G147 REVIEWING CHILDHOOD DEATHS VIA ELECTRONIC HEALTH RECORDS AND WIDER DATA LINKAGE**

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10.1136/archdischild-2018-rcpch.143

**Aims** The Child Death Reviews Working Group Report (Scottish Government, 2014) recommended that a national review system is implemented across Scotland. NHS Scotland does not currently have one system that captures data of all children who have died. The aim of the present study is to review childhood deaths, within one health board in Scotland, through analysing data from Electronic Health Records (EHR) and wider sources.

**Methods** A mixed-methods case series analyses approach was adopted within a constant comparison framework. EMIS is an EHR system implemented within this board three years ago. It captures health data of all patients 0–5 years and patients 6 years and over referred to Specialist Children’s Services. EMIS data of deceased patients (0–19 years old) within one Scottish health board, who died between July 2015 and September 2017, were analysed alongside data from wider sources including the Specialist Child Protection Service (SCPS).

**Results** Between July 2015 and September 2017, 156 children (m=87, f=69), aged between 0 and 19 years old were recorded as deceased within EMIS. 57.7% of the children died before their first birthday and 89.7% were known to at least one NHS service. None were known to the SCPS. Preliminary analyses suggest that an age ×environment interaction exists, with the highest death rates observed in infants who resided within decile 1: postcode areas of highest multiple deprivation (SIMD, 2016).

**Conclusions** The study represents this health board’s first step in establishing a systematic and robust analytical process to review child deaths via EHR and wider data linkage. The findings demonstrate the potential that this approach offers in building a comprehensive understanding of why a child has died, what risk factors were known and how this knowledge can better protect children in the future. The analyses also suggest that gene ×environment vulnerabilities may exist and that particular age-groups require greater support to protect
their survival outcomes. Limitations of the study are acknowledged and recommendations for future research proposed.

**G148(P)**

**AUDIT OF LONG BONE FRACTURES AND SAFEGUARDING ASSESSMENT IN CHILDREN UNDER 3**

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10.1136/archdischild-2018-rpch.144

**Aims**

Approximately 1/3 of all children will sustain a fracture before they turn 16 years old. Most are accidental but some are due to abuse, with the youngest child at highest risk. We sought to assess how robustly such young children presenting to the Emergency Department (ED) in our Trust are assessed for abuse.

**Methods**

Both authors reviewed the notes for all children aged <3 years attending ED with a lower limb long bone fracture during a 12 month period 2016–2017 (36 cases).

**Results**

34 had appropriate safeguarding information completed at Triage. In 75% of cases, the ‘mandatory’ Safeguarding Questions on the ED card were completed by the doctors. Only half of the assessments included a comment about development. 8 had ‘high risk’ injuries by radiological type—all were spiral fractures however none were under 12 months of age. The authors were concerned about 2 of these cases which either contained insufficient information or were not discussed with paediatrics when the mechanism was not absolutely clear. Only 44% of children were fully examined. In several cases, there was disparity between the opinion given in ED and that of the reviewers. The authors felt that an extra 7 patients had potential safeguarding concerns and should have been discussed with paediatrics, with a further 6 cases where there might have been safeguarding risk but information was insufficient. Interestingly, however, all eight who were seen by paediatrics were felt to be accidental or due to an underlying condition (two had genetic bone disorders and one had rickets). In several instances, the expected actions from the reviewers were not completed—see table 1.

**Conclusion**

Whilst some positives were demonstrated including some excellent individual assessments, use of interpreters and triage actions, the audit establishes the need for improvements in assessment of safeguarding risk.

**Table 1**

<table>
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<th>Social care check</th>
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<th>s/b Senior ED</th>
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**G149(P)**

**A REVIEW OF GENERAL PRACTITIONER ATTENDANCE AT CHILD PROTECTION CASE CONFERENCES**

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10.1136/archdischild-2018-rpch.145

**Background**

Paediatricians write Child protection medical reports when a child has a medical assessment as part of a section 47 enquiry where there are concerns of abuse or neglect. These reports are routinely shared with children’s social care and often shared with other safeguarding agencies. As such it is important that the written opinion and findings of paediatricians are clear and understood by all.

**Aims**

To review a selection of regional child protection medical reports and to analyse the readability and language used when stating opinion. The information was then used to undertake a multi-agency survey to explore how ‘what was being said’ was ‘being understood’.

**Methods**

5 Regional NHS trusts identified 88 child protection medical reports written between Jan 2016 to Jan 2017. These were analysed by a named safeguarding professional in each trust. This analysis included the extraction of statements used