Methods Retrospective data was collected on all children attending emergency department with triage complaint of chest pain using the Emergency department Information system.

Results 134 children were identified

Mean age: 11.66 years [range: 3–16 years]; 80 (60%) were male and 54 (40%) were females. Median duration of chest pain was 2 days and half of children presented within 48 hours of pain onset. Documentation was poor with no recorded history of cough, fever, or shortness of breath in almost half of the presentations. The following specific cardiac symptoms were not recorded; radiation to arm (73.9%), Radiation to back (76%), Dizziness (82%), Collapse (88%) and Palpitations (73%). No mention drug abuse in 100%

Most Common Diagnoses were Musculoskeletal 26.9%, Costochondritis 23.1% Idiopathic 14.1% and Pneumonia 8.2%. Only 1 child had cardiac diagnosis 0.8% required admission while 92% were discharged home. Conclusions Review of 1 year of ED visits revealed that CP in children is a reasonably common complaint and is associated with tremendous anxiety and resource utilisation. There is a need for better documentation of history and examination findings. Yield from Investigations is low and should be reserved for at risk patients. 100 patients aged 0–5 years with a temperature of > 38.0°C were reviewed the PISA and PEWS scoring on patients. The combined PISA and PEWS tool, in our study, when used for review and timely discharge of patients without inappropriate investigations.

Children’s Emergency Department’s (CED) are seeing an increasing number of primary care problems. The most worrying group are the febrile young children and the concern of a serious occult bacterial infection. We set out to analyse this group as a tool for future targeted education and support for our department, parents and primary care. Methods 100 patients aged 0–5 years with a temperature of > 38.0°C at presentation were reviewed. They were analysed using the febrile children NICE guidelines and assigned a risk group. LR: Low, IR: Intermediate and HR: High Risk. Results (see table)

The majority 61% were LR (59% 1–3 yrs, 29% < 1 yr). 68% were self referrals. 32% were GP referrals a third being LR and 82% were discharged home. 14% presented via ambulance. 57% were LR and 71% were discharged home. The majority had no investigations; a third of children in the intermediate and high risk still had no investigations. Of all diagnoses made, 46% were viral illnesses of which 74% did not receive antibiotics. 75% were discharged home with no investigations. The younger the children and the higher the risk group, the more likely that investigations would be performed. Of the 25% requiring admission 73% had no investigations. The majority of patients required review. Overall the commonest diagnosis was viral infection (46%) of which 26% still received antibiotics. Surprisingly there were almost 100% of patients that were vaccinated.

Conclusions Parents are concerned about fever in young children and present frequently straight to CED. GPs also refer many patients with fever whom are LR category. However, in CED these children still require senior review although the majority no do not get investigated and are discharged. This study has helped instigate a change in practice of the local GP practises to prioritise the <5 year olds and to re-open the primary care unit within the hospital grounds. It has also enabled us to provide more senior cover in CED for review and timely discharge of patients without inappropriate investigations.