pilot was carried out from 8 am-8 pm Monday to Friday. Data collected included time of arrival and assessment, admission rates, parental and staff satisfaction.

Results During Jan 2013 and April 2013 between 8 am-8 pm there was a total of 785 admissions. A retrospective analysis was carried out on 80 randomly selected charts. Ages ranged from 3 weeks to 13 years 9 months, with a median age of 3 years 5 months. 97% of patients were seen within 4 h of nursing triage with only 59% being reviewed by a senior doctor within the following 4 h of their initial medical review.

There were 100 APAU admissions during May 2013. Only 87 charts were available and audited. Ages ranged from 2 days to 14 years with a median age of 1 year 7 months. Common diagnoses included gastroenteritis and respiratory tract infections. 100% of patients were medically assessed within 4 h of nursing triage with 85% of patients being reviewed by a senior doctor within the following 4 h (p value 0.01).

Admission rates fell from 95% to 44% during the hours of 8 am–8 pm (p value < 0.0001). Staff impression of our facilities for managing direct admissions as good or excellent improved from 25% to 95%. Patient and parent feedback was excellent.

Conclusion We have shown that developing a model of acute paediatric assessment in a DGH setting can both reduce admissions and improve quality outcomes. Both physical infrastructure and funding remain issues for sustainability however we believe that this project demonstrates the value in investing in acute paediatric care.

## **Primary Care: Infections**

PS-364

## RELATIONSHIP BETWEEN SMOKING PARENTS AND HOSPITAL LENGTH OF STAY IN ACUTE BRONCHIOLITIS

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Background and aims The smoking parent is considered a risk factor of severity for acute bronchiolitis (AB). We aimend to evaluate the relationship between parental history of smoking and length of stay of infants hospitalised for AB.

Methods Prospective descriptive study including all infants admitted for moderately bronchiolitis, between 2011 and 2013. They were grouped in smoking parent or not. Severe bronchiolitis and patients with serious risk factors were excluded. The primary outcome was length of stay (LOS). The following variables were recorded: age, sex, atopic dermatitis, parental atopy, number of siblings, breastfeeding, RSV, treatment received, need for PICU, mortality and clinical score at admission.

Results Among the 137 enrolled infants, 56.2% had no smoking parent. There were no statistically significant differences (p > 0.05) between the two groups in the following variables: median age (40 vs 59 days), male gender (48% vs 53%), atopic dermatitis (6.7% vs 15.6%), breastfeeding (59.7% vs 53.3%), number of siblings (0.66 vs. 0.63) day care attendance (16.9% vs. 6.7%), severity score (5.35 vs 5.28), percentage of positive RSV (67% vs 65%) and PICU admission (7.8% vs 5%). There were statistically significant differences in parental atopy (p =

0.04). The median LOS in the smoking parent group was 3.33 days compared with 3.11 days in the other group (p = 0.239). Conclusions There are no significant differences in mean hospital stay among patients with moderate AB with or without a history of smoking parent. In our series smoking parent is not a severity risk factor for AB.

PS-365

## VALIDATION OF A CLINICAL SCALE IN ACUTE BRONCHIOLITIS

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Background and aims Most of clinical scales used in the assessment of acute bronchiolitis are not validated or are partial validated. The objective of this study is the validation of a clinical scale in the assessment of acute bronchiolitis (AB).

Material and methods Validation of a clinical severity scale in the context of a randomised, double-blind, clinical trial. 148 infants hospitalised with moderate acute bronchiolitis for 2 epidemics (2011–2013) were included. Demographics and clinical data were recorded. Different observers assessed all patients at admission and three times daily until discharge with Wood-Downes modifies by Ferres (WDF) scale. Mild bronchiolitis and those with severity risk factors were excluded. The primary outcome was the difference in the numeric rating scale since admission until were discharged from hospital or admitted to PICU. The collected variables were analysed using non-parametric tests. In all cases it was considered a significance level of 95%.

**Results** Mean age and range interquartílico [IQR] 1.5 months (1–3), 50% were male. The WDF scale in patients admitted to PICU was significantly higher (6 (4–8) vs 5 (4–8), p = 0.026). The WDF scale decreased an average of 3.87 points (95% CI, 2.5–6.5) from admission to the time of discharge.

Conclusions Our results suggest that the WDF scale is related to the severity and outcome of patients with acute bronchiolitis at admission and at discharge. It's change from admission to discharge, which show a clear decrease adequately, reflect good clinical evolution necessary for discharge home.

PS-366

ASSOCIATION OF TACHYCARDIA WITH SERIOUS BACTERIAL ILLNESS IN YOUNG CHILDREN AND ITS COMPARISON WITH RAISED C-REACTIVE PROTEIN AND WHITE CELL COUNT (WCC): OBSERVATIONAL STUDY

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Background and aims Diagnosis of serious bacterial illness (SBI) in children can be challenging despite it being endemic. Few studies have looked at clinical features and investigations in diagnosis of SBI. We compared tachycardia with C-reactive protein (CRP) and WCC to establish which is better for predicting SBI. Methods Prospective cohort study of children <6 yrs referred to an acute assessment unit with febrile illness (July 2012–March