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

¹JC Flores-Gonzalez, ¹B Serrano-Moyano, ²AM Lechuga-Sancho, ¹L García-García, ¹FJ Dávila-Corrales, ¹JJ Perez-Guerrero, ¹MA Matamala-Morillo, ¹RM García-Ortega, ¹P Rodríguez-Campoy, ¹E Palma-Zambrana, ¹P Comino-Vazquez. ¹Pediatrics Department, Hospital Universitario Puerta Del Mar, Cádiz, Spain; ²Cádiz University, Hospital Universitario Puerta Del Mar, Cádiz, Spain

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Background and aims The smoking parent is considered a risk factor of severity for acute bronchiolitis (AB). We aimed 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

¹JC Flores-Gonzalez, ¹B Serrano-Moyano, ²G Jimenez-Gómez, ³AM Lechuga-Sancho, ¹L García-García, ¹FJ Dávila-Corrales, ¹JJ Perez-Guerrero, ¹E Palma-Zambrana, ¹P Comino-Vazquez, ¹MA Matamala-Morillo, ¹P Rodríguez-Campoy, ¹RM García-Ortega. ¹Pediatrics Department, Hospital Universitario Puerta Del Mar, Cádiz, Spain; ²Research Unit, Hospital Universitario Puerta Del Mar, Cádiz, Spain; ³Cádiz University, Hospital Universitario Puerta Del Mar, Cádiz, Spain

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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 modified 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 interquartile [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

¹J Abbasi, ²V Allgar, ³I Thopte. ¹Paediatrics, York District Hospitals NHS Trust, York, UK; ²Medicine, Hull York Medical School, York, UK; ³Paediatrics, York District Hospital NHS Trust, York, UK

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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

Abstract PS-366 Table 1

		Fever, no SBI		SBI with obvious focus of infection		SBI with no obvious focus (e.g. sepsis)		Total	
		Count	Column N%	Count	Column N%	Count	Column N%	Count	Column N%
Tachycardia	No	60	50.4	18	30.5	14	34.1	92	42.0
at Presentation	Yes	59	49.6	41	69.5	27	65.9	127	58.0
Tachycardia	No	47	39.5	9	15.3	5	12.2	61	27.9
later in illness	Yes	72	60.5	50	84.7	36	87.8	158	72.1
	No	10	33.3	0	0.0	4	10.3	14	13.9
CRP >5	Yes	20	66.7	32	100.0	35	89.7	87	86.1
	No	21	67.7	13	40.6	15	38.5	49	48.0
WCC <5/ >15	Yes	10	32.3	19	59.4	24	61.5	53	52.0

2014). Four variables: Tachycardia (APLS guideline) at admission, tachycardia during stay, CRP and WCC were recorded. ROC curves were plotted for WCC and CRP.

Results 219 children participated. 100 had confirmed SBI. 101 had CRP and WCC checked as decided by admitting clinician. There were significant differences for all four variables (Chi-square test). Tachycardia at presentation ($p = 0.021$), Tachycardia later in illness (<0.001), CRP > 5 ($p = 0.001$) and WCC ($<5/ >15$) ($p = 0.031$).

Conclusions In keeping with our previous study tachycardia at presentation did not reliably predict SBI with or without focus, however its negative predictive value was 65%, which increased to 77% for tachycardia later in illness. The optimal cut-off for CRP from ROC curve that maximised sensitivity was 19 (sensitivity-94.1%, specificity-45%). WCC was neither specific nor sensitive. In summary neither the tachycardia nor the WCC and CRP were reliable in predicting SBI.

PS-367 WITHDRAWN

Abstract PS-366 Figure 1 ROC curve of CRP
Diagonal segments are produced by ties

PS-368 12 YEARS DATA ON RESISTANCE PATTERN OF UROPATHOGENS

M Ahmed, DN Sobithadevi, R Chakupurakal. Paediatrics, Burton Hospitals NHS Foundation Trust, Burton on Trent, UK

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Background Urinary tract infection (UTI) is a common bacterial infection in infants and children. Traditionally, Trimethoprim has been the first line antibiotic of choice for the treatment of Coli-form UTI. Empirical antibiotic treatment in UTI in children should be based on local surveillance data on the epidemiology and resistance patterns of common uropathogens. This has been endorsed in the guideline on UTI in children by National Institute for Health and Care Excellence in the UK.

Aim To evaluate the resistance pattern to commonly used antibiotics in children with culture proven UTI.

Methods We retrospectively analysed all cases with proven UTI from 2002–2013. Cases were identified by the clinical coding system and data obtained from the Hospital Information Support System.

Results 1151 cases were identified; 95% (1090/1151) had pure growth of E.coli. Microbiology results were analysed to evaluate the sensitivities to commonly used antibiotics. Increasing resistance to Trimethoprim (TMP) and Co-Amoxiclav was observed during 2002–2008. Change in antibiotic policy has resulted in some decline in TMP resistance (Table below) over the recent years.

Conclusion This comprehensive data on children with culture proved UTI supports the use of cefalexin as empirical treatment of choice for all presumed UTIs (pending culture results) in our region. Alternatively, TMP can be used (provided that urine sensitivity is known before commencing antibiotic treatment) if it is sensitive to coliform. It is vital to continue to monitor the resistance pattern to ensure early identification of emergence of drug resistance.

Abstract PS-368 Table 1

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Trimethoprim	25	27	31	30	43	32	34	30	29.9	21	20	36
Cefalexin	3	7	6	5	5	15	11	5.6	4.2	4.2	9.2	6
Nitrofurantoin	11	5	10	14	15	8	7	8.9	2.5	6	10.7	6
Co-Amoxiclav	NA	12	19	32	30	45	48	NA	NA	NA	NA	NA