

intravenously or 6% nasogastrically). When we asked what would make parents confident about going home, the most common response was 'after reassurance that the child is not dehydrated'. Other responses referred to advice or physical symptoms.

Conclusion Knowledge of parental expectations provided by this study, particularly with regard to expectations of investigations and treatment could enable physicians to provide more comprehensive care, with particular emphasis on explanation. This may improve parental satisfaction and reduce re-attendance.

G238 MAKE LOVE NOT WAR: BRIDGING THE GAP BETWEEN PRIMARY AND SECONDARY PAEDIATRIC CARE

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Aim To determine the number of presentations to a new Children's Emergency Department (CED) that could have been managed in primary care.

Methods All Patients were assessed to determine the appropriateness of attendance. Appropriateness was defined as any patient referred from primary care, or requiring any period of observation, a procedure or an investigation, or that were admitted. Patients appropriate for primary care management were defined as children that did not meet the above criteria, had a simple illness with no significant underlying pathology and were green in accordance to the NICE traffic light system. The outcome of all GP referrals was also reviewed.

Results 898 attendances (viral type illness 47%, injuries 32%) were reviewed. 27.4% were deemed more appropriate for primary care with 60% being < 5 years (23% < 1year). The majority (68.6%) were self-referral, 62% from within a 5miles radius and 30% from just 10 of the 111 GP practises.

16% were referred from primary care, 24.3% were admitted. The estimated minimum cost of these additional referrals was £286 520 per year, with 64.2% of these costs being children under the age of 5.

Discussion A large number of attendances to the CED could be managed in primary care. The health system needs to adapt in order to meet users' needs and continue the ethos of right patient right place right time. Using this audit data the local primary care Clinical Commissioning Group (CCG) and the hospital trust have worked together to implement many changes. The out of hours (OOH) service has been reinstated allowing specific patients to be triaged straight back to the primary care centre, who are prioritising seeing and calling back the under 5 year olds. CED has developed formal care pathways for common illness for use in primary care; CED is in direct liaison with the local GP forums to address concerns. Ultimately, CED services need to adapt to be able to care for an increasing volume of attendances, and primary and secondary care need to "make love not war".

G239 REDUCING NEONATAL READMISSIONS AND RE-ATTENDANCES WITH JAUNDICE: ROLE OF TRANSCUTANEOUS BILIRUBINOMETERS

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Aims Up to 60% of newborns have jaundice within the first week of life. Significant jaundice necessitates readmission to hospital. NICE guidance on neonatal jaundice in 2010 recommending checking bilirubin levels and not relying on visual inspection alone led to increased numbers of babies attending our Emergency Department

(ED). We aimed to address the raising re-attendances and readmissions to paediatrics.

Methods A n Audit identified increasing readmissions within the first week of life. We collected data for readmissions to wards and re-attendances to ED due to physiological jaundice. We compared readmissions prior to use of transcutaneous bilirubinometers (TCBRs) and for one month post introduction. A monthly average was used for comparison.

Results Over the years, the proportion of infants readmitted increased (Table 1). Most were term breastfed babies. Length of stay increased when discharged early. TCBRs can be used as a screening tool. We identified that screening by Community Midwives at home could decrease hospital referrals. TCBRs were obtained in May 2012 through charity funding.

Abstract G239 Table 1 Readmissions within first week of life 2009-2011

	June – Sep 2009	Sep – Dec 2010	Aug – Nov 2011
Number of readmissions for babies <1 week of discharge	26	42/72 (58%)	73/82 (89%)
Proportion readmitted for 'jaundice, poor feeding or weight loss with jaundice'	13/26 (50%)	28/42 (66%)	62/73 (84%)

Post TCBR use, average monthly re-attendances to ED fell from 40 to 16 (Table 2). Average monthly readmissions and financial costs to the Primary Care Trust (PCT) were calculated.

Abstract G239 Table 2 Re-attendances and readmissions: pre and post TCBR use

	Pre TCBRs 01/12–03/12	Monthly average	PCT billing	Post TCBRs introduction 06/2012	PCT billing
Time in months	3 months			1	
No of Re-attendances to ED	122	40.6	£16,916	16	£1,744
No of Readmissions	28	9.3		8	
Days of admission	78	26	£14,495	22	£7,931

Conclusions Introduction of TCBR's reduced attendance rates to ED, but did not significantly affect readmissions. PCT billing reduced significantly. Families could be monitored at home. We are pursuing other strategies like producing a DVD to promote awareness of jaundice and improve breast feeding support and plan to reanalyse following this.

G240 THE ROMLA MATRICES AS A TOOL IN INVESTIGATING GUIDELINE ADHERENCE AND CLINICAL OUTCOME: ARE THEY USEFUL IN CHILDREN WITH HEAD INJURIES?

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Background Paediatric head Injuries (HI) are a common presentation to emergency departments. National guidance is available to facilitate neuroimaging decision making in this cohort. However it is unclear how guidelines and their evidence base influence practise and patient outcomes. The ROMLA matrices are 2X2 classification algorithms relating evidence base adherence to either diagnostic accuracy (Rolma 1) or clinical outcome (Rolma 2).

Abstract G240 Table 1 The Rolma Matrices

Rolma 1 Matrix (Rolma 2 domains in brackets)		Diagnosis (Outcome)	
		Optimal	Sub Optimal
Assessment (Management)	Evidence base consistent		Incorrect Application (Clinical skill deficiency)
	Evidence base inconsistent	Experience/expertise	Performance/training issue

The aim of this study was to trial the feasibility of the ROLMA matrices as a methodological frame work to explore the interplay between guidelines and clinical practise.

Method The notes for 100 HI patients were reviewed. The assessing clinician's evaluation and management were assessed for guideline concordance and the eventual outcome was recorded. Qualitative notes were also taken. The ROMLA matrices were applied and linked to the qualitative notes.

Results In this sample the ROLMA matrices did not show a clear relationship between guideline concordance and diagnostic accuracy. The ROLMA matrix did however provide a framework for assessing compliance with guidelines and whether or not non-compliance with guidelines is related to inaccurate assessment or even adverse outcome (Table 2 and 3). Even in this small group the ROLMA matrices provided a mechanism for identifying and categorising guideline non-adherence, and identifying adverse

events so that this can be fed back to clinicians. The data set is particularly informative when combined with qualitative data.

Conclusion The ROLMA matrices provide a conceptual framework to understand the interplay between evidence base, expertise and outcome. They are useful audit tools on a departmental level to categorise guideline non-adherence and relate this to potential adverse events such as, in this study, unnecessary irradiation. The ROLMA matrix shows promise as a tool for a larger study to detect associations between adverse events and clinicians practise.

G241(P) COMPARING USABILITY OF PAEDIATRIC WEIGHT ESTIMATION METHODS

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Aims In acutely ill children, weights are often estimated to calculate drug and fluid dosage. Many methods exist, attempting to balance complexity and accuracy. The most accurate are based on physical measurements, but those commonly used in the UK are based on age alone. In 2011 the Advanced Paediatric Life Support (APLS) recommendations changed from using a single formula to three. Meanwhile the UK Resuscitation Council maintains that complexity increases risks of error and still advocates the single

Abstract G240 Table 2

ROLMA 1		Diagnosis			
		Correct		Incorrect	
		Potential ICI	Minor HI	Potential ICI	Minor HI
Assessment	Evidence base consistent	7	50	2	
	Evidence base Inconsistent		37	1	3

i. Initial assessment diagnosed CSF Rhinorrhoea incorrectly
 ii. Initial assessment considered NAI senior review decided low risk of NAI.
 i. Incomplete assessment missed key finding that was rapidly spotted during further review initiated by concerned nursing staff (Near miss)
 ii. 2 cases diagnosed as minor head injury but had documented drowsiness

Abstract G240 Table 3

ROLMA 2 (with minor head injuries removed)		Clinical Outcome	
		Optimal	Suboptimal/potentially suboptimal
Management	Evidence base consistent	5 Pt 13 on admission low GCS had normal CT Head Pt 14 > 3 vomits had normal CT Head Pt 20 RTA reduced GCS CT Head normal Pt 76 10 year old amnesia CT Head ordered by CT3 which was normal cons review then home Pt 84 Low GCS CT Head normal	2 Pt 23 Junior thought there was CSF rhinorrhea initial plan for CT Head. Consultant review mechanism inconsistent with clinical findings. Pt 29 FY2 thought NIA therefore admit. Senior review unlikely NAI and minor mechanism and sent patient home
	Not Evidence base consistent	2 Pt 43 child vs car speed 30mph, facial contusion only CT Head indication mechanism. Consultant said no CT Head pt discharged several days later well without issue Pt 64 > 3 vomits admitted rather than CT Head discharged well after period of observation	4 Pt 27 (everything documented as OK but junior and senior wanted pt admitted anyway without stating why.) Pt 24 Initial assessment missed > 5cm haematoma on <1 year old and planned observation nursing staff concern resulted in a rapid re-evaluation finding noted CTH head showed parietal skull fracture. Pt's 48 & 100 – 2 pt's with documented drowsiness or reduced GCS that were sent home neither returned or has had any Leicester based imaging or review.