The aim of the trial was to find out what added benefit the PCCOT Nurse contributed to the PEWS system in the recognition and management of evolving critical illness thus enhancing patient safety.Other aims included improvement to the patient treatment pathway, to assess the types/range of skills the PCCOT Nurse needs and the level of activity of the PCCOT Nurse.

Utilising a service redesign model the project has moved through the following stages: **Problem Identification** Identifying issues surrounding 'failure to rescue' **Proposed initiative** PEWS and PCOTT . **Development of Tool -** PEWS, observation chart and escalation plan.

Pilot Stage The trial of PCOTT and new charts took place over 1 month.

Results: Total Number of patients 137.Average Number of PCCOT episodes per day 20 Time spent per episode 15 min - 6 hours Average PCCOT episodes per patient 5

Patients admitted to PICU/PHDU had higher PEWS score. Of 15 patients admitted to a higher level of care the transfers were controlled and timely. During the trial there were no cardiac arrests on the wards and only one 'collapse' needing ITU admission from a ward where PCOTT had not been involved.

Conclusion: Paediatric Critical Care Outreach supports the effectiveness of a PEWS System improving patient safety.

469

PATIENT SAFETY: A CULTURAL MUST!

J. Maaskant, M. de Neef, J. Wielenga

Emma Children's Hospital - Academic Medical Center, Amsterdam, The Netherlands

Background and aims: Although patient safety has been a major topic in healthcare for more than a decade, the challenge remains to find effective and sustainable safety improvement programmes. A culture of safety is a key factor in the success of such programmes. We investigated the differences in patient safety culture on wards before the start of a safety program with wards where a safety program was implemented for several years.

Methods: A survey was undertaken amongst paediatricians and specialized nurses by means of the Hospital Survey on Patient Safety Culture (HSOPSC) on wards without a safety program (group A) and on wards with a safety program (group B). The study took place at the Emma Children's Hospital, Amsterdam.

Results: In group A 252 surveys were provided with a response rate of 67% (64% nurses). In group B 153 surveys were provided with a response rate of 53% (80% nurses).

The HSOPSC consists of 40 questions, covering 11 dimensions. Results are presented in positive, neutral or negative ratings.

We found the following significant differences between groups (A vs. B) in positive ratings:

1. 'Feedback about and learning from error': 51% vs. 83%

2. 'Overall perceptions of safety': 48% vs. 59%

3. 'Frequency of event reporting': 38% vs. 59%

4. 'Hospital management support': 24% vs. 46%

Ratings in the other dimensions were unchanged.

Conclusion: Implementation of a patient safety programme improves some aspects in the culture on a ward, while other aspects demand more focused intervening.

470

PATIENT SAFETY IN THE NICU

F. van der Stok, J. de Vos, A. van den Hoogen

Neonatology, Universal Medical Centre Utrecht, WKZ, Utrecht, The Netherlands

Background: Patient safety is a spearhead of the University Medical Centre of Utrecht (UMCU), the Netherlands. It recognizes that human error is inevitable. Wherever possible, the system should be (re)designed in such a way that human error is discovered or intercepted before it leads to patient harm.Reporting incidents is part of the patient safety program running in our hospital. The Neonatal Intensive Care Unit (NICU) of the UMCU wanted to have more insight in the incident reports on their unit. By analysing the reports with NICU professionals, the chance of effective improvement on the department would be increased.

Aim: Increase of patient safety by incident analyses.

Method: Our NICU started a multi disciplinary local report committee.Procedures for analysing reports were made.In the analyses we looked at organisational factors, human errors and technical failures. Moreover we used 'why questions' and the 'barrier analysis'.

Implications for practice: Local reporting needs support by management.It is necessary that all disciplines are represented in the committee and that members are approachable and are ambassadors for incident reporting. Regular feedback and presenting results to management and medical and nursing staff, stimulates reporting. Work instructions after exchanging mother milk, a new feeding application form and ongoing attention for the administration of extra oxygen are examples which resulted in fewer incidents.

Conclusion: After three years incident reporting became more regular. The reports increased from 37 in 2006 to 138 in 2009.Meanwhile a number of procedures has been adapted and improved, as a result of which patient safety increased.

471

SHORT TERM OUTCOMES WITH USE OF CHLORHEXIDINE GLUCONATE (CHG) AND POVIDONE-IODINE (PI) IN VLBWI WITH PERCUTANEOUSLY PLACED CENTRAL VENOUS CATHETERS

I.P. Jeffries[1], A. Salas[2], B. Chandler[1], A. Soliz[1]

[1]Division of Neonatology, Miami Children's Hospital, Miami, FL, USA, [2]Pediatrics, Caja Petrolera, La Paz, Bolivia

Background and aims: CHG´s use as a skin antiseptic in neonates is limited because of concerns about systemic absorption and potential side-effects. No chlorhexidine-based antiseptic has been approved by the FDA for neonatal IV catheter placement. We compared the short-term risks of using CHG versus PI as an antiseptic for percutaneously placed central venous catheters (PPCVCs) in VLBWI.

Methods: The records of VLBWI admitted to the NICU at Miami Children's Hospital from 2004-8 were reviewed. Initially, PI was used. After a change in hospital guidelines, CHG replaced PI. Every 10 days the site was re-cleansed with the same antiseptic. Outcomes compared: BPD, NEC, IVH, PVL, ROP, failed hearing test (FHT), length of stay (LOS) and death in infants with lines placed during the first 30 days of life.

Results: PPCVCs were inserted in 187 infants (CHG=95, PI=92). Birthweight, gestational age, gender, total duration of PPCVCs and LOS were similar between CHG and PI groups. The mortality rates in CHG (12.8%) and PI (16.3%) were similar (p=0.54).

COMORBIDITIES: PI group (%), CHG group (%), p value

IVH grade 3-4	14.1	10.6	0.47
PVL	5.4	2.3	0.29
BPD	47	37	0.22
NEC, stages 2,3	6.5	6.4	0.96
ROP stage 3	2.2	2.1	0.89
FHT	21.8	25	0.68
	IODINE GROUP n=92	CHLORHEXIDINE GROUP n=95	p value

[Comorbidities (%)]

Conclusions: The use of CHG as an antiseptic for PPCVCs in VLBWI did not increase the risk of major adverse short-term outcomes and mortality when compared to the use of PI. Although this preliminary data is encouraging, prospective studies are needed to confirm its safety.

472

UNLICENSED AND OFF-LABEL DRUG USE IN A NEONATAL UNIT IN FRANCE

K.A. Nguyen[1,2], O. Claris[1], B. Kassai[2]

[1]Neonatology, Hospices Civils de Lyon/University of Lyon 1, [2]Inserm, CIC201, EPICIME, RIPPS, University of Lyon 1, Lyon, France

Aim: To determine the extent of unlicensed and off-label drugs prescribed in a neonatal unit at a University Hospital, Lyon, France. **Methods:** We conducted a prospective cohort study of newborns who were admitted to the neonatal unit in France during a 4 month-period (from January 1st to April 30th 2009). Using French primary reference source (Vidal 2009), all drug prescriptions were assessed to determine the extent of unlicensed or off-label use.