

## Annual Out of Town Conference

7th - 8th October 2016, Ballymascanlon House Hotel, Carlingford

### PRESENTATIONS

#### IMPLEMENTING A NEONATAL RESUSCITATION RECORD TO IMPROVE DOCUMENTATION DURING PROLONGED RESUSCITATION OF NEWBORN INFANTS.

Dr Natalie Thompson, Dr Elaine Mc Kinley,, Dr Sarah Mc Kee, Dr Danielle Leemon, Dr Bronagh Clarke, Dr Mugilan Anandarajan

**Background and Aims:** Prolonged neonatal resuscitation (>5 minutes) needs careful documentation. However, the timeline of events is often not accurately recorded, leading to errors in future care and unnecessary litigation. The aim of this quality improvement project is to produce a standard document for prolonged neonatal resuscitation, which can be utilised at the time of resuscitation and form part of the medical notes.

**Methods:** A baseline audit of current practice was conducted in July 2016. Notes of 10 patients admitted to the neonatal unit who met the criteria were reviewed. Documentation was recorded against a standard adapted from a successful newborn resuscitation document from another UK neonatal unit.<sup>1,2</sup>

**Results:** The baseline audit revealed areas of poor documentation in the medical notes; particularly of demographics (80% no patient identifier, n=10), and location of the patient (50% no location, n=10), reassessments (60% incomplete, n=10) and advanced resuscitation measures. The findings were presented to the target group of medical and midwifery staff. Following this multidisciplinary meeting, the document was amended and role of the scribe established. A pilot phase of 2 months for implementation of the document was commenced with ongoing feedback. The document was stored on the resuscitation trolley. A simulation exercise enabled staff training in the use of the document, and identified latent errors.

**Conclusion:** The baseline audit highlighted areas of concern in terms of inconsistent documentation for infants needing prolonged resuscitation. An initial document has been produced and is currently in the pilot phase. Ongoing work will aim to implement this document within the trust and to clarify the role of scribe during resuscitation.

### REFERENCES

- 1 Atkinson E., Summers D., Jones H., Berrington J. Neonatal resuscitation – a practical approach. The experience of one UK tertiary neonatal unit. *Infant* 2010; **6**(1): 9-14.

- 2 Yip MQ et al. Structured proforma – A solution to accurate documentation of neonatal resuscitation? *Arch Dis Child* 2016; **101**:Suppl 1 A348-A349

#### EVIDENCE BASED GUIDELINE REDUCES INAPPROPRIATE TREATMENT IN BRONCHIOLITIS - A COMPLETED AUDIT CYCLE

Dr Veena Vasi, Dr Catherine Diamond, Dr Rory Mackle, Dr Thomas Bourke

**Background and Aims:** Bronchiolitis is the commonest respiratory infection in infancy affecting 10% of all children. We developed an evidence based guideline based on recommendations from NICE and the ‘Bronchiolitis of Infancy Discharge Study’ (BIDS). This guideline emphasised the importance of minimal handling and suctioning, rare pharmacological treatment and a permissive approach to patients with saturations above 90%. Introduction of the guideline was combined with a robust programme of communication and training for relevant medical and nursing staff.

**Methods:** We carried out a retrospective audit of infants admitted with bronchiolitis before (n=30) and after (n=36) implementation of the guideline in 2015/2016.

**Results:** The key results are shown in table 1. There was a statistically significant reduction in use of hypertonic saline (p<0.05) and nasopharyngeal suction (p<0.001). Use of salbutamol and adrenaline nebulisers was low and the reduction did not reach statistical significance. No significant difference was seen with regards to duration of stay.

**Conclusions:** Our completed audit cycle demonstrates that adherence to an evidence based guideline reduces inappropriate treatments and promotes minimal handling. Our small study did not demonstrate a shorter length of stay however we plan to complete a larger surveillance in 2016/2017 to establish if we can recreate the significant reduction in length of stay demonstrated in the BIDS study.

#### THE RBHSC APP – A NEW AND INNOVATIVE RESOURCE FOR STAFF

Dr Ben McNaughten, Clinical fellow in education and simulation, RBHSC

**Background:** In February 2016 a printed paediatric starter pack was created to complement material distributed at trust induction. The aim was to provide useful practical information about working in the Royal Belfast Hospital for Sick Children (RBHSC). Although feedback was excellent,



staff stated that it was lengthy and difficult to access when working.

**Methods:** A smart-phone web app was therefore developed. The app outlines the members of the various medical teams. It provides links to useful contact numbers and paediatric resuscitation algorithms. There are direct links to websites and users can access guidelines and review articles on common paediatric conditions. Staff can also access the weekly rota and teaching schedule. Following an initial trial period staff were invited to complete an online survey.

**Results:** The survey revealed that 92% agreed that the app was easy to access with 50% stating that they use it at least

once every three days. The results suggest that the links to contact numbers, resuscitation algorithms and the weekly teaching schedule are of greatest value. Feedback on areas for improvement included 'more contact numbers', and 'maybe an alert system' for new articles. All staff agreed that the app is a useful resource.

**Conclusions:** Feedback has been very positive. One staff member simply wrote 'I love it!'. By seeking multidisciplinary team input we aim to create a powerful clinical tool accessible to all staff. Proposed future developments include publication on App Store® /Google Play® and exploring the possibility of similar projects in other paediatric units.

