Paediatrics & Emergency Department research day - 18th August 2015

<u>Febrile Neutropenia audit – Paul Stanley (Paed Nurse), Shabna Rajapaksa (Paediatrician) & Ferlene Ooi (Melbourne Uni student)</u>

- Emphasised the importance of recognizing sepsis in this high risk group (warm and cold shock)
- Discussed new guidelines Clinical network/ RCH
- Retrospective study of Febrile Neutropenia patients (<18 years) between 2012-2015 v current RCH guideline
- BHS compliance with guidelines currently superior to Monash and RCH however, all groups are not meeting the recommendations to see and treat sepsis within recommended timeframe
- Recommendations:
 - Families empowered with card to present to triage to facilitate earlier review and treatment
 - o Triage as category 2 or 3
 - From triage commence decision tree about iv/ port access consider ED staff abilities - consider early consultation with paediatric nursing staff
 - Challenges of all ED nursing staff being competent in port access given small numbers of patients and large number of ED staff. Suggestion that senior staff/ those in resus are competent – to be taken further by ED

Anaphylaxis Audit - Fiona Noble (Paediatrician) & Charlotte Frost (Melbourne Uni student)

- Retrospective study of patients presenting with anaphylaxis over 6 months using coding to identify allergy patients and then ascertain if diagnosis met ASCIA criteria and if appropriate discharge planning/ follow up was made
- Limitation relying on documentation
- Demonstrated limited documentation in relation to: provision of auto-adrenaline injectors; provision of Anaphylaxis action plans and follow up
- Recommendation:
 - Use of ASCIA Anaphylaxis Action Plans:
 http://www.allergy.org.au/images/stories/anaphylaxis/2015/ASCIA_Action_Plan_Anaphylaxis_EpiPen_Personal_2015.pdf
 - o Adding action plans to records with Bossnet suggestion that this could be created as an e-record
 - O Discharge and document provision of plan; autoinjector; how to use the autoinjector (can be provided by ED/ Paediatrician) and follow up
 - o Suggestion to re-audit/ prospectively study this in a year

<u>Asthma Audit - Paediatric Clinical Network Project - Kathryn Pegg (Paediatric ANUM)</u>

- Topic chosen by Clinical Network as part of ongoing collaboration
- Retrospective study of compliance with guidelines over 2 times periods for children admitted to hospital with asthma/ wheeze
- Limitation relying on documentation
- Overall improvement in documentation between study periods (2014 v 2015)
- Recommendations:
 - o Documenting severity of asthma and if this alters during clinical course
 - o Ensure treatment matches severity of asthma
 - Review utilization of ipratropium bromide in mild/ moderate asthma mixed opinion here with several ED physicians stating that their practice remains its use in moderate asthma
 - o Document giving information on inhaler use; provision of asthma plan; follow up
 - o Suggestion: Creation of "asthma discharge document" ? BHS/ Clinical Network

- Suggestion: Change current "sticker" to indicate mil v moderate v severe asthma ED suggestion that audit only identified admitted patients and therefore omitted several mild cases that were discharge from ED as per RCH guidelines
- o Suggestion: Combined Paed/ED audit of asthma guidelines in 2015/2016

<u>Victorian Health Experience Survey - BHS Paed ED - Clinton Griffiths (Paed NUM)</u>

- https://results.vhes.com.au
- Families invited by Dept Health to complete the survey
- Demonstrated the above results for BHS in comparison to other similar hospital as per carer perceptions of the delivery of care
- Generally performing well in all areas
- Information can guide delivery of services/ teaching and training
- Future surveys will involve feedback from children in addition to their carers

Neonatal Hypoglycaemia – before and during the trial – Katie van Schilfgaarde

- Discussed current BHS guidelines in line with varying practice in different hospitals and new studies that demonstrate the benefits (reduced need for nursery admission/ less iv procedures/ reduced need for artificial feed) of glucose gel
- "Sweeter for Everyone" study is prospectively studying use of glucose gel to treat hypoglycaemia in newborns on postnatal ward and in Special Care Nursery
- Study to report back when completed

Kawasaki Disease - Andrew Crellin - Emergency Physician

- Rare but important disease given complications of coronary aneursyms due to late/failed diagnosis at presentation
- The clinical diagnosis can be aided by use of online scoring systems
- Younger children are more likely to have an atypical presentation
- Fever and lymphadenopathy are relatively consistent features in all ages groups
- Consider the differentials and provide regular and close review

Analgesia via sedation – Janie Worth – Paediatric ED Physician

- Discussed the importance of procedural sedation and how to select the appropriate method for different procedures
 - o Intranasal fentanyl
 - o Nitrous oxide
 - o Midazolam
 - Ketamine
- Emphasised the importance of adequate staffing and monitoring
- Ensure adequate support/ distraction/ information for families
- Recommendation:
 - Audit/ review success of iv fentanyl in children who have suffered burns/ scalds (similar to audit completed in fractures)
 - Audit/ review use of above sedations in Paediatric ward/ ED for different procedures