We developed the programme using the principles of implementation science, which included a systematic and standardised child-centred approach. We developed a blended learning programme aimed at the healthcare professionals who provide care to children and their parents on a daily basis. We also developed a child health website and supporting resources for parents. This was achieved by early engagement of stakeholders and by collaboration with parents and frontline health care providers. Formal evaluation of the needs and experiences of parents and frontline staff helped shape the methodology of implementation of evidence based interventions and also allowed for the recognition of potential barriers to quality improvement, and enhanced adaptability to challenges as they arose. This presentation will outline how this integrated approach led to the development of quality improvement interventions where sustainability was considered from the outset.

P163 ADHERENCE TO THE BRONCHIOLITIS GUIDELINES- A DEPARTMENTAL STUDY BETWEEN NOVEMBER 2018- JANUARY 2019

Irina Chistol*, Zachary Tan, Samira Mohamed, Salma Mohamed, Nurasyidah Abdul Halim, Victor Morris. *St Luke's Hospital, Kilkenny, Ireland*

10.1136/archdischild-2019-epa.518

Introduction Acute bronchiolitis it is a clinically diagnosed viral respiratory infection that affects infants, mostly aged 3–6 months with peak prevalence between November and March. The aim is to determine the current knowledge that the Paediatric department in our hospital has about bronchiolitis, to improve that knowledge and at the end to test the applicability in practice.

Background We used the guidelines from the Royal College of Physicians of Ireland- Faculty of Paediatrics- Algorithm 14- Acute Bronchiolitis (Feb 2014), the NICE guidelines regarding Bronchiolitis in children (2015), and also Nebulized hypertonic saline solution for acute bronchiolitis in infants- Cochrane Database of systematic reviews 2017

Methods The design of the study consists in 3 different parts: first is to test the knowledge about bronchiolitis thru a questionnaire, the second part is represented by teaching sessions with all the members in the department and third part is represented by analysing the PAU (Paediatric Assessment Unit) charts to see if the set up parameters have been correctly used. We also created a quick reference Bronchiolitis Guide- to help NCHD's in the correct management of Bronchiolitis patients.

Results

Questionnaires results Peak age of bronchiolitis 25% answered correctly (AC). The most common causative organism: 90.62% AC. Peak prevalence - 40.62% AC. Incubation period- 37.5% AC. severity peak - 65.62% AC. 5 of the risk factors for severe disease- 21.87% named immunodeficiency, 50% heart disease, 28.12% Chronic lung disease, 81.25% Prematurity, 31.25% parental smoking, 15.62% age, 6.25% Down syndrome. 2 of the indication for Palivizumab prophylaxis- Prematurity- 84.37%; CHD- 40.62% ; CLD- 15.62% ; Immunodeficiency- 3.12% . Recognize reason for further referral: 43.75% AC. Investigations required- 37.5% AC. Treatment required- 18.75% of the doctors answered nebulized hypertonic saline with 50% Oxygen if Sat O₂ <92% and 75% of

the nurses recommended the use of Oxygen. How long can the wheeze persist post-illness- 31.25% AC.

At the end, during the selected period of time of 2 weeks, 13 patients were diagnosed with bronchiolitis. We had 100% compliance with indications for blood investigations, chest X-ray, but only 69.2% of the total number of patients had treatment according to the guidelines.

Conclusions The results from the questionnaires showed that there is still place for improvement. Having a quick reference bronchiolitis guide made de NCHD's to have more confidence in treating Bronchiolitis as differences from the knowledge tested and the knowledge applied is much improved.

P164 ASSESSMENT OF SKILLS AND LEVEL OF CONFIDENCE IN THE USE OF LARINGEAL MASK (LMA) IN A GENERAL HOSPITAL

Zachary Tan*, Irina Chistol, Alfonso R Herrera. *St Luke's Hospital, Kilkenny, Ireland*

10.1136/archdischild-2019-epa.519

Background LMA mask and intubation had been in use for several years. In 2005, AHA guidelines state that LMA can be used in cardiac arrest. LMA can also be used in emergency and elective setting as it is safe and has a low failure rate (0.15).

Objective The objective of this study is to determine the skill level of LMA use and our confidence level in using them if necessary and appropriate.

Methods This study was designed as a prospective audit. The study sample is all that are involved in the care of patients that worked during the period of 9 July 2018 to 13 January 2019. This study will include a primary audit with questionnaire, then training via a presentation and video. Manikin training and skill training under control direct supervision by anaesthetist. Then finally at the end of rotation, we will conclude with a closed audit to check for improvement. All the data collected will be anonymous and data will be analysed and compared pre and post training.

Results In this study we included 100% NCHD and 50% of nurses from our department. There is a 20% rise in LMA intubation post education and training. We had 73.5% of participants present in lectures and LMA training. We had a low turnout of 35.3% of supervised LMA insertion in theatre due short time study period, busy department and largely no turn out from nurses group. 69.2% of NCHD had supervised insertion of LMA in theatre. By analysing the data gathered, we can safely say that the group with the highest confidence to perform LMA insertion is consultants group and the lowest confidence is the nursing group.

Conclusion The results of this study suggest that education plays an important role in the use of LMA in non-anaesthesia training doctors. Additional education and awareness training needs to be put in place for the nursing group also. There is a general decreased in trend of LMA insertion from consultant to registrar and to SHO. In the pre and post training evaluations, there is a slight improvement in the confidence of the department members, with probability that more exposure will increase their familiarity of the technique. We recommend doing small regular audits and teaching programme with the NCHD initially and then with the nursing staff as this will increase confidence and skill of paediatric practitioners in tertiary hospital with limited resources.