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CONFERENCE ABSTRACT

Integrated care initiative to improve management of paediatric asthma

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Introduction: Asthma is the most common chronic illness of childhood. Frequent asthma attacks may result in unscheduled hospital presentations. Unscheduled hospital presentations are a marker of poorly controlled asthma - a significant burden to the health systems and families. Following hospital presentation, the New South Wales (NSW) clinical practice guideline suggests follow-up with the general practitioner (GPs) within 3-5 days. However many children only have their asthma reviewed in hospitals when there is an acute attack rather than having a planned GP review.

Implementation of practice change: The Sydney Children's Hospitals Network (SCHN) Asthma Follow Up Integrated Care Initiative assembled a multidisciplinary team of clinicians, nurses, GPs, managers, researchers, and consumer representatives. The team created a driver diagram to identify change ideas and developed an integrated model of care to improve post-discharge follow-up of children with non-complex asthma

Aim: To reduce emergency department (ED) presentations, through improved asthma management and increased engagement with their GPs.

Targeted population and stakeholders: Children aged 2-16 years of age with non-complex asthma or viral induced wheeze (VIW), local health partners and parents/carers.

Timeline: December 2016-February 2018

Innovation: The integrated model of care included the following:

1- All children, presenting to ED with non-complex asthma/VIW, for ≥4 times in a 12 month period were flagged in electronic medical record system .Care coordinators (CCs) contacted the parents and requested that their child have a review with their GP, and also offered referral to asthma education sessions.

2- A letter was sent to the child's GP by the CC advising of the child's recent hospital presentation. This letter contained asthma best practice points, encouraged influenza vaccination, review of asthma action plan, preventer medication and referral to a paediatrician if necessary.

3- Parents were also given a standardised asthma/ VIW resource pack upon discharge from ED which included individualized Asthma Action Plan, asthma information pack and discharge instructions (including recommended follow-up with a GP).

Impact: We compared the number of asthma ED presentations for these children six months pre and post enrolment using Wilcoxon signed-rank test.

Outcomes: A total of 57 children were contacted by CCs. The median age of the children was 4 years (IQR 3-5 years). The median numbers of ED presentations in the six months preceding enrolment in the program was 2 (IQR 2-3) and post enrolment was 1 (IQR 0-1). There was a 57% reduction in number of children who presented to the ED ≥4 times in the 12 months period post implementation of the program ($z=3.25$, $p=0.001$).

Sustainability: The initiative has been adopted as routine clinical practice within SCHN.

Transferability: Although the model was evaluated within the SCHN , based on the positive preliminary findings the model can be scaled up across all local health districts of NSW.

Conclusion: A comprehensive integrated approach to asthma management may reduce frequent ED presentations due to asthma in children.

Lessons learned: It is important to have a collaborative multidisciplinary team, in order to share expertise, understand all view points and effectively implement change.