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CONFERENCE ABSTRACT

Phase 2 of integrated care initiative aiming to improve management of paediatric asthma

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Introduction

During December 2016-February 2018, Phase 1 of Asthma Follow Up Integrated Care Initiative was implemented at Sydney Children's Hospital (SCH) Randwick which included an integrated model of care coordinated by clinical care coordinators (CCs) for children who presented frequently to Emergency Department (ED) (≥4 times in a 12-month period but no admissions) with asthma/ viral induced wheeze (VIW). Phase 1 resulted in 60% reduction in ED presentations. In Phase 2 we tested if a similar model of care could be adopted for children (aged 2-16 years) who had severe asthma (presented to the ED ≥4 times and had ≥1 hospital admission in the preceding 12 months).
Implementation of practice change: Through a series of iterative process, the integrated model of care developed for Phase 1 was modified by our multidisciplinary team of clinicians, nurses, GPs, managers, researchers, and consumer representatives and implemented in phase 2 of the integrated care initiative.

Aim

To reduce ED representations of eligible children by 50%.

Targeted population and stakeholders

Eligible children, their parents/carers and local health partners.

Timeline

July 2018-August 2019

Innovation

The CCs contacted all eligible children and coordinated the integrated model of care. The phase 1 component of the care coordination model included
1) Encouraging parents/carers to schedule a follow-up with child's general practitioner (GP) within 2-3 days post-discharge and providing a standardized asthma/ VIW resource pack which included individualized Asthma Action Plan, Asthma Information pack and details of upcoming asthma education sessions.

2) Sending a letter to the child's GP advising of the child's recent hospital presentation. The letter contained asthma best practice points and advised to, encourage influenza vaccination, review asthma action plan and need for preventer medication, access asthma education/resources and refer to a paediatrician if necessary.
3) Additionally, to provide continuity of care, in phase 2, text message reminders were sent to parents reminding them to follow-up with GP and encouraging attendance to asthma education session and receipt of influenza vaccination.
Impact: We analysed the data to compare the number of asthma ED presentations and inpatient admissions for the enrolled children 6 months pre and post-enrolment.

Outcomes

Within 6 months post-implementation of phase 2, a total of 17 eligible children were enrolled. The median numbers of ED presentations in the 6 months pre-enrolment was 2 (IQR 2-3) and post-enrolment was 0 (IQR 0-1) leading to 100% reduction in ED presentation ($z=-3.178$, $p=0.001$). Similarly, the median number of hospital admission pre-enrolment was 1 (IQR 0-2) and post-enrolment was 0 (IQR 0-0) leading to a 90% reduction in hospital admissions ($z=-2.887$, $p=0.004$).

Sustainability

The initiative has been adopted as routine clinical practice within SCH.

Transferability

Our model of integrated care developed for frequent ED presenters was successfully implemented with modification for children with severe asthma.

Conclusion

The preliminary data suggest, a comprehensive integrated approach to asthma management may reduce frequent admission and ED presentations in children.

Lessons learned

Active involvement of a collaborative multidisciplinary team in the process of testing change can effectively implement quality improvement initiatives.