Inpatient Asthma Clinical Pathway for the Paediatric patient
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Introduction
Asthma is one of the most common reasons for paediatric admission and it places a heavy burden on the health care system and families. There is strong evidence that timely treatment can improve asthma control. Currently there are inconsistent approaches in hospital care for childhood asthma. Clinical pathway is a tool to guide standard care of the multidisciplinary team.

Objectives
1. To develop a locally accepted evidence-based approach in childhood asthma management
2. To develop a standard of care agreed by multidisciplinary team
3. To evaluate the practice of clinical pathway and identify areas of quality improvement

Methodology
1. Evaluated the clinical pathway and collected feedback from the multidisciplinary team
2. Improved treatment effectiveness including reduction in length of hospital. Use of drugs including bronchodilators and steroids) and unplanned readmission rates are expected to decrease.
3. In-house training for staff on management updates, assessment tools and clinical pathway familiarization
4. Carried out audit on compliance of key elements of the clinical pathway
5. With the audit findings, identify variances and solutions for quality improvement

Result
1. Literature revealed that clinical pathways appear to be effective in reducing length of stay and hospital costs associated with inpatient asthma as well as use of bronchodilators while readmission rate was not affected.
2. Retrospective analysis locally in July 2015 confirmed the feasibility of this locally designed clinical pathway and also appeared to shorten length of hospital stay.
3. A revised Asthma management program including asthma clinical pathway was implemented in November 2015 after in-house staff training.
4. Preliminary analysis comparing data of 2014 November and 2015 November demonstrated a reduction in hospital stay (42 hours vs 38 hours) and bronchodilator use (17.0 episodes vs 14.9 episodes) and a possible reduction in unplanned readmission rates (7.4% vs 0%). Systemic steroid utilisation rates were similar.
5. Compliance and variance audit are in progress.