



Formalized Asthma Education and Asthma Nurse Educator

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Clinical Significance & Background

Asthma is one of the most common chronic disorders of childhood in the United States.

It is an inflammatory disease that causes narrowing of the airways resulting in shortness of breath, wheezing, continuous coughing, and chest tightness/pain.

Asthma

- Accounts for 10 million school absences per year. More than 50% of children with asthma missed at least one day of school because of asthma.
- Seriously limits a child's activities
- Often has exacerbations that result in emergency department visits and hospitalizations
- Is linked to at least 4,000 deaths per year

Orange County

- More than 66,000 children are affected by asthma.

Purpose of Project

Child Health Priority

- Research indicates that self-management education is a key factor in the control of asthma in children and is related to improved outcomes.

Organizational Priority

- PCS Strategic Plan
- Goal #2 - Deliver Exemplary Patient Care and Services Devoted to Safety and Quality
- Initiative #3 – Incorporate the principles of evidence-based practice into the care processes and standards of practice at CHOC

CHOC and Patient/Family Priority

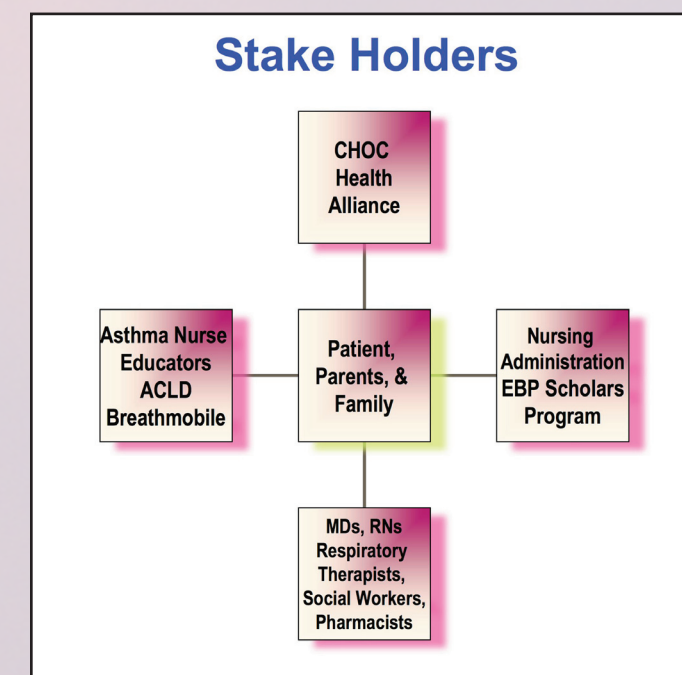
- Develop a model program for active partnership in asthma self-management
- Provide a program that has consistent asthma self-management educator(s) to assess patient concerns and provide family-centered care

Clinical Question

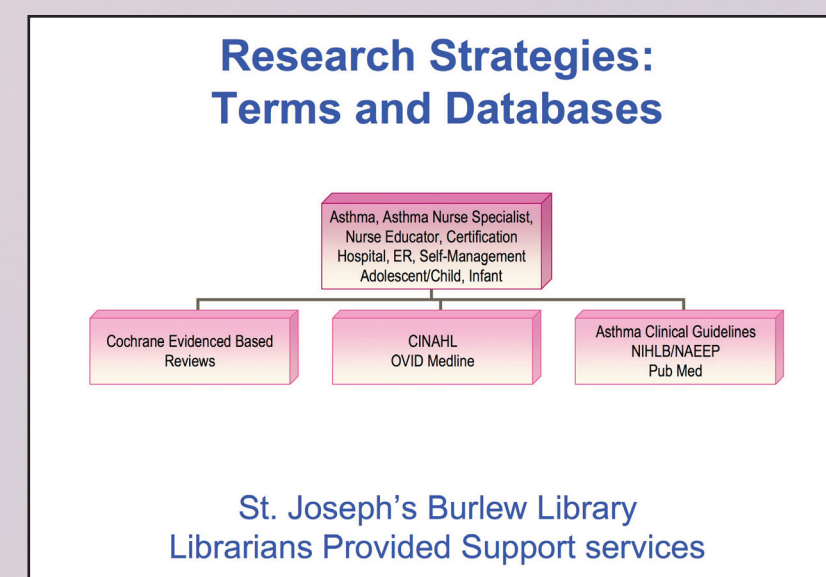
Among hospitalized pediatric patients with asthma (P) does a formalized asthma educational program for patients and their parents by a trained asthma nurse educator (I) compared to traditional hospital discharge education (C) result in:

- Increased knowledge of asthma and its triggers
- Increased adherence to daily medication management and/or rescue plan
- Decreased Emergency Department visits
- Increased school attendance
- Increased quality of life (O)

Team



Terms and Databases



Critique

Randomized clinical control study (Madge, McColl, & Paton, 1997) of children hospitalized with acute asthma suggested fewer hospital re-admissions for children whose parents had received nurse led home management education compared to children who received usual discharge instructions and education. Level I

Compared education about asthma self-management skills provided by a hospital-based nurse specialist with that of usual hospital-based care. Nurse-taught patients increased their use of inhaled corticosteroids; reduced use of Albuterol, reached higher and less variable peak flow rates (Levy et al. 2000). Level II

Hopman and colleagues (2004) used nurse specialists in educating asthmatic children and adults who employed a standardized 2 hour asthma education program in 7 clinical centers. There were marked decreases in hospital utilization and missed activity over 6 months. Level VI

In two adult-focused asthma studies, Lindberg et al. (2002) demonstrated that patients whose education was provided by nurse specialists experienced greater reductions in asthma symptoms, less limitations of activities, and demonstrated less airway inflammation when compared to patients receiving standard educational care (Janson et al. 2001). Level VI

Reliable, consistent expertise with supporting materials is needed to ensure that education predictably occurs (Nettles, 2005).

Expert Panel recommended that asthma self-management provided by trained health professionals be considered for policies and reimbursements.



Adopt Change to Practice

Recommendations for CHOC's Asthma Care Guidelines

- Changes to be made based upon the NIH 2007 Asthma Guidelines and 2006 GINA Global Initiatives.

Asthma Nurse Educator

- A licensed Registered Nurse, with three years pediatric nursing experience with an existing asthma educator certification or will complete within one year of onset of employment.
- Asthma Nurse Educator (AEC) will be responsible for the education with regards to various aspects of asthma self management care for patients/families with all severity levels of asthma.

Line of Authority

- Case Management Department, Hospital funded position

Supervision

- Under supervision of delegated Manager/Supervisor

References

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