

Title of Intervention: Childhood Asthma Project

Website: http://ihpr.uthscsa.edu/past_proj_intervention_asthma.html

Intervention Strategies: Provider Education, Supportive Relationships, Environments and Policies

Purpose of the Intervention: To increase health care provider's knowledge and confidence in implementing the Guidelines for the Diagnosis and Management of Asthma (GDMA)

Population: Pediatric health care providers

Setting: Continuity care clinic located in an urban ambulatory care facility; health care facility-based

Partners: University of Texas Health Science Center-San Antonio

Intervention Description:

- **Provider Education:** Participants completed a 36-question, computer-based pre-test of asthma knowledge. Each question was followed by immediate feedback. At the end of the test, participants received an overall summary of their performance. The seminars covered the following topics: 1) spirometry and peak flow meters, 2) asthma medications and 3) recognition of asthma symptoms and triggers. The seminar leaders were pediatricians with four to ten years of experience teaching. Two one-hour lectures were presented on emergency treatment of the child with asthma. The second lecture included a videotape testimonial of a child describing the pervasive impact of asthma on her health, family and schoolwork. The participants then participated in three interactive skill development seminars conducted to maximize opportunity for discussion and hands-on practice. Finally, residents were requested to complete an interactive computer program that placed them in the position of treating an eight-year old Hispanic child with moderate to severe asthma. To facilitate utilization of the GDMA, two pocket cards were distributed to participants. The pocket cards were reinforced by posters placed in the health care facilities.
- **Supportive Relationships:** Role modeling of the GDMA was provided throughout the year by the attending pediatricians.
- **Environments and Policies:** The clinic environment was modified by providing peak flow meters to each patient enrolled in the Childhood Asthma Project study. In addition, spirometry was available on request by the residents. The daily presence of a nurse educator provided support for the providers.

Theory: Not mentioned

Resources Required:

- **Staff/Volunteers:** Facilitators, educators
- **Training:** Not mentioned
- **Technology:** Computer, interactive program
- **Space:** Meeting space
- **Budget:** Not mentioned
- **Intervention:** Peak flow meters, spirometry, pocket cards, posters, educational materials
- **Evaluation:** Computer-based interactive program

Evaluation:

- **Design:** Pre- and post-test
- **Methods and Measures:**
 - A computer-based test assessed asthma knowledge.

Outcomes:

- **Short Term Impact:** Participants demonstrated significant increases in knowledge about evaluation of asthma, pulmonary function testing and clinical management. They also displayed significantly enhanced levels of confidence. Participants were enthusiastic about the asthma management curriculum, rating it significantly higher than 15 other content areas in the general pediatric curriculum.

- Long Term Impact: Not measured

Maintenance: Not mentioned

Lessons Learned: Provider education improves provider's knowledge, management and treatment of asthma, which has a positive effect on their patients with asthma.

Citation(s):

Hendricson, W. D., P. R. Wood, et al. (1994). "Implementation of a physician education intervention. The Childhood Asthma Project." *Arch Pediatr Adolesc Med* 148(6): 595-601.