

2009 APHA Abstract

Title: Children's Hospital Boston Community Asthma Initiative: One Year Follow-up

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Objective: Because asthma is the leading cause of hospitalization and emergency room (ER) visits at Children's Hospital Boston, the Community Asthma Initiative (CAI) was developed to provide nurse case management, home visits, and community connections to reduce hospitalizations, ER visits, and missed school days.

Methods: Services provided included nurse case management for an individualized care plan, coordination with primary care, allergist, and community resources; and home visits, including environmental assessment, integrated pest management, and asthma education. In the first 2 years of the program, baseline and 12-month follow-up questionnaires were completed. Data analysis included the McNemar's test for dichotomous variables and paired t-test for continuous variables.

Results: 207 children enrolled were a mean of 7.9 years old (± 4.5 SD); 55.1% males; 38.2% African American, 52.7% Latino, 9.1% other; and 108 completed 12 months of follow-up to date. There were significant reductions in emergency room visits from 68.5% to 22.8% ($p < 0.001$), hospitalizations from 51.1% to 7.5% ($p < 0.001$), any missed school days from 95.3% to 56.5% ($p < 0.001$), and an increase in the number of children with a current asthma action plan from 45.7% to 86.1% ($p < 0.001$). The program has been successful implementing Community and Family Advisory Boards. This model of asthma care is generating information that is used for planning, advocacy, and policy efforts by the hospital.

Conclusion: CAI significantly decreased ER visits, admissions, and missed school days at 12 months of follow-up, and provides a successful community participating model of asthma care that can be replicated nationally and influence policy.

Learning Objectives:

To understand how to evaluate a community asthma program for health outcomes.

To be able to assess quality improvement one year follow-up information from the Community Asthma Initiative.

To identify the role of community asthma programs in planning, advocacy and policy.

Key Words: asthma, case management, home visiting, environmental triggers