

PUBLIC HEALTH PROGRAM SURVEY- Chronic Disease

Contact Information

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Short Title: An Effective Program for Improving the Quality of Asthma Care for California Children

Program Location: California—seventeen communities statewide

Objectives and Goals:

The goals of the program were to improve the quality of clinical care according to National Asthma Education and Prevention Program (NAEPP) guidelines, reduce asthma morbidity and improve quality of life, and reduce/eliminate asthma health disparities for California children aged 0-18 years with asthma. Many hospitalizations, urgent doctor visits, and symptoms related to asthma can be prevented by following an asthma management plan and avoiding environmental ‘triggers’ for asthma, but poor and minority children are often not educated about these effective care measures.

Methods:

The program released a request for applications in 2005 and selected 17 community health care agencies for funding.

Key strategies included:

1. Training and support of a full-time clinic-based asthma coordinator to improve individual asthma education and care coordination.
2. Utilizing continuous quality improvement strategies in the clinic to improve the delivery and quality of asthma care, focusing on four components of quality asthma care (asthma visit flow sheets, asthma action plans, a home environmental assessment tool, and comprehensive child/family asthma education).
3. Implementing state-level, team, and individual training, guidance, technical assistance, and evaluation.
4. Community outreach to promote and disseminate these best practices.

We provided technical assistance (TA) and training on topics ranging from quality improvement principles and practices and the NAEPP Asthma Guidelines to evaluation methodology, including data gathering and entry, random sampling techniques, and chart abstraction. TA was provided through all-site (in-person) trainings, on-site training by the BPCA program team as needed, monthly teleconference calls, and through written and verbal feedback to bimonthly detailed progress reports submitted to the BPCA program team.

The CAPHI Program team conducted a longitudinal evaluation of patients and their families through interviews at baseline, 12 months, and 21 months, as well as a cross-sectional evaluation of process measures related to asthma care through chart reviews at baseline, 12 months and 24 months. Charts were randomly selected from the clinics' population of children with asthma. Interviews (including validated quality of life instruments) and chart reviews were conducted by the clinics' asthma coordinators and other staff.

Program Length:

Program activities began on April 1, 2006 and continued through June 30, 2008.

Number of target population reached by effort:

The program's target population was the total population of children with asthma served by the seventeen community health centers: 12,197 children (ages 0-18 years). The clinics were located in underserved communities in which there is a high prevalence of asthma.

Demographic Info:

At baseline, 71% of children were Hispanic and 10% African American; 58% were covered by Medicaid and 9% had no insurance

Overall Cost:

The overall cost per year was \$2,975,000 in direct local assistance (\$70,000 per site/annually).

Funding Sources:

100% State
percentages are NOT estimates

Outcomes:

Outcomes (all statistically significant, $p < 0.0001$):

- 84% increase in the number of children who reported having a written copy of an asthma action plan
- 81% increase in the number of children whose healthcare provider ever provided asthma trigger education
- 31% increase in the number of children who had an asthma severity classification documented in the chart in the past six months
- 72% reduction in the number of children who experienced daytime asthma symptoms more than twice a week
- 65% reduction in the number of children who experienced nighttime asthma symptoms more than twice a month
- 76% reduction in hospitalizations due to asthma
- 78% reduction in emergency department visits due to asthma
- 67% reduction in acute clinic or office visits due to asthma attacks
- 73% reduction in the number of children who used rescue medication more than twice a week

- 139% increase in caregivers with “very good” quality of life
- 103% increase in the number of children with “very good” quality of life
- 33% increase in the number of children/families who reported confidence in managing the child’s asthma
- 27% increase in the number of children/families who rated the asthma care they received at the clinic as very good or excellent

All outcomes were derived from longitudinal interviews and cross-sectional random chart review data.

Did you make any estimates regarding costs deferred, outbreaks averted or deaths prevented?

No

Additional Information:

The program was conducted to maximally provide public health services (based upon published effective interventions) to an underserved childhood asthma population. As such, there was no control population for the intervention.

Future Plans:

Currently we are conducting a smaller follow-up program with ten community health centers to integrate key elements of the new EPR-3 NAEPP asthma guidelines into the core asthma clinical assessment and care activities. We had planned to conduct broader dissemination of the programs best practice tools, trainings, and resources throughout both public and private health care systems. Unfortunately, the current state budget crisis is threatening severe program fund cut backs, which could eliminate these efforts.