

A Collaborative Approach to Asthma Care

Margaret Reid, RN, MPA

Shari Nethersole, MD

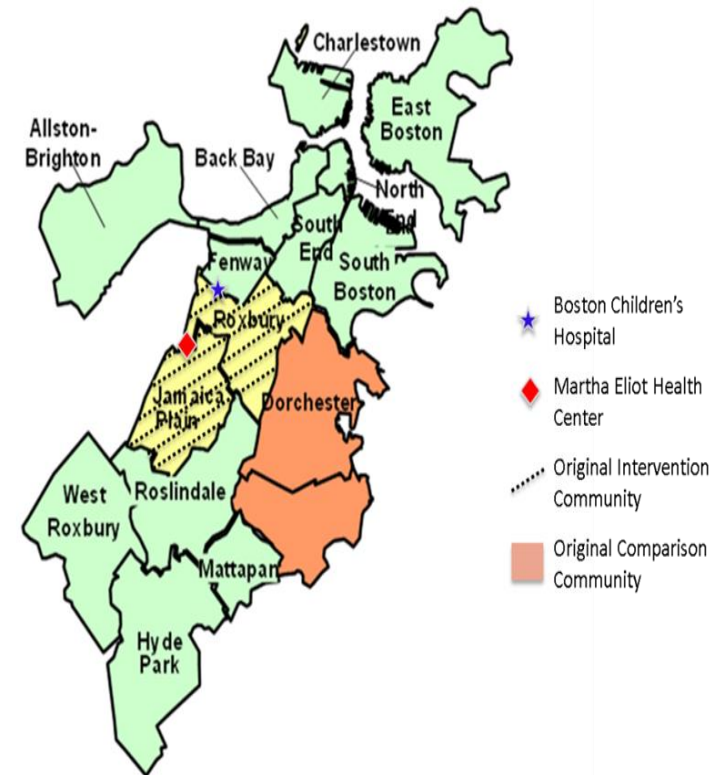


Boston Children's Hospital
Office of Community Health



Assessing the Need

- Community needs assessment by Office of Community Health (2003 and every 3 years)
- Asthma was leading single diagnosis for hospital admissions at Boston Children's
- 70% of children hospitalized for asthma came from 5 low-income, predominately African-American and Latino neighborhoods in Boston
- Boston Schools had 16% asthma prevalence, with 5 schools >24%
- Asthma hospitalization rates for AA and Latino children were 4-5x higher than rate for white children



Boston Children's Hospital
Office of Community Health

Health of Boston, Boston Public Health Commission:

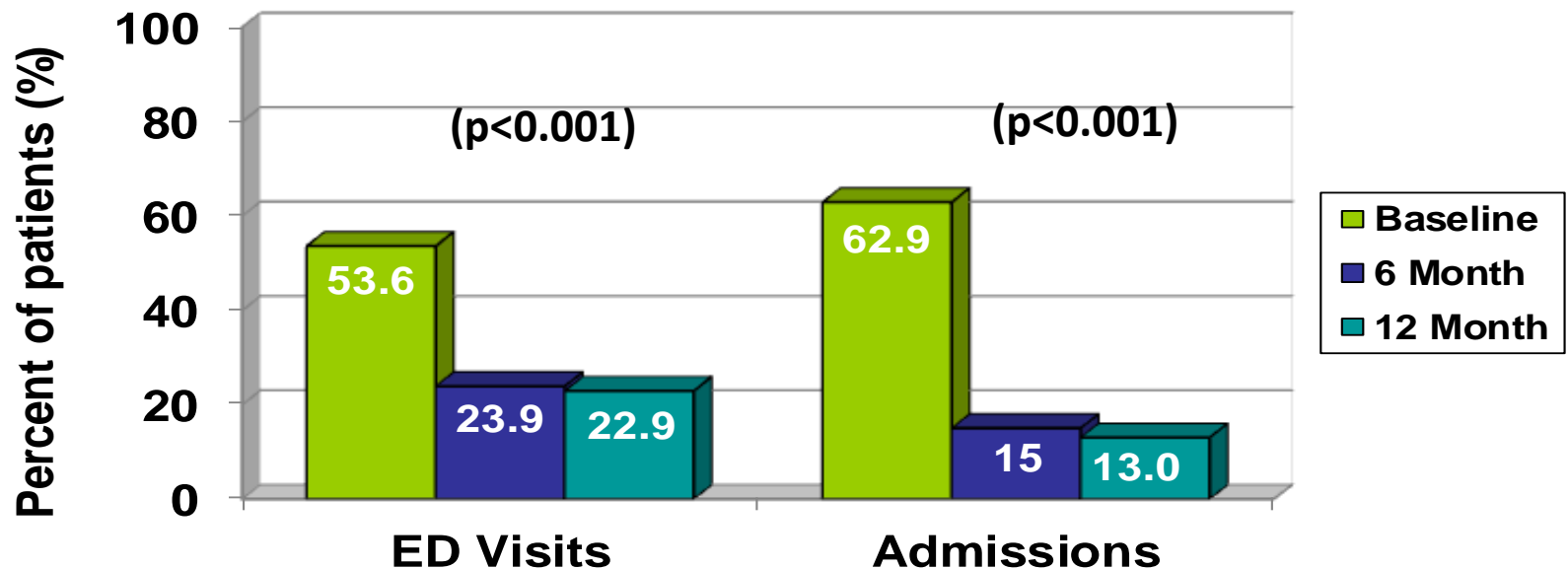
<http://www.bphc.org/healthdata/archive/Documents/Health%20of%20Boston%202005.pdf>

CAI Individual & Family Intervention

- Care coordination by bilingual and bicultural nurses and CHWs
- Establishing family's goals for asthma control
- Identification of barriers to good control
 - Tailored education about asthma and medications
 - Medication adherence
 - Home/school environmental triggers
 - Access to insurance, issues with co-pays
- Environmental assessment/remediation
 - Materials: vacuums, bed encasings, etc.
- Housing advocacy/inspectional services:
 - Breathe Easy at Home (BPHC)
- Referrals:
 - Community medical-legal partnership, child care, and other resources



Decrease in % patients with any (≥ 1) ED Visits or Admissions due to Asthma N=1264 (through March 31, 2014)



57% decrease at 12 Months

80% decrease at 12 Months

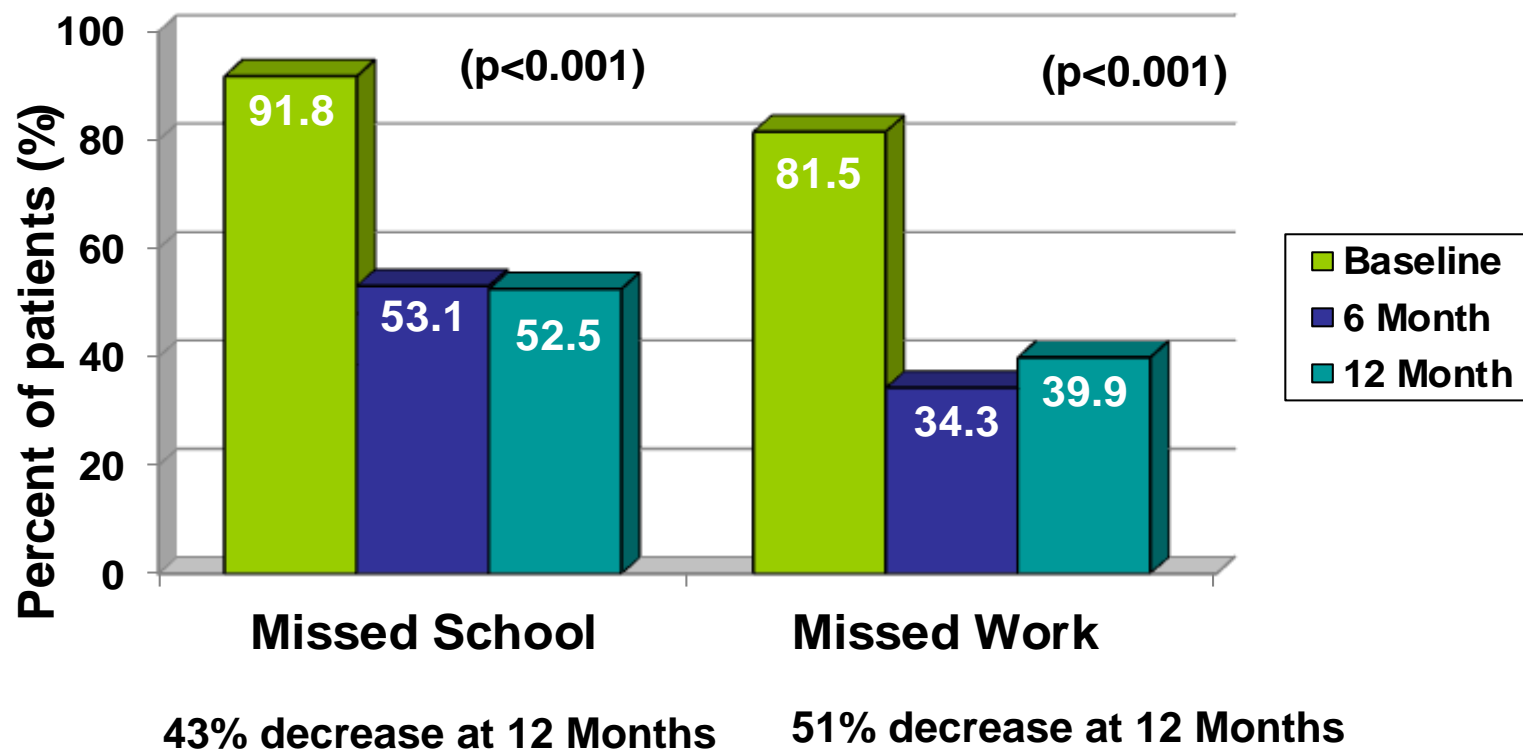


Boston Children's Hospital
Office of Community Health

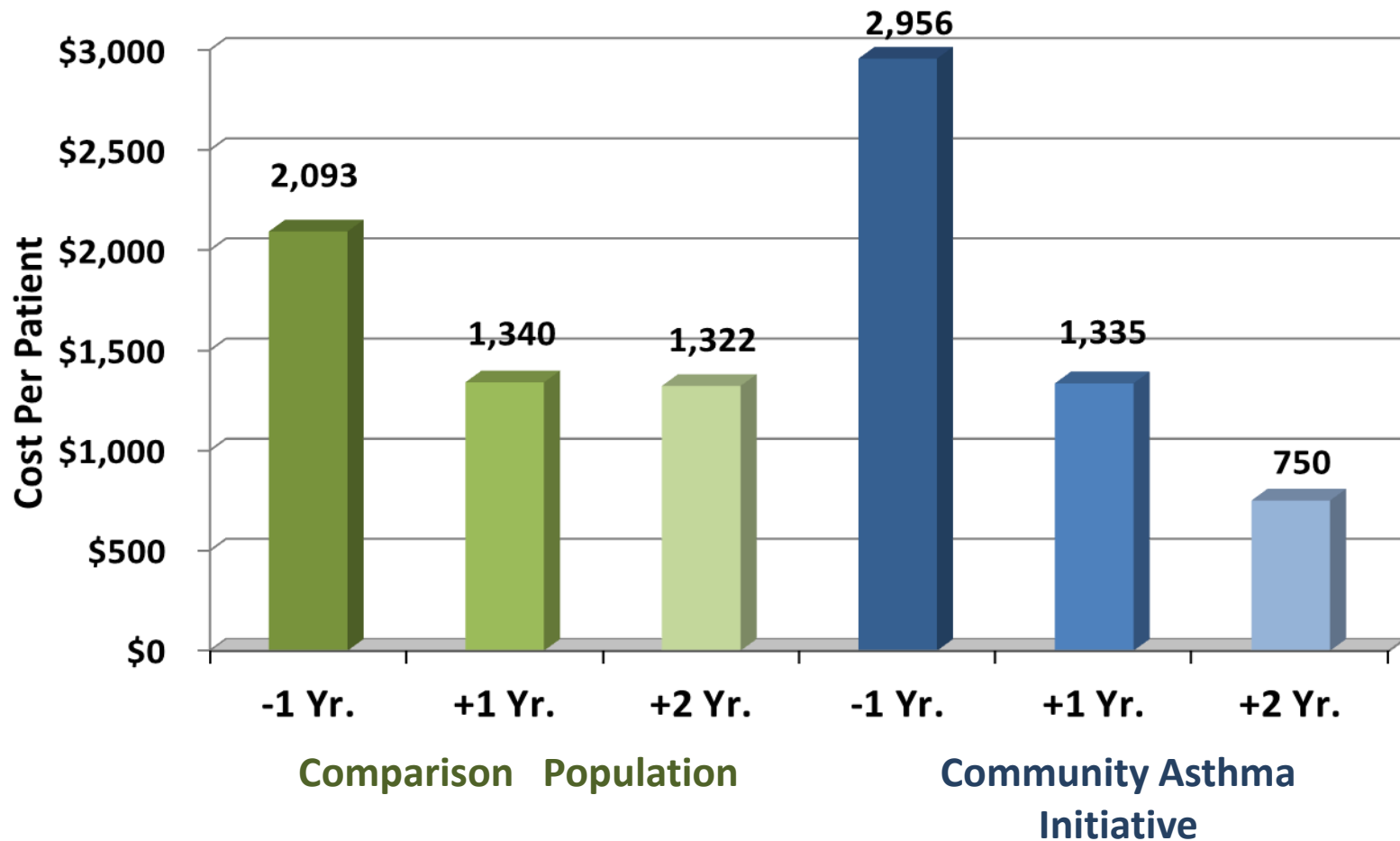
Woods ER, et al. Community Asthma Initiative: Evaluation of a Quality Improvement Program for Comprehensive Asthma Care. *Pediatrics*, 2012;129:465-472.

Decrease in % patients with any (≥ 1) Missed School or Parent/Guardian Missed Work Days due to Asthma

N=1264 (through March 31, 2014)



Total Cost Per Patient (2006, N=102); Return on Investment = 1.46 for ED Visits and Admissions;
Social Return on Investment = 1.73

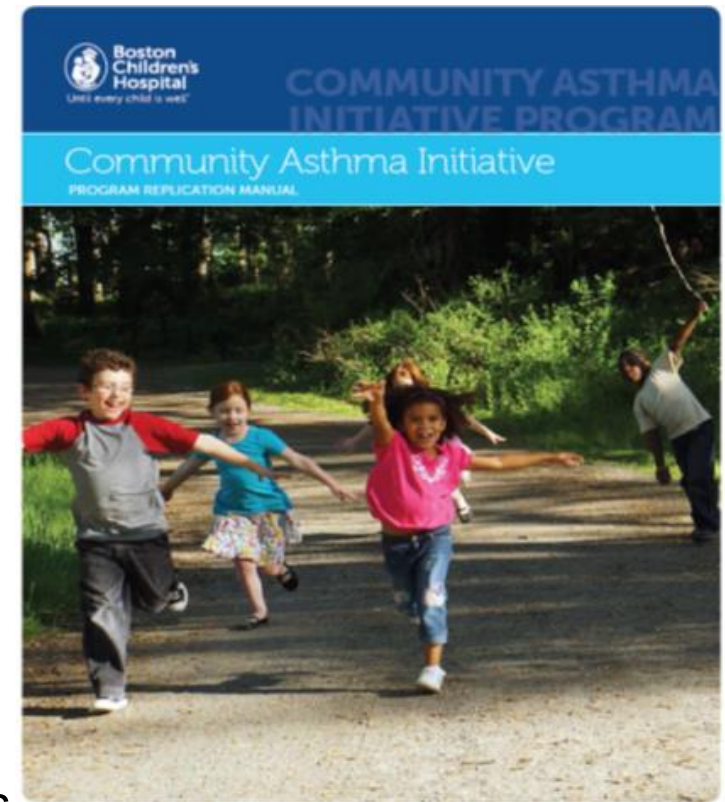


Boston Children's Hospital
Office of Community Health

Woods ER, et al. Community Asthma Initiative: Evaluation of a Quality Improvement Program for Comprehensive Asthma Care. *Pediatrics*, 2012;129:465-472.

Replication, Dissemination and Future Efforts

- HRiA's Center for Medicaid and Medicare Innovation grant, cost effectiveness:
 - New England Asthma Regional Council, providers and insurers
- Replication of CAI model manual
- CAI model adjustment for medical homes, practices, Community Health Centers
 - Population management needed; moving intervention upstream
- Collaborate with insurers:
 - Bundled or case-based payments for traditionally non-reimbursable services
 - Medicaid Pilot funding approved: Children's High-risk Asthma Bundled Payment launching in January 2015.



Boston Children's Hospital
Office of Community Health

http://www.childrenshospital.org/~media/Centers%20and%20Services/Programs/A_E/Community%20Asthma%20Initiative/ReplicationManual2CFinal2C92413.ashx

CAI Family Advisory Board and Staff



Boston Children's Hospital
Office of Community Health

Need for Boston Asthma Home Visit Collaborative

- Inequitable Outcomes: Poor asthma outcomes for Boston children, particularly Black and Latino
- Collaboration & Quality Control: A number of asthma home visiting programs in city
 - Grant funded
 - Variations in content and quality
 - Serving specific institutional or /racial/ethnic/lingual populations with some communities underserved
 - BPHC survey of clinicians found they were confused by the different services and providers

BAHV Collaborative Purpose

- Vision is that any person in Boston who could benefit from home visits for asthma receives them, that the visits are consistent and of high quality, that they result in improved asthma control, are funded primarily by those sources that pay for traditional medical care and are perceived as cost-effective
- Priorities for pursuing this vision
 - Build capacity to offer home visits in as many languages as needed
 - Establish a centralized referral system through BPHC that identifies the most culturally and linguistically appropriate agency to provide the visit to a given family

BAHV Collaborative Members

- Boston Public Health Commission (BPHC)
- Boston Children's Hospital (BCH)
- Boston Medical Center (BMC)
- Environmental Protection Agency, Region 1 (EPA)
- Neighborhood Health Plan (NHP)
- Partners Asthma Center
- Tufts Medical Center

BAHV Collaborative Process

- Collaborative meets every other month
 - Structure:
 - MD's, nurses, public health administrators, program directors, payer, community health workers
 - Facilitated by an asthma policy expert
 - Activities
 - Developed, tested, revamped forms
 - Training and support for community health workers performing visits
 - Completed pilot evaluation of clinician and client satisfaction and ACT improvements after year 1
 - Completed second evaluation

Community Health Worker (CHW) Support

- Monthly meeting of CHWs performing asthma home visits
 - RN, NP or MD for clinical oversight
 - BPHC facilitator/meeting organizer
 - Problem solving, peer to peer learning and support, resource information, reinforcement of training and education
- Goal is standardization across service providers, retaining CHWs and increasing skills and knowledge

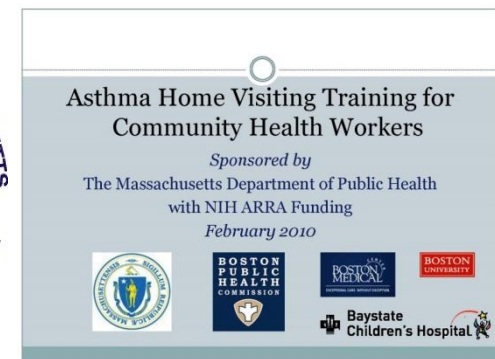
BAHVC Community Health Workers



Margie Lorenzi, Boston Children's Hospital; Zifeng Zou, Tufts Medical Center; Nathalie Bazil and Josephine Santana, Boston Public Health Commission; Joy Gonzalez, Neighborhood Health Plan; Kathy Monteiro Williams, Boston Children's Hospital

Community Health Worker Training

- Training and support developed and implemented by Boston Public Health Commission's Asthma Prevention and Control Program and Community Health Education Center
 - Comprehensive Outreach Education Certificate Program offered by CHEC
 - 4 day asthma home visitor training developed by BPHC Asthma Program and CHEC, 2 day refresher annually
 - 2 day supervisor training
 - Quarterly in person support meetings



Insurance Reimbursement

- Response from Insurers to Asthma CHW Intervention
 - Openness to payment
 - Some convinced it works
 - Some still need more cost benefit analysis
- To expand reimbursement wanted:
 - Standardized training
 - Standardized skill assessment/evaluation
 - Easy referral system



MDPH Consultant Assessed State Capacity: Major Recommendations

- Expand Training
 - Include a mentorship or practicum phase
- Assess CHW skills and knowledge
 - Develop a performance oriented assessment that includes home visit observation and preceptor evaluation.
- Support Easy Referrals
 - Explore community/regional CHW cooperatives that offer supervision, promote intervention standardization, serve as referral agency

