

# spotlight on asthma

## Children's focus on improving asthma care

Asthma is the leading cause of hospitalization at Children's Hospital Boston and the hospital is also the largest provider of health-related services to children with asthma in Massachusetts. The disease is a leading contributor to missed school days and parental work days thus impacting a child's ability to learn and threatening the economic stability of the family.

Children's uses a comprehensive approach to address the issue—its patient care, community health and education, and public policy advocacy efforts are all directed towards improving the lives of children and families coping with asthma and reducing the racial disparities in asthma hospitalizations and emergency department visits.

The hospital provides care for children as inpatients (through the Emergency Department, the Short Stay or Intermediate Care units) and as outpatients (through the Children's Hospital Primary Care Center, Martha Eliot Health Center, Adolescent Medicine, Pulmonary Clinic and Allergy/Immunology Department). Outside the hospital walls, the Community Asthma Initiative (CAI) provides individualized education and case management to support families and help them better manage the disease. Children's is also an advocate for children with asthma and a lead partner in efforts to ensure families have access to needed education and home-based support. Staff and providers are actively involved in legislative efforts to improve insurance coverage for these services so that children throughout Massachusetts can benefit.

## Our community health initiative to improve asthma care

Children's **Community Asthma Initiative (CAI)** helps families living in Jamaica Plain, Roxbury, Dorchester and other Boston neighborhoods to improve their child's asthma management—preventing attacks and other serious complications and better controlling the disease. The program offers:

- **one-on-one nurse case management and home visits** to educate families about asthma and the proper use of medications, how to identify and reduce home environmental triggers, and enhance communication between patients and their primary care providers, as well as link parents to other community resources and specialty medical care.
- **educational trainings and support** for community caregivers of children with asthma including staff from schools, community-based organizations and health centers to help increase their capacity to provide asthma education and care for families.
- **advocacy initiatives** aimed at insurance, legislative and regulatory changes that will help families access needed medical care, support services and education.

Results from CAI are promising. Over the past three years, 314 children have participated in the program. An analysis of these children has shown that their emergency department visits were reduced by 67 percent and hospital admissions by 85 percent. In addition, lost school days were reduced by 41 percent and missed work days (parents/caregivers) by 56 percent, as reported by families participating in the program.

### BY THE NUMBERS

# 85%

reduction in the number of hospital admissions at Children's for patients who have participated in CAI

# 9,453

patients treated for asthma at Children's for a total of more than 17,650 inpatient and outpatient visits at the hospital

# 70%

of the children hospitalized for asthma at Children's are from Boston

# 314

children served in the CAI program over three years

# 174

community meetings Children's staff participated in to raise awareness of asthma

# 29

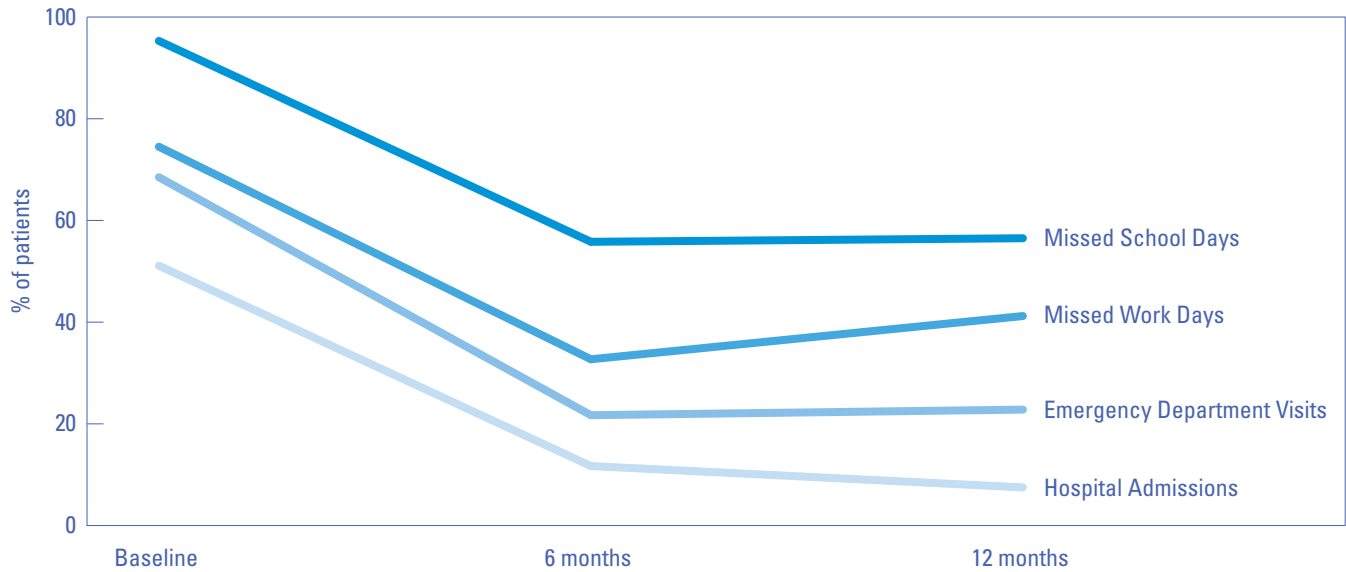
asthma education workshops for parents, providers and caregivers; 98% of surveyed participants reported learning something new following the workshop

# 500

children and parents reached through asthma education and programs in the community



The Community Asthma Initiative (CAI) has significantly reduced the emergency department visits, hospitalizations, missed school days and missed work days (parents/caregivers) for 314 children.



Source: CAI Program data FY 08

## Addressing health disparities

Asthma disproportionately affects minority children and those living in low-income neighborhoods. 70 percent of the patients hospitalized at Children’s Hospital Boston for asthma are from the economically and racially diverse Boston neighborhoods of Roxbury, Jamaica Plain, Dorchester, Roslindale and Hyde Park. Latino and black children are particularly vulnerable to asthma; admission rates for minority children are five times that of white children. Children’s CAI was designed specifically to reduce the burden on minority children with asthma living in the Boston areas with high asthma rates. More than 50 percent of the children participating in CAI are Latino and almost 42 percent are black.

## Partnering to address asthma

Children’s partners with a variety of community organizations and agencies to help provide families with needed resources, and support efforts to create long-term change for how the disease is managed. Children’s works closely with:

- the Boston Public Health Commission to provide children, parents and caregivers with asthma education and physical activity opportunities.
- ESAC (Ensuring Stability through Action in our Community) to provide families with home visits to help identify and better manage home environmental triggers.
- the Boston Urban Asthma Coalition and the Asthma Regional Council to help raise awareness of the disease and advocate for changes to ensure families can access care, resources and medication.

## Moving ahead

Children’s aims to reduce the burden of asthma on children and families by improving their management of the disease. At the same time, the hospital is focused on changing the system to improve asthma care for all children across the state. Working with partners such as the Boston Urban Asthma Coalition and the Asthma Regional Council, Children’s has developed a business case which highlights the cost savings that can be achieved from providing asthma education and

case management. Children’s is engaged in conversations with insurers, advocates, providers and other leaders around this issue and hopes that CAI can serve as a model for how case management, home visits and education can be effective. CAI is also conducting an analysis of the costs of the program per child and a longitudinal study to determine if the program’s results are sustainable over time.

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