

# Project BREATHE: Improving Adherence to Pediatric Asthma Guidelines

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## Purpose

Project **BREATHE** (Bringing Resources for Effective Asthma Treatment through Health Education) is a quality improvement project that began at Cohen's Children Medical Center (CCMC) in 2012 with the support of the Asthma Coalitions of Queens and Long Island.

**ASSESSING ASTHMA SEVERITY**

Determine level of severity according to patient's age & most serious risk or impairment feature (circle answers as you ask)

Risk: how many times that year did your child take a medicine like Otrivin, Prevacid, Protonix, Hydrocortisone or Medrol  
Impairment: in the last 4 weeks - how many days a week does your child have asthma symptoms, how many times do they wake up at night with symptoms, how many times a week do they use their rescue medicine, how much does their asthma interfere with their normal activities - able to go to school, play, etc (you may not have access to lung function testing results)

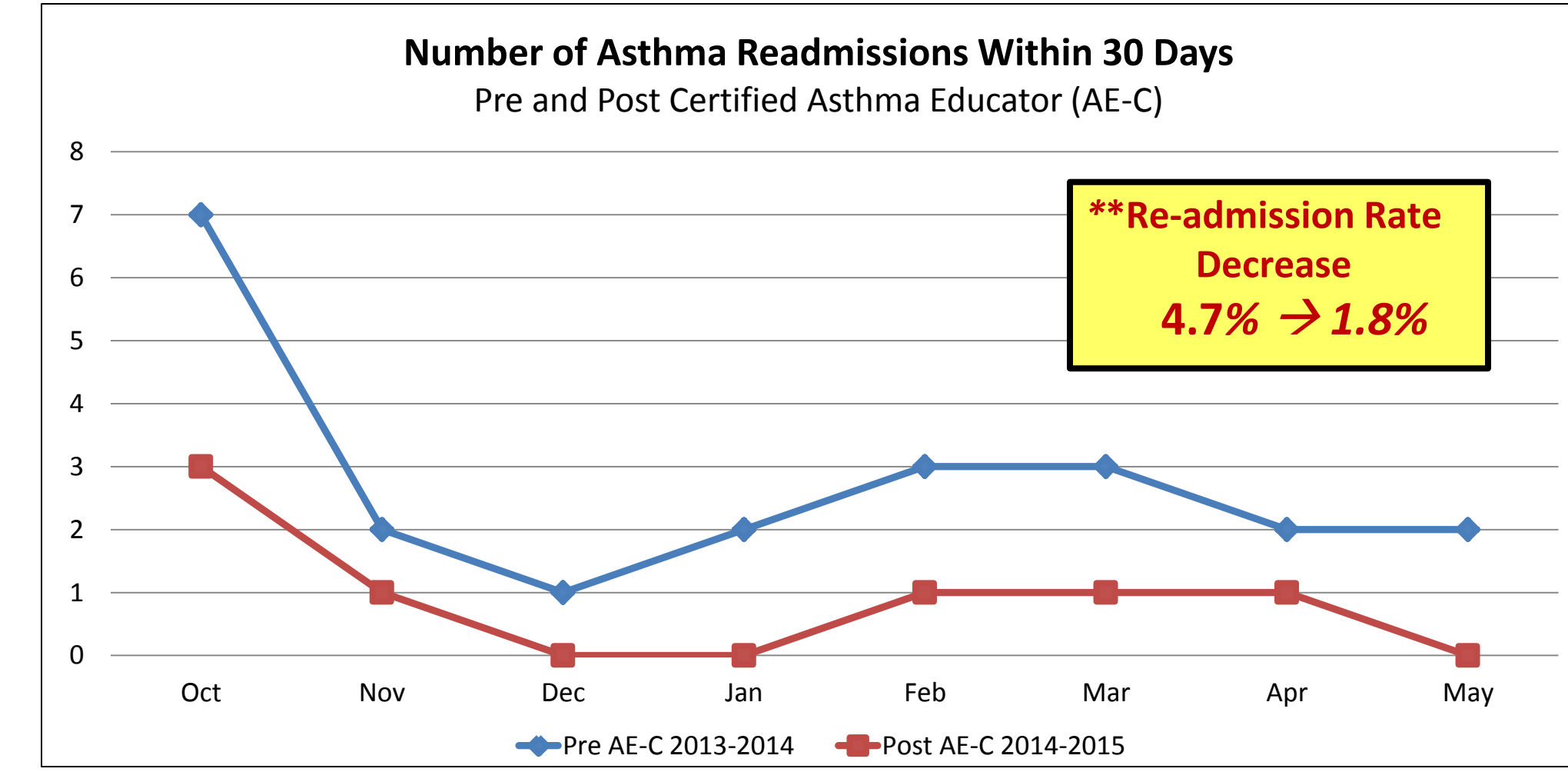
Age Group	Risk	Impairment	Level of Severity	Recommended Initial Treatment					
0-4 Years	A	0-1 / year	≤2 days/wk	0	≤2 days/wk not daily	None	NA	Intermittent	Step 1
	B	≥2 in 6 months or ≥4 wheezing episodes/1 year lasting ≥1 day AND at risk for persistent asthma	>2 days/wk not daily	1-2x/month	>2 days/wk not daily	Minor limitation	NA	Mild Persistent	Step 2
5-11 Years	A	0-1 / year	≤2 days/wk	≤2x/month	≤2days /wk, not daily	None	FEV <sub>1</sub> normal between exacerbations (≥80%) FEV <sub>1</sub> /FVC > 80%	Intermittent	Step 1
	B	≥2 / year	>2 days/wk, not daily	3-4x/month	>2days /wk, not daily	Minor limitation	FEV <sub>1</sub> > 80% FEV <sub>1</sub> /FVC > 80%	Mild Persistent	Step 2
12 Years to Adult	A	0-1 / year	≤2 days/wk	≤2x/month	≤2days /wk, not daily or ≥1x/day	None	FEV <sub>1</sub> normal between exacerbations (≥80%) FEV <sub>1</sub> /FVC normal	Intermittent	Step 1
	B	≥2 / year	>2 days/wk, not daily	3-4x/month	>2days /wk, not daily or ≥1x/day	Some limitation	FEV <sub>1</sub> > 60-80% FEV <sub>1</sub> /FVC > 75-80%	Moderate Persistent	Step 3 & consider short course of OCS
	C	≥2 / year	Throughout the day	Often 7x/wk	Several x/day	Extremely limited	FEV <sub>1</sub> < 60% FEV <sub>1</sub> /FVC < 75%	Severe Persistent	Step 3 medium-dose option OR Step 4 & consider short course of OCS

## Problem/Significance

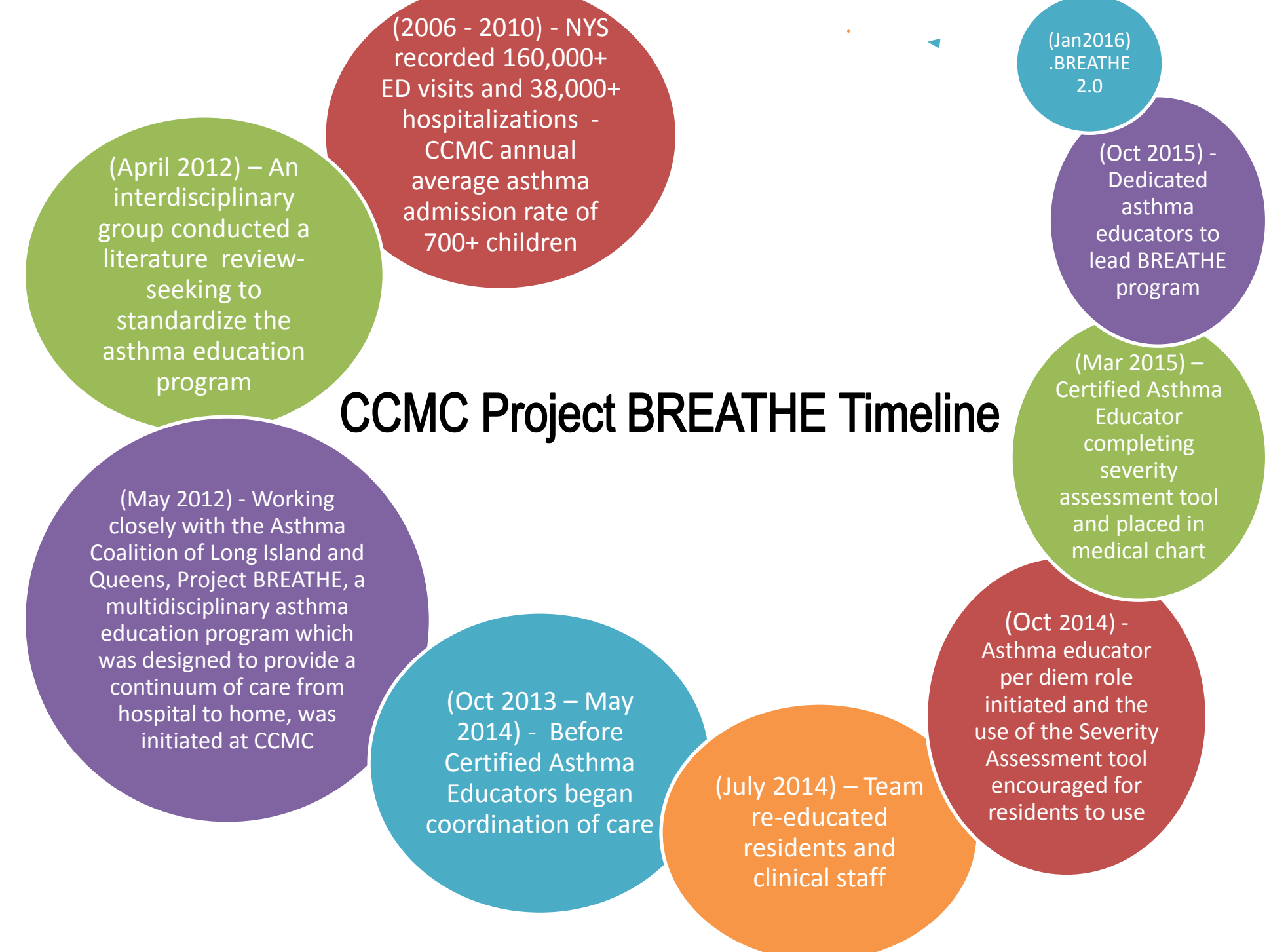
Asthma is the leading cause of chronic illness among children and adolescents in the United States. Approximately **6 million children** are affected by asthma. Asthma complications have accounted for **10.5 million missed schooldays, 456,000 hospitalizations, and 1.75 million hospital emergency room visits annually.** In May 2014, CCMC was challenged with reducing asthma readmissions by 10% and increasing provider adherence to the Asthma Management Guidelines - particularly the assessment, documentation and proper classification of asthma severity - by 70%.

## Results

With the institution of a Certified Asthma Educator (AE-C) and the re-education of staff, CCMC was able to **decrease the asthma re-admissions by 50%** and **increase compliance to the documentation with evidence of asthma severity classification by 86%.**



## Strategy/Implementation



Its primary aim is to **reduce asthma related hospital admissions while increasing adherence to the Asthma Management Guidelines** developed by the National Asthma Education and Prevention Program (NAEPP) via use of an interdisciplinary asthma education program.

