

**AN INVESTIGATION OF
ASTHMA CARE BEST PRACTICES IN
A COMMUNITY HEALTH CENTER**

Aerocrine

OVERVIEW

In August 2012, an article was published summarizing the findings from a study of a comprehensive asthma management program called *Asthma Relief Street*.¹ The program was developed in 2001 in response to health disparities in the South Bronx Latino community whom Urban Health Plan (UHP) serves. This community has higher asthma prevalence rates than the US population overall^{1-3*}:

- ◆ In children, 26.4% versus 9.6% in the US population overall
- ◆ In adults, 13.4% versus 8.8% in the US population overall

*Prevalence data from UHP are from 2011; US prevalence data are from 2009.

UHP PROGRAM DESIGN¹

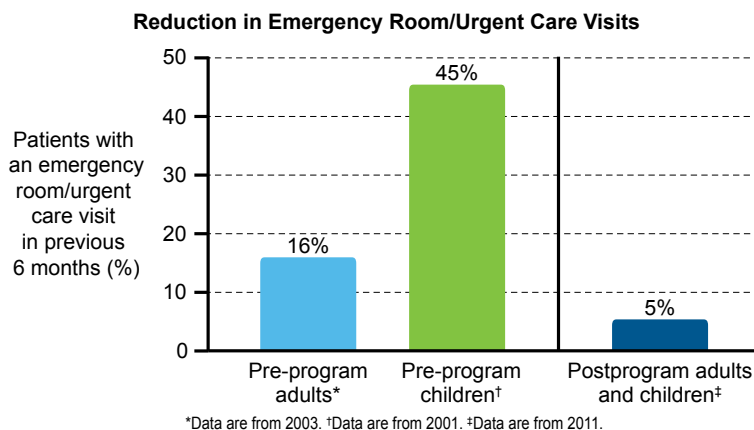
Patients with asthma participated in a health performance improvement collaborative to improve asthma health outcomes. The program included the following:

- ◆ Screening for asthma symptoms, emergency room visits, hospitalizations, and intubations
- ◆ Asthma Control Test Questionnaire
- ◆ Review of medication use
- ◆ Bi-annual spirometry
- ◆ Self-management goals
- ◆ Fractional exhaled nitric oxide (FeNO) measurement at each visit to help identify patients (6 years of age and older) at risk for acute exacerbations and to determine controller medication adherence
- ◆ Development of asthma action plan

From this information, pharmacologic therapy and time to follow-up were determined.

IMPROVED ASTHMA OUTCOMES¹

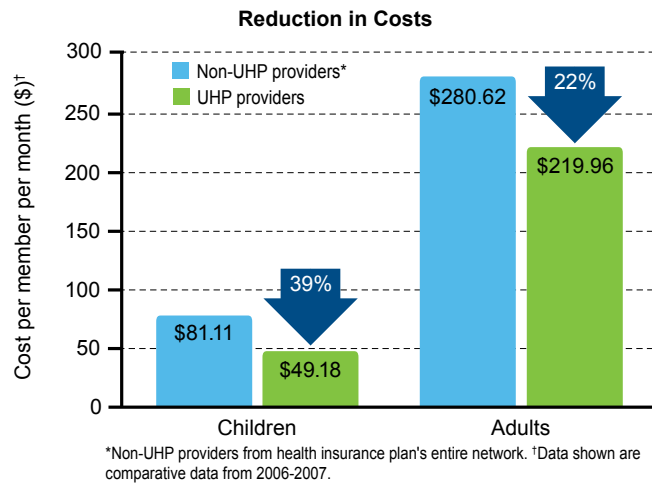
Implementation of the UHP *Asthma Relief Street* program resulted in sustained improvements in asthma outcomes. An integral part of the program's success was using evidence-based medicine, including FeNO measurement, to help identify risk of exacerbations and adherence to controller medications. As of December 2011:



By utilizing a comprehensive asthma management plan, which included FeNO measurement to help identify patients at risk of acute exacerbations and evaluate patient adherence to medications, the *Asthma Relief Street* program improved asthma outcomes while also lowering costs.¹

REDUCTION OF COSTS

The success of the program led to a project to assess the cost of asthma care using the UHP *Asthma Relief Street* program relative to the entire network.



CONCLUSION

The study demonstrated that a comprehensive asthma management program that includes measurement of FeNO not only improved asthma outcomes, but it did so while lowering costs.

References: 1. Lester D, Mohammad A, Hernandez PI, Leach EE, Walker EA. An investigation of asthma care best practices in a community health center. *J Health Care Poor Underserved*. 2012;23:255-264. 2. Akinbami LJ, Moorman JE, Liu X. Asthma prevalence, health care use, and mortality: United States, 2005–2009. Hyattsville, MD: National Center for Health Statistics, Centers for Disease Control and Prevention, US Dept of Health and Human Services. January 12, 2011. DHHS Publication No. (PHS) 2011-1250. National Health Statistics Reports No. 32. 3. Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System Survey Data. Atlanta, GA: US Dept of Health and Human Services, Centers for Disease Control and Prevention; 2009. <http://apps.nccd.cdc.gov/brfss/list.asp?cat=AS&yr=2009&qkey=4416&state=All>. Accessed August 15, 2012.

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