



**The Problem**

- ◆ When asthma is not controlled, it can hurt a child’s ability to sleep, think, do well in school, and participate in sports.
- ◆ In parts of Chicago, 1 in every 4 children has asthma. There is no cure for asthma. But we can make life better for children with asthma.

**Our Goal**

Erie Family Health Centers and the University of Illinois at Chicago (UIC) are working together on the Asthma Action at Erie research project for children with asthma. This project provides special asthma services to Erie Family Health Centers patients. Some families are offered asthma education in the clinic from an asthma educator. Other families receive asthma support in the home from community health workers.

**Enrollment by Site (total=223)**

|               |     |
|---------------|-----|
| West Town     | 122 |
| Evanston      | 9   |
| Helping Hands | 41  |
| Humboldt Park | 37  |
| Johnson       | 9   |
| Westside      | 5   |

**Study Recruitment**

To qualify for the study, children had to be 5-16 years old, a patient at Erie, and have experienced a lot of asthma symptoms in the past year. Erie identified 1,688 candidates from six Erie clinic sites. These families were sent letters describing the study and then contacted by telephone to determine their interest and eligibility. Many families did not qualify because children did not have enough symptoms. After 18 months, 223 families were fully enrolled in the study.

**Participants**

Parents were almost all female (97%) and had an average age of 36 years. Twenty-nine percent of parents had less than high school education, and 38% had a high school education or GED. Eighty-six percent of parents were Hispanic, with the majority claiming Mexican heritage (74%). Fifteen percent of parents were African American. The majority of parents were married/living with a partner (65%). Slightly more boys than girls (56% boys) were enrolled. Seventy-nine percent of children were ages 5-11, while 21% were 12-16 years old. Sixty percent of children were either overweight or obese.

**Asthma Problems**

Asthma was measured in multiple ways. Families were asked about asthma symptoms and hospital visits. Medications and triggers were also observed in their homes. Over half of the children had recently experienced many asthma symptoms, and all had had some asthma problem in the past year. Not everyone had an asthma quick-relief medication (82%), and less than half had a controller medication. Medication technique was not optimal, and many triggers were seen and reported in homes.

**Behavioral Health Issues**

Fifteen percent of parents and 18% of children reported depression symptoms. Additionally, 19% of parents and 51% of children reported symptoms of post-traumatic stress disorder.

**Next Steps**

Families will be receiving asthma intervention for the first year of the study. The second year is observation only, but the research team from UIC will continue to collect information on families to understand if asthma changes over time and if the interventions help.

| Participant Asthma Characteristics                                |     |
|---|-----|
| Uncontrolled asthma in last 7 days                                | 59% |
| Average number of days of activity limitation in the past 2 weeks | 3.6 |
| Uncontrolled asthma in last 4 weeks                               | 56% |
| Asthma severity in the past year                                  |     |
| Low/mild  | 38% |
| Moderate  | 43% |
| Severe  | 19% |
| Had used prednisone for asthma in past year                       | 60% |
| Had been to the emergency room for asthma in past year            | 38% |
| Had been to the hospital for asthma in past year                  | 17% |
| Number of missed school days for asthma in past year              | 6.7 |
| Have an asthma reliever medicine                                  | 82% |
| Have an asthma inhaled controller medicine                        | 44% |
| Has a spacer  | 72% |
| Percent of medication technique steps done correctly              | 64% |
| Smoker in the home  | 30% |
| Pets in the home  | 52% |

