Partnering with Schools to Improve Asthma Care for Urban Children

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Students with Asthma Struggle to Succeed
Joshua

Emergency visits

Difficulty sleeping

Frequent absences

Poor attention

Inconsistent adherence
The Burden of Asthma

Poor and minority children have a greater asthma burden.

1 in 11 children has asthma.

Children with asthma living in poverty:
- 12.2% < 100% Poverty Level
- 9.9% 100-199% Poverty Level
- 8.2% ≥ 200% Poverty Level

Nearly 7 million children ages 0 to 17 in the United States have asthma, with poor and minority children suffering a greater burden of the disease.

Over $50 billion in medical expenses associated with asthma annually.

Impact on Schools

Missed school days
Poor sleep
Activity limitation
Poor school performance
Impacts all members of school community
On average, 3 children in a classroom of 30 are likely to have asthma.*
13.8 million
Number of missed school days among children with asthma
Guideline-Based Care can Improve Outcomes
National Asthma Guidelines

Daily preventive medications + Adjustments for poor control → Improved outcomes
Inadequate Therapy and Poor Control

National Asthma Survey; N=975

- Persistent asthma w/ no preventive medication: 37%
- Poor control w/ preventive medication: 43%
- Optimal Control: 20%
How to Address Gaps in Care?

Elements of health care system that encourage high-quality care

Ensure access to services that improve outcomes

Ed Wagner, et al.
School-Based Programs Can Improve Outcomes
Provide opportunities to identify high-risk children

Build optimized systems of care where children spend most of their day
Partnership with School Nurse Program

The Preventive Care Program for Urban Children with Asthma

Directly Observed Therapy + Treatment Adjustments
School-Based Asthma Therapy (SBAT) Trial

25% Reduction

Symptom Days
Symptom Nights
Activity Limitation
Days Absent From School
Asthma Attacks
School-Based Asthma Care
Rochester City School District
School-Based Asthma Care Nationally
School-Based Telemedicine Enhanced Asthma Management (SB-TEAM)

Child site: School or Daycare

Clinician site: Pediatric Office

Secure web connection
Students with Asthma Struggle to Succeed

Despite guidelines, treatment often is suboptimal
HEALTH CARE + SCHOOL PARTNERSHIPS

Improved Symptoms

Participation in Activities → Absenteeism → School Engagement & Attention

Academic Outcomes & Success
Joshua

Consistent medication
Symptoms controlled
Better sleep
Decreased absenteeism
Improved performance
The Preventive Care Program for Urban Children with Asthma