Assembling Your School Asthma Team: An Asthma Quality Improvement Collaborative

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Identify a problem or an opportunity for improvement
Establish a team/collaborative
Identify a project location and set an aim
Establish measures and report data monthly
Develop ideas, test, and implement change

What’s the problem? The burden of asthma in New York State.

- NYS has the 2nd highest rate of asthma in the United States
- In 2015, 400,500 children had asthma
- 30,000 hospitalizations, 170,000 ER visits, and 287 deaths
- In 2018, there was an estimated total cost for asthma $3.6 billion
What’s the Problem? Buffalo/Western NY

WNY has the 2nd highest rate of asthma ER visits and the 3rd highest rate of asthma hospitalizations

- 20% of children in Buffalo have asthma
- African-American and Latino children have the highest % of asthma
- Buffalo: high poverty rates, old housing stock, Peace Bridge, pockets of neighborhoods with high AA, and Latino children with asthma

New York State DOH Asthma Quality Improvement Collaborative (AQIC)

- Mission is to improve the quality of asthma care and health related outcomes among child of moderate to high-risk asthma in primary care and SBHC settings using evidence-based practices (NHLBI/NAEPP, 2007)
- 14 month project starting in June 2018 - July 2019
- 3 learning sessions
- Monthly webinars and data collection
- Rapid PDSA tests using the Model for Improvement

School Based Health Center (SBHC) P.S. 76 Herman Badillo Bilingual Academy

- Provide FREE care in school to all students Enrolled in the SBHC
- Primary care services include comprehensive physicals, immunizations, diagnosis and treatment of acute and chronic medical conditions, such as asthma and obesity, and nutritional counseling
- Mental health services include assessments, counseling, crisis intervention and referrals as needed
- Safety Net to reduce gaps in care, lower emergency department and hospital rates
SBHC
P.S. 76 Herman Badillo Bilingual Academy

- ~800 children in PreK-8th grade
- 212 children have an asthma diagnosis
- Over 90% of students are enrolled in the SBHC
- Many Spanish speaking children/families

Buffalo SBHC AQIC Team

P.S. 76 School Based Health Clinic
NP, MA, SW, MD, AE-C

Oishei Healthy Kids (OHK)
Care Managers, QI

WNY Children’s Environmental Health Center (WNY CEHC)
Coordinator, Medical Director

Buffalo SBHC AQIC Team

Kim Uttech, FNP-C, AE-C
Melinda Cameron, MD
Medical Director

Susan Boswell, FNP
Lizette Polietro, MPH
Coordinator of the WNY Children’s Environmental Health Center

Chelsea Kreida
Care Manager
Robert Showery, Quality, Oishei Health Kids

Robert Mowery, Quality, Oishei Health Kids
NYS AQIC AIM

- Reduce # of hospitalizations for asthma patients by 20% in the previous 6 months
- Increase the % of asthma patients classified as well controlled by 40%
- Increase symptom free days to at least 12 out of 14 days

Buffalo SBHC AQIC AIM

In 14 months, increase the number of student with asthma with EMR documentation of:

- AAPs by 50%
- Environmental triggers by 50%
- “Well Controlled” by 25%

Measures Established by NYS AQIC

- Asthma Action Plan
- Asthma Classified as “Well Controlled”
- Documented Control Classification
- Documented Severity Classification
- Documented Environmental Triggers
- Education about Environmental Control Measures
- Referrals to Home-Based Services
- Hospitalization and ED visits due to asthma
- Prescribe inhales Corticosteroids
- Documented Self - Management
**Intervention SBHC 76**

**Streamline Asthma Visit Process**

- Staff training: School Asthma Management (SAM) Survey Tool, NHLBI Guidelines, Asthma 101
- Prioritized children with asthma by severity and control
- Increase Communication
- Posters and Pictures of medications, triggers, lungs, spacer/inhaler technique in all exam room

**Intervention SBHC 76**

**Asthma visits were broken down into smaller multiple visits with focus on asthma education**

- SAM Survey Tool
- AAP (medications, spacer and inhaler technique)
- Self-management education (what is asthma, signs and symptoms, triggers, AAP)
- Every visit: Assess smoking, spacer/inhaler technique, controller use, medication use, control

**Intervention SBHC 76**

**Establish Linkage to Community Based Organizations:**

1. OHK Health Home: for children with asthma who also have one other chronic health condition
2. WNY CEHC
3. NYS Smokers Quit line
4. Visiting Nurse Association (VNA)
5. Erie County DOH Healthy Neighborhood Program
6. Referrals to Lung Center, Allergy Clinic, PCP
Intervention OHK and WNY CEHC:

WNY CECH: Educate OHK care managers on asthma and environmental asthma triggers
- **WNY CEHC**: Environmental asthma trigger survey developed in English and Spanish (10 questions)
- **2 Education Sessions**: for 26 OHK care managers to teach them how to screen for environmental asthma triggers and review Asthma 101
- **OHK**: Referral tracking system in the EMR, developed a 5 question tool

Data Results
June 2018 - April 2019

![Chart showing data results]

- Referrals Received
- Referrals Enrolled
- Referrals Enrolled During A Home Visit
- Members That Received An OHK Home Visit

- Visits
# of Children that Completed the Full Environmental Asthma Trigger Screen

- October: 0
- February: 1
- March: 6
- April: 3
- May: 2

% of Patients with an Asthma Action Plan

- June: 0%
- September: 40%
- October: 100%
- November: 0%
- December: 20%
- January: 30%
- February: 90%
- March: 80%
- April: AAAP created in P.S. 76 clinic

Documented Level of Asthma Control

- Jun-18: 20%
- Jul-18: 80%
- Aug-18: 60%
- Sep-18: 60%
- Oct-18: 20%
- Nov-18: 90%
- Dec-18: 80%
- Jan-19: 80%
- Feb-19: 100%
% of Asthma Patients Whose Asthma is Not "Well-Controlled" Who Received a Referral to Home-Based Asthma Services

Home visits conducted by OHK

Conclusions

Barriers
- Staff turnover
- Time constraints
- Engagement
- No bilingual team members
- Survey return rate low
- Parents say “yes”, but can’t reach
- Fruitful visits?

Successes
- Established a referral system and linkage between Oishei Healthy Kids, WNY Children’s Environmental Health Center, and the SBHC which has become part of process for SBHCS
Next Steps

- Increase referrals to EC CEHC and OHK
- Introduce EC CEHC to other SBHCs
- Spread referral system to other SBHCs
- Sustainability
- Asthma Coalition

Thank you