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A Pilot Evaluation: Asthma-Friendly Schools Initiative



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Project Background

Through funding from the Centers for Disease Control and Prevention National Asthma Control Program, the state of Texas established:



The Texas Asthma Control Program (TACP) to support asthma surveillance, interventions, evaluation and collaborative infrastructure.

Project Background

TACP contracted with UNTHSC to conduct an evaluation of one of their grantees:

Asthma-Friendly Schools Initiative

**Operated by the American Lung Association in
Austin, Texas**

Project Background

TACP's **GOALS** of evaluation are to:

1. Ensure that TACP uses its resources effectively and efficiently
2. Demonstrate the value of the program
3. Extend knowledge on best practices to improve asthma outcomes and prevent asthma
4. Build evaluation capacity in order to strengthen outcome assessment

Why Central Texas?

- Based on data from the 2012 Texas Behavioral Risk Factor Surveillance System, almost 8% of children in Texas Public Health Region 7 have asthma.
- Childhood asthma is the leading cause of chronic disease-related school absenteeism.
- Asthma can affect children's ability to learn while in the classroom.

Program Overview

The Asthma-Friendly Schools Initiative (AFSI) in Austin, Texas works to:

- Develop Indoor Air Quality (IAQ) Teams to create asthma-friendly school districts
- Educate school staff, parents, and community members on asthma management and control using the ALA's Asthma 101 curriculum
- Train school nurses and others how to implement the ALA's Open Airways for Schools (OAS) Program

Texas Asthma Control Program: Asthma Friendly Schools Initiative, American Lung Association, Plains-Gulf Region, Austin, TX

Problem Statement: In 2012, Texas Public Health Region 7, almost 8% of children ages 0-17 have been diagnosed with asthma. Childhood asthma is the leading cause of chronic disease related school absenteeism.

Goal: To create asthma friendly school districts so that students with asthma are able to fully participate in school life.

Target Population

School Districts within Central Texas.

Activities

Promote asthma friendly policies and procedures in school districts

Provide Open Airways for Schools (OAS) training to school personnel

Provide Asthma 101 training to school personnel and parents/caregivers of school children with asthma

Establish Indoor Air Quality (IAQ) teams

Outputs

Number of partnerships created with community and local organizations, including the development of IAQ teams

Number of Asthma 101 presentations and participants

Number of nurses trained in OAS

Outcomes

Short Term Learning

Triggers:

- School personnel demonstrate increased awareness of asthma triggers and awareness of the effects of asthma on their students

Knowledge:

- Nurses increase knowledge of warning signs of asthma, trigger avoidance, and asthma management
- Parents and other caregivers increase knowledge about asthma

Medium Term Action

Triggers:

- Schools develop IAQ teams and actively address issues (improve cleaning methods, implement asthma friendly policies, etc.)

Nurses:

- Implement OAS strategies (e.g., ensure that asthma action plans are in place, provide training to children, etc.)

Long Term Conditions

Schools:

- Asthma friendly school policies and procedures are fully implemented
- Attendance rates improve for children with asthma

Triggers:

- Schools contain fewer asthma triggers

COMMUNITY IMPACT

Improved school performance

Improved health outcomes and asthma control for children

External Environment: Factors that decrease the likelihood that target schools might participate are competing responsibilities, low parental engagement, logistical challenges, No Child Left Behind Act educational mandates, and other state mandates.

Evaluation Methods

- Three potential sources of evaluation data were identified:
 - The Asthma-Friendly Schools Initiative Champion Awards Application
 - Key informant interviews with school nurses who completed the OAS training since 2012
 - The establishment and implementation of pre and post training survey for individuals who enroll in the OAS training

Evaluation Questions



1. Following training on Asthma 101 and the OAS curriculum, what are nurses doing to improve asthma management in schools?
2. What are the characteristics of schools that are actively promoting asthma management and what kinds of successes/outcomes have they observed?
3. To what extent are school nurses already utilizing asthma management strategies? In what areas do they show room for improvement?

Evaluation Design

- Evaluation capacity-building
- Primarily qualitative research design
- Pilot assessment of key informant interview guide and pre-training survey

Key Informant Interviews With OAS Trained Nurses

- The evaluation team contacted all 15 school nurses in Travis and Hays Counties and an additional 27 outside the target area who were trained since 2012.
- The interview goals were to:
 1. Determine how the OAS curriculum has been used
 2. Find out how nurses integrate information from OAS into their daily practice
 3. Identify key school outcomes that may be measured as part of future evaluation plans

Key Informant Interviews With OAS Trained Nurses

- Interviews are continuing, and the results of one interview is summarized in this report.
 - The nurse thought the OAS training was “fantastic”. She said “the challenge is not the training we receive, the challenges are the time constraints in which to present the class”.
 - Instead of scheduling classes, she delivers the information gained in training on a one-on-one basis.
 - She wished for more time during the day to teach the program or for transportation so that kids could take the course after school.

Key Informant Interviews With OAS Trained Nurses

- She also wished for more administrative buy-in.
- The nurse stated that smells were perhaps the biggest trigger at her school (e.g., fragrances and pets in the classroom).
- She did not know if they have an Indoor Air Quality Team at her school.

AFSI Champion Awards Applications

- AFSI promoted the national level ALA's Asthma-Friendly Schools Initiative Champion Awards by emailing the application to school nurses and their supervisors.
- The application was to provide data regarding school-based asthma management strategies that have been implemented and potential successes they have observed.
- Unfortunately, due partly to timing, no schools applied and no data were obtained.

Pre and Post Training Survey

- Designed to capture baseline data regarding asthma management strategies being used prior to the OAS training.
- Two people applied to be OAS facilitators during the evaluation period and completed the pre-training survey.
- At this time, the survey seems to show promise for evaluation of changes that may occur following the training.

Recommendations for AFSI

- For the awards application solicitation, consider directly engaging a small number of schools.
- Establish relationships with school leaders first, then invite others to participate.
- Introduce school leaders who have demonstrated improvements in attendance to those who are less familiar with the effects of school-based asthma management.
- Foster a culture of evaluation.

Recommendation: Link asthma management to school success

“Our district implemented an IAQ [Indoor Air Quality] management plan that led to unprecedented academic success for our students. Since 2005, we have seen an increase of 17.3 percent on test scores and an increase in the average daily attendance rate to 97 percent, allowing students to have more classroom time.”

– Frank DiNella

Keller Independent School District, Texas

(As quoted in EPA’s Student Health and Academic Performance Guide, 2010)

Recommendations:

Consider new potential partners

- Coordinated School Health Programs
- Parent Teacher Organizations/Associations
- Medical partners
- Maintenance staff
- Funding partners

Cultivating a Culture of Evaluation



- Create a vision for the future
 - Sit down with partners (coalition members, organizational partners, volunteers, school board members, funders, etc.) and answer the following:
 1. What role might learning and evaluation play in AFSI's activities?
 2. What value will learning and evaluation add to the organization and other stakeholders?
 3. In what ways can evaluation contribute to strategic decision making?

Limitations/Barriers

- **Capacity:**

AFSI has historically had little evaluative capacity as it is embedded in a small satellite office with one dedicated staff member to the project. Therefore, the resource limitations of AFSI are notable.

- **Sample size and general lack of data:**

Overall, the sample sizes were too small to conduct an in-depth analysis.

Conclusion

- **Objective 1** was to identify the asthma management strategies that school nurses have used since completing OAS training.
 - With a sample size of one, the findings are limited. However, the key informant interview guide resulted in rich dialogue and captured useful preliminary data.

Conclusion

- **Objective 2** was to identify best practices in schools to reduce asthma and improve attendance through data collected from Asthma-Friendly School Award applications.
 - This objective could not be measured as no schools applied for the award. AFSI is already creating a plan to better market this award and the evaluation team reviewed other successful award programs and has made recommendations to improve the process.

Conclusion

- **Objective 3** was to identify asthma management strategies used by school nurses before and after OAS training via an online pre and post training survey.
 - The new pre-training survey was successfully implemented and utilized by 2 new participants. Results show promise for use as an outcome evaluation tool.