

Creating Asthma Friendly Child Care Centers in Kentucky

Kentucky Public Health Leadership Institute Scholars:

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EXECUTIVE SUMMARY:

Child care providers play a major role in the health and safety of the children in their care. Current asthma hospitalization rates among Kentucky's youngest children (0-4 years) are 426 per 100,000 populations¹. According to the Kentucky Division of Child Care there are over 110,000 children (0-12 years) in child care at any given time within a day. It is estimated that a classroom or center with 20 children may have two or more children with asthma. It is imperative that early care and educational providers understand asthma and know how to provide the best quality of care for children with asthma. It is also important to integrate environmental management of asthma into the child care setting.² The *Creating Asthma Friendly Child Care Centers in Kentucky: A Resource Guide* does exactly this.

Team Wee No Wheeze has partnered with the Kentucky Respiratory Disease Asthma Program (KRDAP), the Child Care Health Consultant Program, and the Division of Child Care to develop a guide that will assist child care providers, parents, and community partners with providing the most favorable environment possible to care for children with asthma. The resource guide is entitled *Creating Asthma Friendly Child Care Centers in Kentucky: A Resource Guide*. The guide will be presented to the KRDAP for dissemination and implementation in child care centers across Kentucky.

With proper care and attention to environment, most children with asthma can lead normal, active lives, and can enter school with the same abilities as other children³. For this purpose; the *Creating Asthma Friendly Child Care Centers in Kentucky: A Resource Guide* is designed to include the following:

- Basic information about asthma
- How to improve the early care and education environment to reduce asthma triggers
- How to administer asthma medication
- How to handle asthma emergencies

The development of the *Creating Asthma Friendly Child Care Centers in Kentucky: A Resource Guide* is the first step in assisting KRDAP to address the hospitalization rates for 0-4 year olds with asthma. The KRDAP will be responsible for the implementation and dissemination of the guide.

The KPHLI Team Wee No Wheeze is composed of two members; both are nurses with a special interest in asthma management, particularly for children. After reviewing the Kentucky Surveillance Report 2009, and researching the status of child care in Kentucky, both members agreed that providing a resource such as the *Creating Asthma Friendly Child Care Centers in Kentucky: A Resource Guide* would be the best way to reach the children most affected by hospitalizations related to asthma.

The goal of this project, as indicated in the 2009 Kentucky State Plan for Addressing Asthma is to “ensure that all children diagnosed with asthma in schools and licensed child care facilities receive optimal care.”⁴ Providing the resource guide to child care providers will assist them in the management of children in their care with asthma.

INTRODUCTION/BACKGROUND:

The Kentucky Respiratory Disease Asthma Program and the Montgomery County Health Department Asthma Program both began in 2007. In order to obtain federal funding the state had to meet specific eligibility requirements. As a measure to meet those requirements, the Department for Public Health initiated the first asthma pilot site in Kentucky at the Montgomery County Health Department. As the result of this collaboration, the Kentucky Respiratory Disease Program was awarded the “CDC Addressing Asthma from a Public Health Perspective” grant. The funding was to create a comprehensive program in Kentucky.

In addition to the pilot site, two other important eligibility requirements were: developing a state plan for addressing asthma and developing a surveillance document that described the burden of asthma in Kentucky. Both documents were completed and published in 2009. In collaboration with the statewide asthma partnership and other key stakeholder, such as the Montgomery County Health Department Asthma Program, the KRdap was able to agree on nine priority goals. These goals identified would provide a comprehensive approach to addressing the problem of asthma, hence the development of the “2009 Kentucky State Plan for Addressing Asthma”. All goals chosen were supported by information obtained from the Kentucky State Asthma Surveillance Report 2009.

According to the Kentucky Asthma Surveillance Report 2009, Kentucky’s highest age-specific hospitalization rates for asthma are for children and infants less than four years of age (424 per 100,000 population). The rates for this age group are eight times higher than the age group with the lowest age-specific hospitalization rates (ages 15 to 24). Of children 0-5 years of age, 11.1% currently have asthma. This project addresses Goal #7 (of the state asthma plan); ensure that all children diagnosed with asthma in schools and licensed child care facilities receive optimal care.

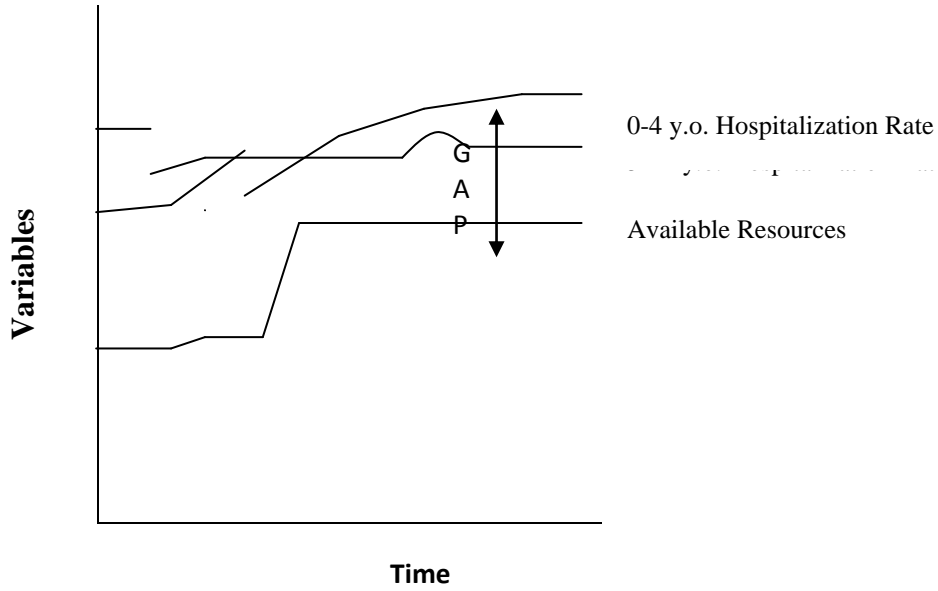
In order to reach this targeted population, Team Wee No Wheeze had to consider limited avenues of approach. Children 5-12 years of age are usually in schools during the day. Many school focused asthma educational initiatives have been implemented over the past two years in Kentucky. These initiatives not only aim for the child, but the parents and school staff as well. Children 0-4 years of age are usually not as accessible. The children 0-4 years of age are either in a child care setting or with their family during the day, limiting the educational opportunities to health care providers and community awareness messages.

The KRdap along with other key partners have launched several activities over the past two years that carry a strong message about asthma management and treatment. As stated previously, 11.1% of children (0-5 years) have asthma. By combining these two factors, the obvious direction of the project was to focus on child care centers. Focusing efforts toward child care centers enables us to reach approximately 11,000 children in Kentucky with asthma, many of whom are within the target age range.

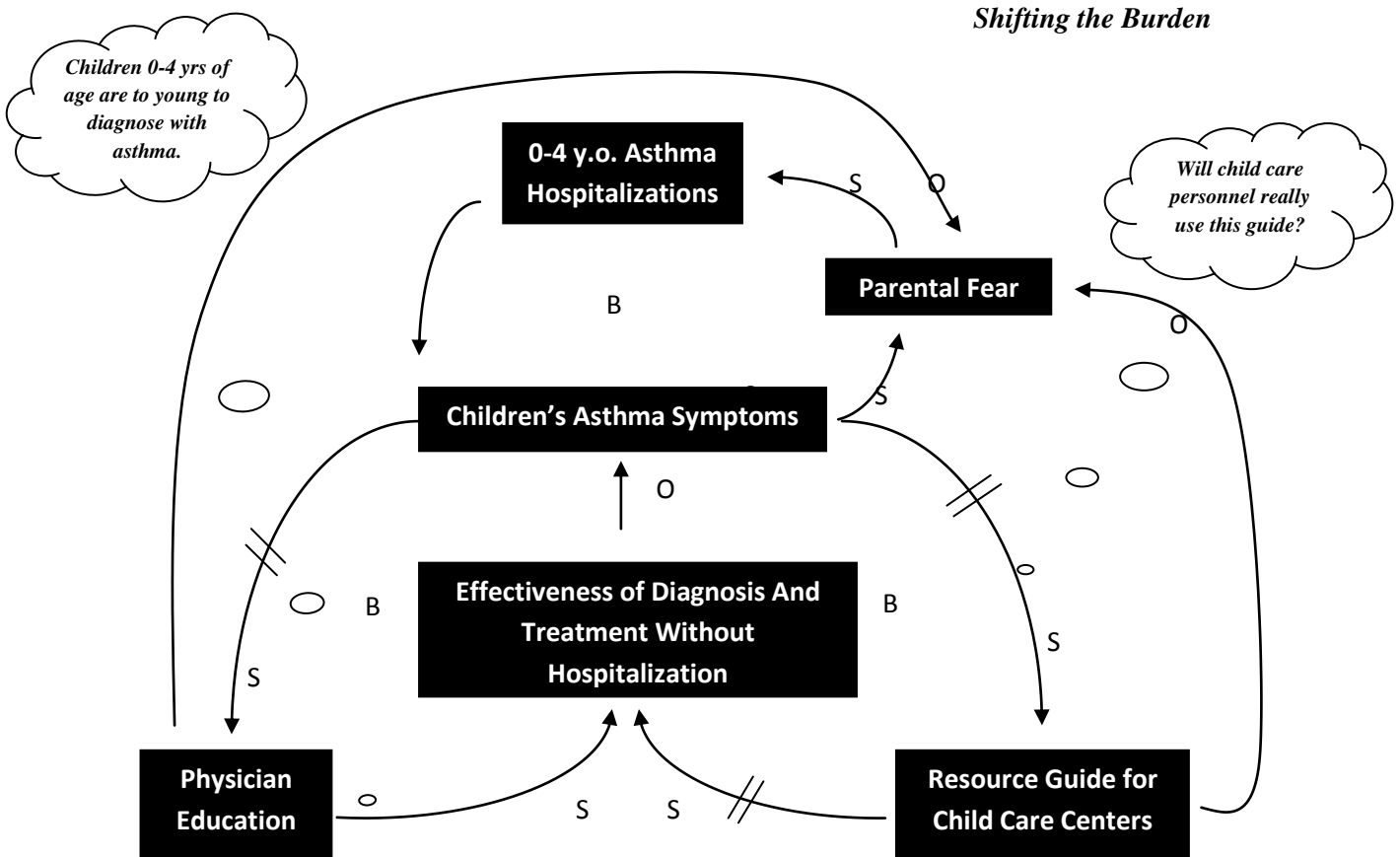
Problem Statement:

“How can we reduce the number of asthma hospitalizations for children 0-4 years of age?”

Behavior over Time Graph:



Causal Loop Diagram:



10 Essential Public Health Services/National Goals Supported:

The 10 Essential Public Health Services (EPHS) defined by the Core Public Health Functions Steering Committee in 1994. The EPHS elaborated on the three core functions identified by the National Institute of Medicine in their 1988 publication, *The Future of Public Health*. Team We No Wheeze focused on EPHS #3, Inform, Educate, and Empower and EPHS #4, Mobilize Community Partnerships.⁵

Essential Public Health Service #3:

Inform, educate, and empower people about health issues

The *Creating Asthma Friendly Child Care Center: A Resource Guide* is targeted for child care providers, parents, physicians, and community partners. The guide provides information that promotes better health among children with asthma who attend child care centers. By informing, educating and supporting activities that are designed to decrease the risk of asthma episodes occurring at the child care center, the center becomes an “asthma friendly” environment. At the child care center, the child care providers and parents will have access to the asthma management resources and educational materials that support the “asthma friendly” message. They can utilize the information obtained from the project to partner with schools and other community agencies to promote the “asthma friendly” environment message.

Essential Public Health Service #4:

Mobilize Community Partnerships

The resource guide encourages child care providers to collaborate with a multitude of partners within their community to address asthma. It supports communication among community partners to build relationships that maintain the functions of public health and essential services. Once these relationships have been established, the partnership can utilize the full range of available resources to create the most effective solutions for creating the best “asthma friendly” environment possible.

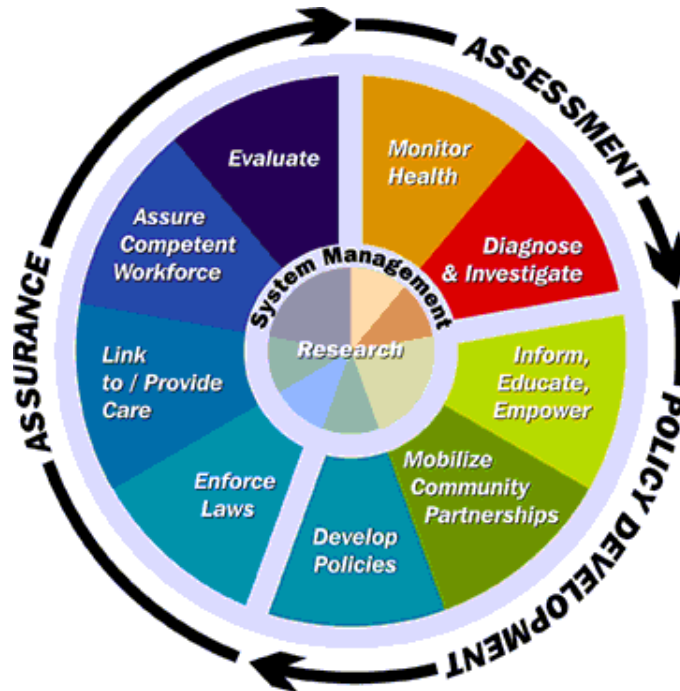


Figure 1: The Core Functions of Public Health and the Ten Essential Public Health Services

PROJECT OBJECTIVES/DESCRIPTION/DELIVERABLES:

Objectives:

- Reduce hospitalizations for asthma in children less than age 5 years. Healthy People 2020 Goal RD 2.1
- Reduce hospital ED visits for asthma in children less than age 5 years. Healthy People 2010 Goal RD 3.1

Deliverables:

- Develop partnerships with key stakeholders.
- Create the *Creating Asthma Friendly Child Care Centers in Kentucky: A Resource Guide*.
- Support EPHS #3 and #4, to inform, educate and empower people about public health issues and to mobilize community partnerships.

METHODOLOGY:

It was decided by Team Wee No Wheeze from the very beginning that the project would entail childhood asthma. Reviewing the data and current initiatives being conducted in Kentucky to address childhood asthma, the team knew they needed to narrow the focus on 0-4 year olds. Team Wee No Wheeze considered all avenues in which to reach this population of children. During the systems thinking exercises we were able to identify aspects of the program we had not considered, such as the role the physician would play as well as the parents.

Team Wee No Wheeze researched and spoke with other state asthma programs about projects they were conducting to reach this population of children. We considered implementation, dissemination and evaluation of their projects and how successful they were. After considering everything we had learned, it was decided by the team to begin with the child care centers. Of all the states researched, the California Childcare Health Program was the most helpful. They had developed a program for their early care and education providers using an information packet entitled *Asthma Information Packet for Early Care and Education Providers*. The packet included an Asthma Information Handbook, a DVD with instruction about asthma management in the child care settings and laminated posters with information about managing an asthma emergency and asthma triggers. The packet contains a comprehensive approach to addressing asthma in a child care setting. The information included in the packet reflects the National Heart, Lung and Blood Institute Expert Panel Report 3, Guidelines for the Diagnosis and Treatment of Asthma.⁶

Considering the California Childcare Health Programs Asthma Information Packet and the *Creating Asthma Friendly Schools in Kentucky Resource Guide* currently being implementing in Kentucky schools, Team Wee No Wheeze decided to direct their efforts to the child care provider. It was decided to create a resource guide similar to the one created for schools, but would include information specific to the child care provider. The guide would be entitled *Creating Asthma Friendly Child Care Centers in Kentucky: A Resource Guide*.

To create an effective and comprehensive resource guide for child care providers, the team needed to include partners in the planning with specific expertise regarding child care. So over the past six months, Team Wee No Wheeze met several times (face to face and conference calls) with the Child Care Health Consultant Program and the Division of Child Care representative to discuss the content and format of the guide. Their assistance in the project has been invaluable. The *Creating Asthma Friendly Child Care Centers in Kentucky: A Resource Guide* is strongly influenced by the Asthma Information Packet and the *Creating Asthma Friendly Schools in Kentucky Resource Guide*. It includes a stepwise approach to creating a healthier environment for children with asthma. The ten steps described in the guide are:

- Learn the Basics about Asthma
- Know the rules: Understanding Kentucky State Laws, Licensing Regulations, and Your Facilities Policies and Procedures Regarding Caring for Children with Asthma
- Identify Children with Asthma in your Child Care Center
- Obtain an Asthma Action Plan for the Child
- Communication and Education
- Know When and How to Administer Asthma Medications
- Learn How to use Devices (Inhalers, Spacers, Nebulizers, and Peak Flow Meters)
- Keep Documentation
- Reduce Asthma Triggers in the Child Care Center Environment
- Emergencies: Know Who to Call and What to Do

Other resources will also be included to support implementation of each step.

RESULTS:

The *Creating Asthma Friendly Child Care Centers in Kentucky: A Resource Guide* is currently in draft. After final review by stakeholders, the document will be completed and presented to the KRdap by May 2011. The KRdap, Child Care Health Consultant Program and the Division of Child Care will collaborate on the development of a plan for dissemination, implementation and evaluation. The members of Team Wee No Wheeze are actively engaged in the activities of the KRdap at both the state and local levels.

CONCLUSION:

With limited KRdap staffing, Team Wee No Wheeze feels that the development of the resource guide will assist the KRdap in expediting the work outlined in the 2009 Kentucky State Plan for Addressing Asthma.

LEADERSHIP DEVELOPMENT OPPORTUNITIES:

Connie Buckley

The past year has been a rewarding experience for me. It has given me the opportunity to learn more about myself and has encouraged me to continually look at my strengths as well as my weaknesses. I've gained insight about my leadership skills and I've grown both professionally and personally from this experience. I have enjoyed the time I have spent working with my change master project team and hope that our project makes a difference for children with asthma in Kentucky. I appreciate the opportunity to participate in KPHLI and I'm looking forward to using the skills developed in everyday practice.

Jennifer Gulley

This past year as a KPHLI scholar has been both challenging and rewarding. As a new leader at the local health department level, I found myself juggling many things. However, it has been a tremendously rewarding year both professionally and personally. KPHLI has provided me with an opportunity for personal growth and development and time for self reflection. I value the feedback received from the assessment tools. Being able to come face-to-face with my strengths and weaknesses has allowed me to develop strategies to learn, grow, and increase my effectiveness as a leader. As I have learned from summits and readings I have looked for opportunities to incorporate lessons learned into my professional and personal life. I am confident that what I have learned from this experience will benefit me in the future and improve my ability to serve as a leader.

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