Published in final edited form as:

Public Health Nurs. 2010 ; 27(4): 329–336. doi:10.1111/j.1525-1446.2010.00862.x.

Asthma Management Challenges in Head Start Settings: Teachers' Perspectives

Ann W. Garwick, PhD, RN, LMFT, FAAN,

Professor, School of Nursing, University of Minnesota

Ann Seppelt, MS, RN, CNP, and

Community Program Associate, School of Nursing, University of Minnesota

Michelle Riesgraf, RN, PHN

Health Services Manager, Community Action Partnership of Ramsey and Washington Counties
Head Start, 450 Syndicate St. N., Suite 20, St. Paul, MN. 55104

Ann Seppelt: siec0007@umn.edu; Michelle Riesgraf: mriesgraf@caprw.org

Abstract

Objective—To develop an action plan based on asthma management challenges identified by Head Start teachers in a multi-site program.

Design and Sample—Qualitative, participatory action research project. Three focus groups were conducted with Head Start teachers (n=14), and one with Center managers (n=15) in an urban Midwestern program.

Measures—Brief background questionnaire and semi-structured focus group interview guide. Content analytic techniques were used to identify and categorize asthma management issues in transcripts of teacher focus groups. Center managers verified the findings and recommended action plan strategies to address asthma management challenges.

Results—Head Start staff identified four common challenges: (a) undiagnosed and unreported asthma; (b) coordinating asthma care with parents; (c) medication administration issues; and (d) variability among asthma action plans. The action plan focused on (a) early identification of asthma, (b) improving coordination of asthma care with parents, (c) developing more asthma education and resources for Head Start staff and parents, and (d) developing a standardized, comprehensive Head Start asthma action plan.

Conclusions—Public health nurses can play a major role in ensuring quality care in Head Start programs by periodically identifying staff needs and developing strategies to address asthma management challenges.

Keywords

asthma management; child care; early education; Head Start; public health nurses

Asthma is a major public health issue affecting the well being of low-income, preschool children. Children under age five represent the group with the highest rate of increase in asthma prevalence since 1980 (U.S. Department of Health and Human Services, 2000). Furthermore, children from low-income families have significantly higher asthma prevalence (Akinbami, 2006; Akinbami & Schoendorf, 2002) and hospitalization rates (Newacheck & Halfon, 2000). Several Head Start studies have documented disproportionately high prevalence rates of asthma (Ladebauche et al., 2001; Slezak, Peresky, Kviz Ramakrishnan, & Byers, 1998; Walsh, Kelly, & Morrow, 1999) as well as high hospitalization and emergency room utilization rates associated with barriers to preventive care and undertreatment of asthma (Walsh et al.). High asthma related absenteeism has also been reported among low-income preschoolers enrolled in Head Start programs (Vargas et al., 2004; Walsh et al.).

The quality of asthma management can affect a child's ability to learn and engage in early childhood education programs, such as Head Start. Children with poorly controlled asthma are more likely to have their sleep disrupted by coughing at night and have limited activity levels (Vargas, et al.). Uncontrolled asthma can also disrupt a child's ability to learn and attend Head Start (Walders, McQuaid, & Dickstein, 2004).

Asthma management involves a complex set of behaviors and skills that focus on preventing and managing asthma episodes. Effective asthma management for preschoolers requires care coordination among family, child care, and health care providers across setting (Klinnert, McQuaid, & Gavin, 1997). Communication skills and mechanisms are essential to this coordination. Although health care providers are usually the primary source of asthma information for children and their parents, the parent or guardian is typically the point person who transmits this information to other family caregivers and child care providers, including early education providers (Brown, Avery, Mobley, Boccuti, & Golbach, 1997). Both communication and asthma coordination challenges among Head Start staff, parents and health care providers have been identified (Vargas, Simpson and Wheeler, 2004; Walders et al., 2004). For example, Vargas et al. reported that teachers felt "caught between" parents and providers in following asthma action plans that were not understood or endorsed by parents.

Pre-literate, preschool children with asthma are reliant upon their caregivers' abilities to recognize and prevent asthma episodes and to administer medications as needed. Thus, Head Start staff must know how to prevent and manage asthma episodes in the classroom as well as on field trips and on the playground. However, previous studies have identified gaps in asthma knowledge among Head Start staff (Huss et al., 2002) and lack of asthma training for staff in Head Start programs (Huss et al.; Walders et al., 2004). In their survey of Head Start staff in two Eastern urban programs, Walders and colleagues found that asthma management tasks such as (a) keeping the child calm; (b) avoiding triggers; (c) recognizing symptoms and (d) giving medications were challenging for staff. Given the limited number of health care personnel per number of children, Head Start teachers are primarily responsible for administering prescribed medications to children with asthma in their classroom under the guidance of Health Services staff (Huss et al.; Walders et al.).

Public health nurses (PHNs) have a long history of working with children in Head Start programs as health staff and as child care health consultants (Gaines, Wold, Spencer & Leary, 2005) that uniquely positions them to identify and address asthma issues in this high-risk population. Our aim is to demonstrate how public health nurses used a community-based, participatory action research approach to develop an action plan to address asthma management challenges identified by Head Start teachers in an urban, multi-site Head Start program in the Midwest.

Methods

Design and Sample

This community-based, participatory action research (PAR) project (Olshansky et al., 2005; Whyte, 1989) was conducted in partnership with health staff, administrators, parents and teachers in the Community Action Partnership of Ramsey and Washington Counties (CAP) Head Start program in St. Paul, Minnesota. The intent of PAR projects is to develop a relevant action plan based on needs identified by community constituents, in this case, Head Start staff. The CAP multi-site program serves over 1300 low-income children from diverse cultural backgrounds; most are enrolled in half-day programs. This PAR project involved two sequential phases: (1) a needs assessment and (2) action plan development. The Head Start Policy Council and the University of Minnesota Institutional Review Board reviewed the protocol and consent and approved this project.

This report focuses on needs assessment data collected from Head Start teachers about asthma management issues they encountered while working with preschool children from ethnically diverse backgrounds (e.g., African-American; African; Caucasian; Asian/Hmong/Cambodian; and Hispanic/Latino). The needs assessment informed the creation of an action plan developed in collaboration with Head Start Center managers and health staff.

Teachers and Center managers were invited to separate focus groups to better understand asthma management issues from classroom and administrative perspectives. Eligible participants included teachers and managers from 16 Centers who had at least one preschool child with asthma in their classroom or center. At the beginning of the 2005 school year, there were 74 children with a medical diagnosis of asthma enrolled in 16 of the 19 CAP Centers; by April 2006, there were 81. This is likely an under representation of the number of children with asthma in this program, as additional children have documented wheezing and other related diagnoses, such as reactive airway disease and chronic bronchitis.

Participants were recruited from each of the 16 Centers where at least one child with asthma was enrolled. Each Center manager was asked to (a) nominate one teacher who had a child with asthma in their classroom to represent teachers at their site and (b) give an informational flier about the project to the teacher. Center managers were invited to participate in the final focus group to verify findings and develop action plan steps. Interested participants contacted the Head Start health services manager (HSM). Eligible participants received a packet of information about the focus group and a copy of the consent form to review prior to the focus group. A total of 16 teachers were invited (five to

six participants to each teacher focus group). Sixteen Center managers were invited to the fourth focus group.

Measures

Focus group sessions were held in a conference room at the CAP Head Start administrative office. The PI, who has had extensive training and experience conducting focus groups, and a Head Start health staff member co-facilitated the focus groups. Participants were paid their hourly wage for participating in focus groups during non-class time. Each group lasted about an hour and a half.

The principal investigator (PI) first explained the informed consent process and obtained written consents for participation and permission to audiotape the focus group. After informed consent was obtained, each participant completed a brief self-report *Background Checklist* prior to the focus group. This paper focuses on teachers' responses to one of the questions in the semi-structured focus group interview protocol: *What are the major issues you face in working with preschoolers with asthma in your setting?*

During the Center manager focus group, the facilitator presented a summary of the common asthma management challenges derived from the content analysis of issues identified in teacher focus groups. The Center managers verified that specific core issues identified by teacher representatives were relevant to their Centers through a consensus process that involved sharing additional examples of these issues. Next, Center managers recommended strategies for improving asthma management in this multi-site Head Start program. These strategies were incorporated into the PAR action plan developed in collaboration with Head health staff and the research team.

After each focus group, the facilitator debriefed with the co-facilitator to review the findings and discuss questions that emerged from the focus group sessions. Debriefing notes were documented and used to inform the interpretation of the data.

Analytic Strategy

Audiotaped focus group sessions were first transcribed verbatim. Then data from each focus group were entered into a separate Word document file identified by ID number.

Descriptive content analytic techniques (Neuendorf, 2002) were used to identify and categorize asthma management issues and action plan strategies. First, the PI and research associate (RA) read and reread each focus group transcript in its entirety to understand the context of the focus group discussions. Next, each independently read the responses in the verbatim transcripts on a line-by-line basis to identify types of asthma management issues within and across the focus groups. Then they met to confirm, through a consensus process, common themes that participants emphasized in all three of the teacher focus groups. After the RA systematically organized the findings by theme and ID number, the PI validated the categorization of findings. Exemplars of each of the common themes or challenges are included in the findings. A similar analytic approach was used to determine whether issues raised by case managers fit the four common themes and to identify action plan strategies to address these issues.

Trustworthiness of the findings (Lincoln & Guba, 1986) was determined by having: (a) the PI check the accuracy of the transcription against the audiotape; (b) the PI and RA independently code the data; and (c) maintaining an audit trail of the analysis. The PI also checked the interpretation of the findings with the Head Start focus group co-facilitator and validated the core themes with the teachers' Center managers.

Results

The findings are reported according to the sequence of this PAR project. Phase I summarizes asthma management challenges identified by Head Start teachers in the needs assessment. Phase II summarizes the development of an action plan by Center managers and health staff to address these challenges.

Sample

The sample consisted of Head Start classroom teacher representatives from 14 of the 16 eligible Center sites who participated in one of three focus groups (*Group 1*: $n=3$, 21.4%; *Group 2*: $n=6$, 42.9%; *Group 3*: $n=5$, 35.7%). Fifteen of 16 eligible Center managers participated in the fourth focus group. Of the 14 teacher participants, 3 (21.4%) identified themselves as Asian, Hmong, or Cambodian; 7 (50.0%) as Black or African American; and 4 (28.6%) as White. Half of the participants had worked at Head Start for at least 3 years ($n=7$; 50%) and half for 3 years or less ($n=7$; 50%). Six (42.9%) had been Head Start employees for more than five years. The majority of the teachers worked in half-day programs ($n=10$; 71.4%), and 4 (28.6%) worked in full-day programs.

The focus group of Center managers consisted of 15 female participants (1 Asian; 6 (40%) Black/African American; and 8 (53.4%) White). The majority ($n=12$; 80%) had been Head Start employees for more than 5 years; three had worked at Head Start for 3 years or less. Most ($n=12$, 66.7%) managed Centers with half-day programs.

Phase I. Needs Assessment Findings

The findings are organized by the four common asthma management issues identified by Head Start teachers in all three of the focus group discussions: (a) undiagnosed and unreported asthma; (b) coordinating asthma care with parents; (c) medication administration issues; and (d) variability among asthma action plans.

Undiagnosed and Unreported Asthma—Participants described how frightening it was to care for a child with breathing difficulty who had undiagnosed or unreported asthma. For example, one staff member recounted an incident on a field trip when a child had difficulty breathing.

We went on a field trip this past Tuesday, and we were there like two and a half hours. And this child just played and played, and then all of a sudden he's coughing and gagging. It kind of freaked me out. But I'm like, what should I do? Give him some water? Have him sit down, rub his back? But basically he was OK. But when I looked in my emergency contact, he didn't have asthma, no kind of health plan or anything like that.

Other participants reported that Head Start teachers were often the first to notice asthma symptoms and to report these to parents and the health staff.

We keep the kids so active, so we find out very quickly [which ones have asthma symptoms]. There are required twice a day activities.

We've experienced that this child has been playing too hard, and they're having trouble breathing. And you have them come and sit down and give a sip of water. Then you ask the parent, when you get the chance, "Has your child ever had asthma, or is there any asthma in your family? Do you think you should have it checked out by a doctor?"

Teachers were particularly concerned about parents or health care providers who did not report or document a child's asthma. Some parents told staff that they had not reported asthma on the Head Start application form because they were concerned that their child wouldn't be accepted into the program, despite verbal and written statements to the contrary.

Coordinating Asthma Care with Parents—Head Start teachers stressed the importance of communicating and coordinating asthma care with a child's parent(s). Participants shared a variety of helpful as well as challenging experiences with parents. Helpful encounters were characterized by interactions with parents who: (a) proactively informed staff about the child's asthma and treatment needs; (b) ensured that the staff had the medications and equipment knowledge they needed; (c) communicated signs and symptoms to watch for in their child; and (d) wanted to hear from the staff how the day went for the child. Staff would follow up with a phone call or note to these parents.

As a toddler teacher, that's when I really learned how to use the [nebulizer] machine. I had a parent that was very concerned, "This is her machine, and do you know how to do it?" She didn't assume. She came in, because she had just figured this out herself.

The parent I had, she would tell me to watch for different signs. Like in the breathing ...does he have his mouth open a lot like he's trying to suck in air?

In terms of challenging experiences, participants identified factors that contributed to communication gaps about asthma care between parents and Head Start teachers. Key factors included:

- a. lack of opportunities to meet with parents face-to-face;
- b. cultural and language barriers;
- c. discrepancies between family caregivers' and health care providers' recommendations for managing asthma;
- d. some parents' reluctance to inform staff about their child's asthma;
- e. parents' misunderstandings about asthma management; and
- f. lack of information from health care providers to parents and

Head Start Staff. Head Start teachers also talked about challenges related to medication administration when parents did not follow Head Start medication guidelines. Sometimes, parents brought in medicine without a required label and documentation from the health care provider. In other cases, a child would indicate they had received medication before coming to Head Start; but there was no written note from the parent indicating that the child had received a medication that was typically given at Head Start. Similarly, a child or parent might say that he/she needed to take medication in a way that was not recorded on the child's Head Start health plan. In these cases, teachers consulted with the Head Start HSM who followed up with the parents.

Participants also shared a few incidents where Head Start guidelines conflicted with the parent's wishes for how they wanted their child's asthma managed, and staff felt "caught in the middle." In these situations, teachers indicated that they followed the child's documented health care plan, communicated concerns to the Head Start nurse, and followed up with parents.

One of my parents doesn't want me taking the child outside anytime, even if it's nice out.... So we called [the Head Start nurse] and she called the doctor. The doctor faxed us over a paper saying, "Yes, she can go outside, but just watch her." And so we had to show that to mom. But then she comes in and she says, "Well, I need her to get nebs." And I said, "I can't do it, I don't have that on the health plan; I only have the inhalers." So then she had to turn around and get that, so we can give it.

Medication Administration—A common challenge was having the medications and appropriate equipment available for children with asthma when needed. Several staff recommended that more than one nebulizer be placed in classrooms when several need nebulizer treatments. For example, one of the teachers noted that children in full day programs are typically at Head Start for 10 to 11 hours a day:

Like 7:00 in the morning until 6:00 at night.... They take a nap between 12:00 and 3:00, so that's usually when we have the problems-- right there. Because one day I had to give two children their nebs, and it took about half an hour to do it. We only had one neb machine.

Participants noted that asthma medications must be available on field trips. Children in Head Start programs typically take weekly field trips to a variety of indoor and outdoor settings that can trigger a child's asthma. There was variability in whether or not nebulizers were taken along on field trips. Some commented that nebulizers went on field trips when a child with known asthma was on the trip. When electricity was not available for the nebulizer on a field trip, participants wished they had portable, battery-operated nebulizers available.

What would be nice if we had portable nebulizers, because all we have are the nebs that are plugged in. And it's like you're going on a field trip, and there's no plug ins around, so then what are you going to do? Like if we go out for a hayride, it would be nice to have one that doesn't have to have a plug and has batteries.

Variability Among Asthma Action Plans—Teachers found the variety of asthma action plan formats from different health care providers confusing. Faxed black and white copies of asthma action plans were less helpful to staff than plans that included the red, green, and yellow stop light colors representing the zones of asthma care with action steps specified for each zone.

You know, we have to get an asthma care plan, and we haven't found one specific asthma care plan. They're all so different and hard to read, so that's a concern for staff. They're not all the same.

I've got 63 kids in our Center and though 16 [have asthma] there are probably about five different types of asthma care plans on them.

Phase II. PAR Action Plan Development

An action plan to address the asthma management challenges identified by Head Start teachers was developed in partnership with Head Start Center managers and health staff. Action plan steps focused on (a) early identification of asthma, (b) improving coordination of asthma care with parents, (c) developing a standardized, comprehensive Head Start asthma action plan that is completed by a health care professional for all children with asthma symptoms, and (d) developing more asthma education and resources for Head Start staff and parents. See Table 1 for examples of proposed action plan steps related to recommendations made by Head Start teachers and Center managers.

Discussion

This paper demonstrates how public health nurses in a University-Head Start partnership worked collaboratively with Head Start staff to develop an action plan to address asthma management challenges identified by Head Start teachers of preschoolers with asthma in an urban, multi-site program. An undercurrent of fear and uncertainty was evident in focus group discussions as teachers shared their stories about children with undiagnosed and under-treated asthma in their classrooms. Participants wanted to be certain that they knew what to do in case of an emergency and how to administer medications appropriately. Asthma management issues related to recognizing and managing the child's asthma symptoms and giving medications were similar to those identified by Huss et al. (2002) and Walders (2004). Like Head Start teachers in the Vargas et al. (2004) study, teachers in this study felt "caught in the middle" between parents' requests and the written instructions from health care providers. Although the core challenges identified by participants were similar to those reported by Head Start staff in other studies, the PAR process transformed these issues into action plan strategies to improve care for preschoolers with asthma in this multi-site program. Participants' rich description of barriers to effective asthma management and coordination of care with parents were particularly useful in determining action plan strategies. The range of barriers illustrates the complexity of asthma management as well as the importance of developing asthma education resources for parents from diverse cultural and linguistic backgrounds.

A major challenge for the Head Start HSM is to ensure that Head Start teachers and Center managers in all centers in this multi-site Head Start program know how to prevent and

manage asthma episodes and provide safe care to preschoolers with asthma. By listening to teachers' and Center managers' experiences working with children with asthma and asthma like symptoms, the HSM and research team were able to tailor the development of asthma resources to their needs. The Head Start HSM has been able to use the needs assessment and action plan to garner additional asthma education resources from community partners and work with the PI to construct a web site for Head Start staff and parents.

The findings must be interpreted within the context of this qualitative, PAR pilot study that illustrates how identifying asthma management challenges from teachers' perspectives can be used to improve care for children with asthma in a particular Head Start program through the development of an action plan. The small sample size, potential selection bias in nomination of teachers by Center managers and scope of this pilot project limits the transferability of findings to other Head Start programs. The nomination of teacher representatives may have precluded discovery of additional challenges from other teachers; however, the Center managers verified that the core challenges identified in teacher focus groups were relevant to their sites.

Effective coordination of care among early education staff, parent(s) and health care providers is essential to ensuring safe, quality care for children in Head Start settings. Head Start teachers who are knowledgeable about asthma are in a prime position to help children learn how to manage their asthma and keep asthma from interfering with their learning at Head Start.

Public health nurses are well prepared to address the range of asthma management challenges faced by Head Start teachers in Head Start programs that serve low-income children and families from diverse cultural backgrounds. The challenges identified in this study call for nursing leadership in the (a) early screening and identification of asthma, (b) development of clear, evidence-based health policies and procedures (e.g., related to medication administration and asthma action plans), (c) educating Head Start staff about asthma and its management, and (d) coordination of asthma care among parents, early education staff and health care professionals in Head Start, primary care and specialty care. Public health nurses who are employed in Head Start programs and those who serve as childcare consultants are uniquely positioned to promote the health of preschoolers with asthma through direct practice, education, advocacy, and policy development.

Acknowledgments

The development of this manuscript was supported by funding for the *Web-based Asthma Education for Urban Head Start Program* from NIH/ National Institute for Nursing Research (Grant Number: 5 R03 NR008752-02).

References

- Akinbami, L. Advance Data from Vital and Health Statistics. Hyattsville, MD: National Center for Health Statistics; 2006. The state of childhood asthma, United States, 1980–2005. Retrieved June 20, 2009, from <http://www.cdc.gov/nchs/data/ad/ad381.pdf>
- Akinbami L, Schoendorf K. Trends in childhood asthma: Prevalence, health care utilization, and mortality. *Pediatrics*. 2002; 110(2):315–322. [PubMed: 12165584]

- Brown JV, Avery E, Mobley C, Boccuti L, Golbach T. Asthma management by preschool children and their families: A developmental framework. *Journal of Asthma*. 1997; 33:299–311.
- Gaines SK, Wold JL, Spencer L, Leary JM. Assessing the need for child-care health consultants. *Public Health Nursing*. 2005; 22(1):8–16. [PubMed: 15670320]
- Huss K, Winkelstein M, Calabrese B, Butz A, Reshef S, Rand C, et al. Asthma management practices and education needs of Head Start directors and staff. *Journal of School Health*. 2002; 72:329–333. [PubMed: 12389373]
- Klennert M, McQuaid E, Gavin L. Assessing the family asthma management system. *Journal of Asthma*. 1997; 34(1):77–88. [PubMed: 9033443]
- Ladebauche P, Nicolosi R, Reece S, Saucedo K, Volicer B, Richards T. Asthma in Head Start children: Prevalence, risk factors, and health care utilization. *Pediatric Nursing*. 2001; 27(4):396–399. [PubMed: 12025278]
- Lincoln, YS.; Guba, EG. But is it rigorous? Trustworthiness and authenticity in naturalistic inquiry. In: Williams, DD., editor. *Naturalistic evaluation*. San Francisco: Jossey-Bass; 1986. p. 144-151.
- Neuendorf, KA. *The content analytic guidebook*. Newbury Park, CA: Sage; 2002.
- Newacheck PW, Halfon N. Prevalence, impact, and trends in childhood disability due to asthma. *Archives of Pediatrics & Adolescent Medicine*. 2000; 154:287–293. [PubMed: 10710030]
- Olshansky E, Sacco D, Braxter B, Dodge P, Hughes E, Ondeck M, et al. Participatory action research to understand and reduce health disparities. *Nursing Outlook*. 2005; 53:121–126. [PubMed: 15988448]
- Slezak J, Peresky V, Kviz Ramakrishnan V, Byers C. Asthma prevalence and risk factors in selected Head Start sites in Chicago. *Journal of Asthma*. 1998; 35(2):203–212. [PubMed: 9576146]
- U.S. Department of Health and Human Services. *Action against asthma: A strategic plan for the Department of Health and Human Services*. Washington, DC: U.S. Government Printing Office; 2000. Retrieved June 20, 2009, from <http://www.aspe.hhs.gov/sp/asthma>
- Vargas PA, Simpson PM, Wheeler GJ, Goel R, Field CR, Tilford JM, et al. Characteristics of children with asthma who are enrolled in a Head Start program. *Journal of Allergy & Clinical Immunology*. 2004; 114(3):499–504. [PubMed: 15356547]
- Walsh KM, Kelly CS, Morrow AL. Head Start: A setting for asthma outreach and prevention. *Family & Community Health*. 1999; 22(1):28–37.
- Walders N, McQuaid E, Dickstein S. Asthma knowledge, awareness, and training among Head Start and Early Head Start staff. *Journal of School Health*. 2004; 74(1):32–34. [PubMed: 15022374]
- Whyte WF. Advancing scientific knowledge through participatory action research. *Sociology Forum*. 1989; 4:367–385.

Table 1

Recommendations and action steps to address asthma management challenges identified by Head Start staff

Identify asthma early.

- Add more detailed screening questions about asthma symptoms to Head Start intake forms.
- Provide training for Head Start teachers and family workers on how to recognize asthma symptoms and conduct intake interviews with parents that include asthma screening questions.
- Reassure families that a child will not be excluded from Head Start because of asthma.

Improve coordination of asthma care with parents.

- Expect teachers, parents and health staff to inform each other about changes in the child's health status and asthma management in a timely way and provide tools to facilitate this communication.
- Notify staff and parents to communicate any discrepancies in the implementation of asthma-related policies to the HSM who follows up with the parent, health care provider and Head Start staff as needed.
- To reduce the need for nebulizers, the HSM notifies the parent(s) to follow-up with the child's primary health care provider at the next visit to see if the child is able to use an inhaler with mask instead of a nebulizer.

Develop and utilize a standard Head Start Asthma Action Plan.

- Develop a standard *Asthma / Breathing Difficulties Action Plan* that includes information about the child's symptoms and triggers; guidelines for preventing and managing asthma episodes indicated by green, yellow and red zones of asthma care; medication information and emergency contact information. When asthma-like symptoms are identified by teachers or parents, the HSM refers the child to a primary care provider and sends an *Asthma / Breathing Difficulties Action Plan* for the provider to complete before the child can enter or return to Head Start.
- A Head Start nurse reviews each new asthma action plan with the child's classroom staff and provides just-in-time education regarding asthma medication and symptom management.
- Keep copies of the Head Start Asthma Action Plan in the Head Start Health office and in the child's file in the classroom for the Head Start staff to refer to as needed.

Develop more asthma education and resources for Head Start staff and parents.

- Expand annual mandated CPR and first aid training for Head Start staff to specifically address how to identify asthma symptoms and when to call 911.
 - Provide annual asthma education sessions for Head Start staff and parents at Head Start sites.
 - Develop just-in-time learning resources (e.g., about triggers, asthma action plans, how to administer asthma medications, and what to do in case of an asthma episode) for Head Start teachers that are readily available in the classroom or on a field trip.
 - Develop easy-to-understand asthma education resources that Head Start staff can share with parents of preschoolers who speak English, Hmong and Spanish.
 - Develop an asthma website for Head Start parents and teachers with downloadable resources.
-