AMERICAN LUNG ASSOCIATION® of Minnesota

Partners for Asthma Action
Helping Twin Cities youth breathe easier

Primary Care Appointment Following an Asthma ED/UC Visit

Background

The Controlling Asthma in American Cities Project, (CAACP), is a seven-year, six million dollar project designed to improve outcomes for children with asthma in Minneapolis and Saint Paul. The American Lung Association of Minnesota, in collaboration with the Healthy Learners Board, received a two-year grant from the Centers for Disease Control and Prevention (CDC) to develop a strategic plan related to childhood asthma. The CDC then granted the American Lung Association of Minnesota and its partners five years of funding to implement the plan.

As part of this project, a meeting was convened to review guidelines regarding asthma visits following an emergency department (ED) or urgent care (UC) visit and to draft a consensus statement on best practices for a follow-up visit. The attendees represented the following groups: primary care physicians, nurse practioners, pediatric pulmonologists, health educators, certified asthma educators, pharmacists, health plan administrators, emergency department staff, school health staff, and home health nurses.

The following guidelines were reviewed:

- 1997 National Heart, Lung, and Blood Institute (NHLBI) guidelines
- 2002 NHLBI guidelines update
- GINA (Global Initiative on Asthma) guidelines
- ICSI (Institute for Care Systems Innovations)
- American Academy of Asthma, Allergy, and Immunology *Pediatric Asthma: Promoting Best Practice*

The group acknowledged that an ED/UC visit might signal a lack of coordinated asthma care due to a variety of factors and barriers to optimum care. The follow-up visit provides an opportunity for reassessing and improving a patient's asthma control. By drawing on the expertise and experience from the many disciplines present, the following document was drafted. The goal is to use the follow-up visit as an opportunity for a planned visit based on the Chronic Care Model. The authors wish to acknowledge that it may not be feasible to address all items at one follow-up appointment, but that the components of the visit represent best practices based on the above guidelines and the consensus meeting. Aspects that are not completed during a visit could be addressed at a subsequent scheduled follow-up visit or by health care professionals other than the primary care provider.

Emergency Department Role

There was agreement that patients must receive a consistent message from all providers of asthma care. The ED staff will stress the importance of daily controller medications to help prevent exacerbations and the importance of a follow-up appointment with the provider who manages the patient's asthma within 5 to 7 days, even if the patient feels well. There is an emergency department asthma care initiative underway as part of the CAACP.

Key components of a Primary Care Appointment following an Asthma ED/UC Visit

Obtain Pre-exacerbation History

A detailed history regarding the patient's condition *prior to* the exacerbation provides valuable information regarding patient adherence to and understanding of their asthma plan.

Determine level of severity before exacerbation.
Review exercise tolerance and day and night symptoms.

Determine level of control prior to exacerbation.
Review controller and reliever medication use prior to exacerbation.

Ask about what may have precipitated the exacerbation.
Assess exposure to both avoidable and unavoidable triggers. Medication non-adherence was identified as a preventable cause of exacerbations resulting in ED/UC visits. Common issues identified by the participants included: patient ran out of medication; improper inhaler/device technique; incorrect medications; patient traveled without medication; children were without medication (commonly occurs when visiting non-custodial parent, on field trips, vacation).

Asthma action plan (AAP)
One of the cornerstones of appropriate asthma care is for all patients with moderate persistent or severe persistent asthma to have an up-to-date asthma action plan. An asthma action plan is drafted with a health care provider and advises the patient and family on which medications to use daily and steps to take during an exacerbation of symptoms. More information regarding asthma action plans is available in Practical Guide for the Diagnosis and Management of Asthma (see appendix).

Review asthma action plan and whether it was followed during exacerbation. Review ability of patient and family to appropriately monitor asthma symptoms and understanding of how to use the asthma action plan. Review medications used during the exacerbation and outcome of treatment. Care should be taken not to blame the patient or family for the exacerbation or for possible inappropriate use of the ED/UC. Committee members stressed the importance of acknowledging that the patient or family took steps to treat the asthma exacerbation. The exacerbation can be used as a teaching opportunity to prevent or better manage future exacerbations.

Determine Present Status and Appropriate Treatment

Exam/treat
Evaluate for co-morbid conditions such as allergies, pneumonia, or respiratory infection and treat. Assess current status.

Determine current severity rating and level of control
Does the patient's severity rating need to be changed based on recent exacerbation? By HEDIS measures, an ED visit automatically labels a patient as having persistent asthma.

Medication
Many patients are placed on a burst of prednisone during an ED/UC visit. Often there is patient misunderstanding of the role of prednisone and mistaken belief that now that they are feeling well they can stop all of their medications. Assess for adherence to prednisone treatment. Ensure that patient is also taking their controller/anti-inflammatory medication appropriately and prescribe one if patient is not currently on a controller.

Many patients exhibit poor technique when using their inhaler or other device. The ED follow-up visit is an opportunity to have a staff member assess patient technique and teach proper technique. Similarly, patients who use peak flow meters should be assessed for proper technique.

Influenza vaccine

Patients with asthma should be vaccinated yearly against influenza.

Tobacco exposure

Determine if patient is a smoker or exposed to second-hand smoke. Respectfully ensure that patient/family understands the role that smoke exposure may have had in exacerbation. Suggest quitting and offer support.

Patient Education

The Chronic Care Model identifies patient understanding of their condition and treatment plan as an integral factor in successful control of chronic conditions such as asthma. The consensus committee acknowledges the time constraints present in a patient clinic visit. Providers are encouraged to review the best practices education elements listed below and to then tailor education to the patient at hand. Practices with a staff person designated to provide asthma education could benefit from a coordinated effort to provide asthma education at the time of the follow-up visit. Ideally this would be automatically scheduled as a provider appointment followed by an educator/nurse appointment on the same day. Upon reviewing the patient history, the provider can identify the most important education topics for that visit. Patient education resources are listed in the appendix.

Components of Asthma Education

- Basic facts about asthma and normal and asthmatic airways
- What happens to the airways during an asthma exacerbation
- Monitoring of signs and symptoms
- Trigger/environmental education including smoking cessation
- Controller medications - understanding these are long-term and prevent symptoms, often by reducing inflammation
- Reliever medications- quick relief, short-acting bronchodilator relaxes muscles around airways
- Proper use and compliance with medications, inhaler, spacer, and peak flow meter
- Understanding when to seek care from primary care provider or ED
- Stress importance of chronic care model and need for scheduled visits not only for exacerbations

Update or create an Asthma Action Plan (AAP)

Review importance of AAP and teach how to use AAP. Check for understanding. Ensure that all adults who care for a child with asthma will have a copy of the plan.
Create AAP if patient does not have one or revise AAP if it was followed and still did not control exacerbation. Fax new AAP to school health office. Minneapolis and St. Paul public schools each have a centralized fax number for asthma care. St. Paul (651) 632-3731 Minneapolis (612) 668-0855.

Check medications/peak flow

Review proper use of medications. Ask patient and family if they need refills for their medications. Remember a second prescription for medications that will be used for school. Some patients and families do not understand how to fill a prescription or obtain a refill when they run out. Assess for understanding. Prescribe peak flow meter if needed and review technique. Prescribe spacer, by brand name, for inhalers if patient does not have one.

Address logistical needs

Some patients will require a note for work or school absences or a note authorizing return to work or school. Addressing these needs at the visit limits time-consuming messages later. Many patients and families are uninsured and underinsured. The committee recommended referring these patients to a social worker or family resource center.

Follow-up

Follow-up appointment

Committee members agreed that any patient that had an exacerbation severe enough for an ED/UC visit should have their next follow-up appointment within one to three months. Provider discretion should be used to determine if the patient should be seen sooner than one month. This decision should take into account the severity and nature of the exacerbation, whether any changes were made in medications or AAP, and patient and family's general level of understanding of and ability to adhere to the treatment plan.

Education

As previously described, the provider or designated staff member should provide key education components during the current visit. The patient may be asked to return for asthma education visits to review topics not addressed at current visit. Provider discretion should be used in determining which patients and families may be unlikely to follow-up. Every effort should be made to provide as much education as possible at current visit for these families or to schedule appropriate in home-services (see appendix).

Spirometry

If patient does not have recent spirometry, schedule patient for a spirometry test after current exacerbation resolves.

Consider referrals as appropriate to:

- Asthma specialist
- Public health nurse
- Environmental assessment and modification program (see appendix for more information)

Improving adherence and food for thought

Despite good intentions on the part of providers, the committee members acknowledged that sometimes opportunities to provide appropriate asthma care and ensure good control for our patients are missed. Clinic systems improvement may facilitate better access and patient care. The following questions are designed as food for thought. Please consider these questions in an effort to identify opportunities for improving asthma care in our community.

- Did this patient contact the clinic first?
- What advice did clinic staff give? Was a timely appointment offered?
- Why did patient choose the ED? Was this an appropriate choice?
- Was there an asthma action plan for this patient?
- Did this patient/family have the asthma education necessary for managing patient's asthma?

Appendix/Resources

Centralized fax numbers for asthma care:

- St. Paul Public Schools (651) 632-3731
- Minneapolis Public Schools (612) 668-0855

1997 NHLBI guidelines - http://www.nhlbi.nih.gov/guidelines/asthma/asthgdln.htm

2002 NHLBI guidelines update - http://www.nhlbi.nih.gov/guidelines/asthma/asthgdln.htm

American Academy of Asthma, Allergy, and Immunology *Pediatric Asthma: Promoting Best Practice*

GINA (Global Initiative on Asthma) guidelines - http://www.ginasthma.com/GuidelinesResources.asp?l1=2&l2=0

Institute for Care Systems Innovations – www.icsi.org

National Asthma Education and Prevention Program *Practical Guide for the Diagnosis and Management of Asthma* available at www.nhlbi.nih.gov/health/prof/lung/asthma/practgde/practgde.pdf

Patient education

- EACH (Environmental Action for Children's Health) offers in-home environmental assessments and medically appropriate products to reduce asthma triggers. Call the American Lung Association of Minnesota at 651-227-8014.
- Minnesota Asthma Information Center - www.alamn.org/InfoCenter
- Minnesota Visiting Nurse Agency 612-617-4600
- National Asthma Education and Prevention Program - http://www.nhlbi.nih.gov/about/naepp/
- Pediatric Home Service 651-642-1825