

ROUTINE HEALTH CARE

Setting the stage: Key accomplishments

Asthma focused follow-up visit

The [WAC asthma focused follow-up visit tool](#) was created to assist primary care providers in providing ongoing management of asthma patients based on the NIH asthma guidelines. The tool was initially created in 2007 as a simple algorithm to be used during a primary care asthma visit.

Today, the asthma focused follow-up visit tool provides questions and information that serve as a guide during an asthma follow-up visit. Several WAC members have used the tool to either build new or enhance existing electronic health record systems. The WAC continues to encourage providers to add components not already included in their electronic health record.

The WAC recommends that health care providers use an asthma action plan with asthma patients. Epic, a large electronic health record company located in Wisconsin, will be incorporating an asthma action plan as part of their software upgrade which is expected to be released in 2015. The WAC was able to partner with Epic and provide feedback during the creation process.

Education for primary care providers

From 2002-2009, the Allergist Outreach Asthma Education Program trained more than 1,400 primary care providers and other clinical staff to improve the diagnosis and management of asthma. Significant improvements were documented in severity classification, assessment of dust as a trigger, writing asthma action plans, primary care providers teaching patients, staff teamwork and nurses review of inhaler technique. The program was sponsored by the American Lung Association in Wisconsin, Children's Health Alliance of Wisconsin, Children's Hospital of Wisconsin, Fight Asthma Milwaukee Allies, Medical College of Wisconsin, Wisconsin Academy of Pediatrics Foundation, Wisconsin Allergy Society and WAC.

The WAC members and partners have identified a need to again train primary care providers on the NIH asthma guidelines. Children's Health Alliance of Wisconsin is

Partnering with WAC

The WAC has provided me with the tools needed to utilize a thorough asthma focused follow-up visit template within my organization's electronic health record. This helps ensure consistent care for patients as the most important information for all providers is right there at their fingertips.

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managing a new educational program, Improving Outcomes: Practical Asthma Management (PAM), which will begin implementation as part of this new plan.

Emergency department follow up

The WAC completed a [needs assessment with 14 emergency departments](#) to identify how asthma was managed. The WAC found varying protocols, services and goals regarding asthma. While all hospitals provide some sort of basic asthma education during an emergency department visit, only 3 of the 14 (21 percent) provide an asthma action plan to their patients. The educational materials and information varies between hospital systems and physicians. Time is the most significant barrier for patients in the emergency department to receive comprehensive education to manage their asthma. The majority of emergency department physicians feel comfortable prescribing a rescue medication, but few are willing to prescribe controller medications. All 14 emergency departments refer patients to follow-up care, but the majority of the time the patient is responsible for following up with their primary care provider. Some of the emergency departments alert the patient's primary care provider that their patient was seen. However, the process used differs greatly and results in varied outcomes. Based on this information, the WAC felt it was important to implement an assortment of data sharing and system change strategies to increase the number of patients who complete a follow-up visit with a primary care provider after an urgent care visit, emergency department visit or hospitalization.

Workplan

Goal: Increase implementation of current NIH asthma guidelines for optimal diagnosis and management of asthma by health care providers.

Objective A: Implement the WAC asthma focused follow-up visit components to support practice guidelines for health care providers.

Activity	Target date
1. Severity and control <ul style="list-style-type: none"> a. Promote the use of clinical flow charts to assess severity b. Promote the use of validated tools to assess control (e.g., Asthma Control Test (ACT)/Child-ACT, Test for Respiratory and Asthma Control in Kids (TRACK), asthma therapy assessment questionnaire (ATAQ)) c. Promote inclusion of severity and control assessment within the electronic health record as discrete data elements 	2015-ongoing

<p>2. Asthma action plans</p> <ul style="list-style-type: none"> a. Promote the use of clear, understandable action plans with all asthma patients b. Promote components for inclusion in asthma action plans c. Identify and/or develop appropriate health literacy terminology and pictures d. Promote embedding action plans within the electronic health record for use at each visit 	<p>2016</p>
<p>3. Environmental assessment</p> <ul style="list-style-type: none"> a. Promote basic environmental assessments as part of the clinic visit b. Promote environmental assessment tool for use by clinic staff (e.g., National Environmental Education Foundation, Physicians for Social Responsibility) c. Promote patient education to minimize triggers d. Refer patients to community resources (e.g., home nursing, community health workers) 	<p>2016-17</p>
<p>4. Spirometry</p> <ul style="list-style-type: none"> a. Promote the use of spirometry b. Promote and/or provide training on performing spirometry and interpretation of data c. Promote spirometry guidelines (e.g., American Thoracic Society) 	<p>2018</p>
<p>5. Patient and/or family education</p> <ul style="list-style-type: none"> a. Promote educational resources for clinics to use with patients (e.g., Living With Asthma: Families Speak video) b. Create and/or promote patient education materials 	<p>Ongoing</p>

Evidence rating: Scientifically supported

Basis for evidence rating: 3 systematic reviews (a, b, c); 3 experimental studies (d, e, f)

- a. Gibson PG, Powell H. Written action plans for asthma: an evidence-based review of the key components. *Thorax*. 2004; 59: 94-99.
- b. Gibson PG, Powell H, Wilson A, et al. Limited (information only) patient education programs for adults with asthma (review). *Cochrane Database of Systematic Reviews*. 2002; 1: 1-32.
- c. Clark NM, Nothwehr F. Self-management of asthma by adult patients. *Patient Education and Counseling*. 1997; 32: S5-S20.
- d. Fassi BA, Nkoy FL, Stone BL, et al. The joint commission children's asthma care quality measures and asthma re-admissions. *Pediatrics*. 2012; 130: 482-491.
- e. Cabana MD, Slish KK, Evans D, et al. Impact of physician asthma care education on patient outcomes. *Pediatrics*. 2006; 117: 2149-2157.
- f. Vernacchio M, Epstein DM, Santangelo J, et al. Effectiveness of an asthma quality improvement program designed for maintenance of certification. *Pediatrics*. 2014; 134: e242-e248.



Objective B: Increase the number of patients who complete a follow-up visit with a primary care provider after an urgent care visit, emergency department visit or hospitalization.

Activity	Target date
1. Promote written discharge plan that includes <ol style="list-style-type: none"> Medication use Follow up with a primary care provider within 1 to 4 weeks 	Ongoing
2. Identify and share successful urgent care, emergency department and hospital protocols, and promote best practices to other systems	Ongoing
3. Provide training to urgent care, emergency services and hospital staff on appropriate use of the NIH asthma guidelines	2018-19
4. Promote data sharing between the urgent care, emergency department, hospital and primary care provider to follow up with patients	Ongoing
5. Promote timely data sharing between the urgent care, emergency department, hospital and health plan case managers, care coordinators and other health care partners	Ongoing
6. Promote use of the patient-centered medical home model within health systems	Ongoing
7. Identify and share real-time appointment scheduling models for patients to have a follow-up appointment when leaving the urgent care, emergency department or hospital	As opportunities arise

Evidence rating: Some evidence

Basis for evidence rating: 2 experimental studies (a, b); 3 descriptive studies (c, d, e)

- Baren JM, Boudreaux ED, Brenner BE, et al. Randomized controlled trial of emergency department interventions to improve primary care follow-up for patients with acute asthma. *Chest*. 2006; 129: 257-265.
- Zorc JJ, Scarfone RJ, Li Y, Hong T, Harmelin M, Grunstein L, Andre JB. Scheduled follow-up after a pediatric emergency department visit for asthma: a randomized trial. *Pediatrics*. 2003; 111: 495-502.
- Li P, To T, Guttman A. Follow-up care after an emergency department visit for asthma and subsequent health care utilization in a universal-access health care system. *The Journal of Pediatrics*. 2012; 161: 208-213.
- Sin DD, Bell NR, Svenson LW, Man SFP. The impact of follow-up physician visits on emergency readmissions for patients with asthma and chronic obstructive pulmonary disease: a population-based study. *The American Journal of Medicine*. 2002; 112: 120-125.
- Zorc JJ. Improving asthma care after an emergency visit: a universal challenge. *The Journal of Pediatrics*. 2012; 161: 184-185.

Objective C: Increase communication and collaboration to improve asthma management.

Activity	Target date
1. Create an emergency protocol for use with children who do not have an individual asthma action plan on file at school	2016
2. Increase awareness of referral opportunities, such as: <ul style="list-style-type: none"> a. Case managers or care coordinators through appropriate delivery points (e.g., health insurance, community-based organization, hospital) b. Certified asthma educators c. Disease management companies d. Public health nurses e. Specialists per the NIH asthma guidelines (e.g., allergist, pulmonologist) f. Wisconsin Pharmacy Quality Collaborative 	Ongoing
3. Promote collaboration among health care systems, including exploration of an asthma registry	As opportunities arise

Evidence rating: Scientifically supported
 Basis for evidence rating: 1 systematic review (a)

- a. Okelo SO, Butz AM, Sharma R, et al. Interventions to modify health care provider adherence to asthma guidelines: a systematic review. *Pediatrics*. 2013; 132: 517-534.

Objective D: Strengthen partnerships with Wisconsin Medicaid leadership to improve asthma outcomes.

Activity	Target date
1. Utilize Medicaid data to build upon successful programming (e.g., home nursing, follow-up visits after an urgent care visit, emergency department visit, hospitalization)	Ongoing
2. Explore pay-for-performance measures to improve asthma care	Ongoing

Evidence rating: Mixed evidence (systematic reviews and descriptive studies have mixed results)
 Basis for evidence rating: 2 systematic reviews (a, b); 3 experimental/quasi-experimental studies (c, d, e); 2 descriptive studies (f, g)

- a. Schatz, M. Does pay-for-performance influence the quality of care? *Current Opinion in Allergy and Clinical Immunology*. 2008; 8: 213-221.

- b. Johnson R, Dinakar C. Pediatric pay-for-performance in asthma: who pays? *Current Allergy and Asthma Reports*. 2010; 10: 405-410.
- c. Kelly CS, Morrow AL, Shults J, Nakas N, Strobe GL, Adelman RD. Outcomes evaluation of a comprehensive intervention program for asthmatic children enrolled in Medicaid. *Pediatrics*. 2000; 105: 1029-1035.
- d. Mandel KE, Kotagal UR. Pay for performance alone cannot drive quality. *Archives of Pediatric and Adolescent Medicine*. 2007; 161: 650-655.
- e. Linden A, Berg GD, Wadhwa S. Evaluation of Medicaid asthma disease management program. *Disease Management*. 2007; 10: 266-272.
- f. Levin-Scherz J, DeVita N, Timbie J. Impact of pay-for-performance contracts in network registry on diabetes and asthma HEDIS measures in an integrated delivery network. *Medical Care Research and Review*. 2006; 63: 14S-28S.
- g. Piecoro LT, Potoski M, Talbert JC, Doherty DE. Asthma prevalence, cost, and adherence with expert guidelines on the utilization of health care services in a state Medicaid population. *HSR: Health Services Research*. 2001; 36: 357-371.

Objective E: Promote the importance of respiratory disease vaccines for asthma management.

Activity	Target date
1. Maximize access to vaccinations outside of the clinic system (e.g., pharmacies, health departments, schools, workplaces)	2015
2. Encourage eligible health care providers to become trained to administer vaccines	2015
3. Partner with the Wisconsin Immunization Registry (WIR) to assist in increasing the number of providers who use WIR to document immunizations	2015
4. Support efforts to electronically transfer information between WIR and electronic health records	Ongoing

Evidence rating: Scientifically supported

Basis for evidence rating: 2 systematic reviews (a, b); 1 experimental study (c); 2 descriptive studies (d, e)

- a. Pesek R, Lockey R. Vaccination of adults with asthma and COPD. *Allergy*. 2011; 66: 25-31.
- b. Thorburn AN, Hansbro PM, Gibson PG. Pneumococcal vaccines for allergic airway diseases. *Expert Opinion Biological Therapy*. 2009; 9: 621-629.
- c. Martin E. Improving influenza vaccination rates in a pediatric asthma management program by utilization of an electronic medical record. *Clinical Pediatrics*. 2006; 45: 221-227.
- d. Dombkowski KJ, Leung SW, Clark SJ. Provider attitudes regarding use of an immunization information system to identify children with asthma for influenza vaccination. *Journal of Public Health Management Practice*. 2007; 13: 567-571.
- e. Ong BA, Forester J, Fallot A. Does influenza vaccination improve pediatric asthma outcomes? *Journal of Asthma*. 2009; 46: 477-480.