

Find out how one practice has improved care and outcomes for its asthma patients and increased practice revenue at the same time.

Kurtis S. Elward, MD, MPH, FAAFP



# Asthma Days

## An Approach to Planned Asthma Care

National guidelines and numerous studies emphasize the importance of the key elements of asthma care – classification, provision of controller medications and education about self-management skills,<sup>1</sup> but both patients and physicians still tend to rely mostly on acute-care needs when it comes to asthma. Optimal care of asthma is of special concern to family physicians, who care for more than half of the asthma patients in this country.

While working with several local asthma care programs and serving as faculty for the AAFP-NICHQ (National Initiative for Children's Healthcare Quality) Asthma Collaborative (<http://www.aafp.org/x3857.xml>), I observed

many of the challenges family physicians face with asthma care (and other chronic illnesses): assuring proper preparation for the visit, training nurses, having necessary visit tools (e.g., flow sheets or other chart tools for physicians and educational materials for patients) and ensuring documentation. In my own practice, the staff often felt inadequately prepared for all of the different types of patient visits we had, which ranged from asthma to diabetes to well-child visits. I also remembered one of my patients telling me that her asthma and allergy care subspecialist had an entire team who taught her about asthma. Since I knew the subspecialist had the same doctor-to-staff ratio as our practice, it seemed that what the subspecialist's practice

*Dr. Elward practices at Family Medicine of Albemarle, in Charlottesville, Va. He is also a member of the Department of Family Medicine at the University of Virginia. Conflicts of interest: None reported.*



Physicians and patients tend to focus on acute-care needs where asthma is concerned and don't have an organized approach for managing the condition.



The author established Asthma Days, which are devoted to providing planned-care visits.



Patients with asthma were found by searching billing records for asthma-related diagnosis codes, and they were sent mailers encouraging them to make appointments.



Staff were educated on the importance of providing asthma care, and their responsibilities associated with each type of asthma-related visit were defined.

actually offered was an organized focus on asthma and allergy care. Although switching gears from visit to visit is common in family medicine, I began to wonder if we could streamline the care process for chronic illnesses such as asthma and create a more refined focus on an individual condition in the context of a family medicine practice. Looking back at our scheduling history, I discovered that, by chance, we were nearly filling some days with our well-child visits and gynecological exams. So, I decided to make the same thing happen on purpose for our asthma patients.

By taking lessons from these experiences and using available tools for asthma care, our practice developed an innovative approach to asthma management by family physicians that involved scheduling groups of planned-care asthma visits on the same days. I have called this approach "Asthma Days." Here's a look at the first three months of the project – how we got started and what we learned along the way.

### Implementing "Asthma Days"

Our approach required that we prepare our staff for asthma-specific visits, identify our asthma patients, and schedule and conduct planned-care asthma appointments.

**Preparing our staff.** We began by conducting a staff meeting to review the goals for and importance of high-quality asthma

### PLANNED-CARE VS. ACUTE-CARE VISITS

A planned-care visit is a proactive clinical encounter that focuses on overall patient goals and aspects of care that are not usually delivered during an acute-care visit. In addition to this and other obvious inconveniences and risks associated with acute-care visits, such visits can have a negative effect on a physician practice. Acute visits disrupt the practice schedule, require resources that are poorly reimbursed, do not allow time to teach, and often occur in the emergency room instead of the office, resulting in lost charges for the practice. Planned visits, on the other hand, ensure at least two preventive-care, billable opportunities, allow for physician care and nursing visits, keep income in the practice and allow for good follow-up and education of the patient and the patient's family.

If you have 20 asthma patients with persistent asthma, just two planned-care visits per patient per year at \$65 per visit would generate over \$2,600 in additional income. In many cases, the clinical care and counseling may support a level-IV office visit and pulmonary-function testing (PFT). According to national guidelines, PFT could be reasonably included once or twice a year at \$40 to \$75 per test, which would add \$800 to \$3,000 in additional revenue.

### KEY POINTS

- A planned-care visit is a proactive clinical encounter that focuses on overall patient goals that are not usually delivered during an acute-care visit.
- Using planned-care visits, the author's practice achieved dramatic increases in the percentage of patients with persistent asthma who had action plans and who received inhaled corticosteroids.
- With 48 patients participating in the author's Asthma Days visits, the program generated more than \$5,600 in a three-month period.

care. We also highlighted the importance of each individual staff member in providing quality asthma care and defined each staff member's role in the different types of patient encounters, such as acute-care visits, follow-up or planned-care visits and patient phone calls. With the nursing staff, we also discussed each of the tasks we wanted them to complete during an asthma-care visit (e.g., asking about night symptoms, use of short-acting agents, any symptoms with activity and lost days of work or school). See "Team members' roles in asthma care" (page 45) to see how we broke down the tasks.

**Identifying our asthma patients.** Next, we pulled all asthma claims for the previous two years by searching for code 493.xx in our computerized billing system. Within that list, we searched for any patient who

did not have a visit in the past year. This generated a shorter list of 80 patients. We then mailed letters to each of these patients that explained the importance of planned asthma care, the fact that new developments in asthma care offered more effective and personalized treatment, and that this was a chance to help control their asthma even better.

**Scheduling planned-care visits.** A planned-care visit is a proactive clinical encounter that focuses on overall patient goals and other aspects of care that are not usually delivered during an acute-care visit (see "Planned-care vs. acute-care visits"). Planned care for asthma is strongly recommended and is reimbursed by insurance car-

## TEAM MEMBERS' ROLES IN ASTHMA CARE

	Front-desk staff	Nurse	Physician	Check-out desk staff
Acute-care asthma visit	<ul style="list-style-type: none"> <li>➤ Pull the patient's chart and attach a self-assessment form for the patient and/or his or her family to fill out while waiting.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Attach the asthma documentation form to the chart.</li> <li>➤ Assess the duration of symptoms, triggers, presence of fever or sputum, symptoms of URI and medications taken.</li> <li>➤ Measure PEF on all patients and PEF plus O<sub>2</sub> saturation on ill patients.</li> <li>➤ Ask the physician for initial orders on all acutely ill patients.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Review intake, perform a clinical assessment and treat exacerbation.</li> <li>➤ Confirm or reassign the patient's classification.</li> <li>➤ Review the possible triggers for this event and decide whether intervention is needed.</li> <li>➤ Evaluate the need for social intervention, such as smoking-cessation counseling.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Confirm the billing information, looking for diagnoses, modifiers, PEF, nebulizers, medications, O<sub>2</sub> saturations and lab work.</li> <li>➤ Schedule a follow-up visit. Notify the physician if the next appointment is more than three days' variance from the intended visit date.</li> <li>➤ Arrange for referrals/education visits before the patient leaves the office.</li> </ul>
Follow-up or planned-care visit	<ul style="list-style-type: none"> <li>➤ When scheduling the appointment, remind the patient to bring any home-monitoring materials.</li> <li>➤ Ensure that the appropriate time is given according to the template.</li> <li>➤ Pull the patient's chart, and attach a self-assessment form for the patient and/or his or her family to fill out while waiting.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Attach the asthma documentation form to the chart.</li> <li>➤ Ask the patient if he or she brought home-monitoring materials.</li> <li>➤ Perform a brief vital-sign and asthma-intake assessment, including PEF.</li> <li>➤ Ask the patient if he or she has any specific questions or concerns.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Review the intake assessment, home-monitoring materials and self-assessment form.</li> <li>➤ Confirm the patient's classification.</li> <li>➤ Perform a physical exam.</li> <li>➤ Review medications.</li> <li>➤ Modify the Asthma Action Plan, and give the patient a copy.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Schedule a follow-up visit. Notify the physician if the next appointment is more than one week's variance from the intended visit date.</li> <li>➤ Arrange for referrals/education visits before the patient leaves the office.</li> </ul>
Patient phone calls	<ul style="list-style-type: none"> <li>➤ Find out whether the patient is sick or calling with a question or refill request.</li> <li>➤ If the patient is sick, notify the phone/triage nurse and have the chart pulled.</li> <li>➤ If no one is available, ask the patient when he or she can be called back. If the patient feels that he or she is too sick to wait, notify the triage nurse or physician about an urgent work-in or a referral to the ED or 911.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Pull the patient's chart.</li> <li>➤ Consult the asthma documentation form and/or Asthma Action Plan from the patient's last visit to determine the patient's severity classification, date of last visit, etc.</li> <li>➤ Talk with the patient, assess whether it's time to step up therapy as outlined in the patient's Asthma Action Plan. Note the timeframe, triggers, additional illnesses or events, current limitations, PEF if performed and actions taken thus far.</li> <li>➤ Make recommendations based on the Asthma Action Plan and the patient's preference. (Patients should generally be seen if desired.)</li> <li>➤ Notify the physician of the call and the actions taken as soon as possible.</li> </ul>		



Each patient was asked to complete an asthma status questionnaire at check-in.



Patients were given asthma action plans tailored to their symptoms.



The practice is working to improve its rate of scheduled follow-up appointments from 65 percent.



The practice's goals were to classify the patient's asthma status, prescribe inhaled corticosteroids for all persistent asthma patients and teach them how to use their delivery devices.

riers. The National Heart Lung and Blood Institute (NHLBI) recommends yearly visits for mild intermittent asthma, six-month visits for mild persistent asthma, four-month visits for moderate persistent asthma and three-month visits for severe persistent asthma.

As the asthma patients we had identified called in, we scheduled appointments for them in one of six half days we had set aside specifically for asthma visits. We strongly encouraged them to come at these times, but if for some reason a patient was not able to make one of these days, we set up an appointment that fit his or her schedule. If there were any remaining openings in the schedule the week before the asthma visits, we filled the spots with other patients. This ensured that we kept a full schedule while maintaining the overall emphasis of the half-day on asthma.

At the end of each of these appointments, we also made an attempt to schedule a follow-up visit. After the first three months, our rate of scheduled follow-up appointments was about 65 percent. We have since revised our protocol in an attempt to increase our follow-up rate. Initially, we did not set specific days for follow-up because we did not know how well the program would be accepted. However, after seeing the success of the project, I have designated planned asthma days for next year and am encouraging patients to come in at these times. To adhere to recommendations for careful follow-up of short-acting beta-agonist use and ensure that patients came in for their planned-care visits, our practice also began limiting albuterol refills to one per year except in cases where the patient's personal physician authorizes more.

**Conducting planned-care visits.** The basic objective of a planned-care asthma visit is to provide the patient with clinical management based on both the National Asthma Education and Prevention Program (NAEPP) guidelines and the patient's individual needs. For this reason, each of our planned-care asthma visits have been designed to target the following key processes of care:

- Patient self-assessment;
- Review of symptoms and direct observation of the patient's inhaler technique;
- Objective clinical reassessment by peak-flow meter or spirometry;

- Clinical exam and assessment, with revision of treatment plan;
- Discussion of goal setting and self-management, including development or review of an Asthma Action Plan, which is a written guide for patients that provides a basic outline for self-management according to their symptoms and/or pulmonary-function parameters;
- Scheduling a follow-up appointment at the time of check-out.

We began each visit by asking the patient to complete an asthma status questionnaire at check-in. After trying several different questionnaires, we decided to use Asthma Action America's five-item Asthma Control Test, which is available online at [http://www.asthmaactionamerica.org/i\\_have\\_asthma/control\\_test.html](http://www.asthmaactionamerica.org/i_have_asthma/control_test.html).

To help us identify the important elements of care that are recommended for asthma visits and to ensure proper documentation, we designed a special documentation form for our asthma visits (see the form on the next page). In the exam room, the nurse completed specific data elements on this documentation form and had the form ready for review by the physician or physician assistant. The visits focused on the most important elements of the patient's asthma, and time was allotted to further explain the planned-care visits concept as needed. We were unable to complete every goal of asthma care at most visits, so we scheduled subsequent visits as needed to assure that the following nationally recommended goals were met:

- Classification of asthma;
- Prescription of inhaled corticosteroids for all patients with persistent asthma and thorough discussion of their use, side effects and safety;
- Completion of an Asthma Action Plan;
- Teaching of technique for a patient's specific delivery device, including the use of a spacer.

### The project's outcomes

Responses from the 48 patients who participated in these visits during the first three months were uniformly positive. Though we did meet with some resistance to the idea of preventive asthma visits in the beginning, almost every patient who participated felt the visits were useful or very useful. In fact, 92

**Ninety-two percent of patients felt that the visits improved their asthma care.**



# ASTHMA VISIT DOCUMENTATION FORM

Name: \_\_\_\_\_ Date: \_\_\_\_\_

History number: \_\_\_\_\_ Peak flow personal best: \_\_\_\_\_

## CLASSIFICATION (circle appropriate category)

	1: Mild intermittent	2: Mild persistent	3: Moderate persistent	4: Severe persistent
Use of quick-acting medication	< 2 times/week	3 to 6 times/week	Daily	All the time
Night-time waking	≤ 2 times/month	3 to 4 times/month	> 5 times/month	Frequent
Symptoms interference	Not at all unless with attack	Only with lots of activity	Only with moderate activity	With any activity
FEV <sub>1</sub> , PEF (% pred.)	≥ 80 percent	≥ 80 percent	> 60 percent, < 80 percent	≤ 60 percent

**Type of visit:** \_\_\_\_\_ Acute / FU / Educ. \_\_\_\_\_

**BP:** \_\_\_\_\_

**HT/WT:** \_\_\_\_\_

**Pulse:** \_\_\_\_\_ **O<sub>2</sub> Sat:** \_\_\_\_\_

**RR:** \_\_\_\_\_

Days with Sx (#/wk): \_\_\_\_\_

Current severity score: 1 2 3 4

**Triggers:** \_\_\_\_\_

**Social issues:** \_\_\_\_\_

**Tobacco exp.:** \_\_\_\_\_

ER since last visit? Y N Dates: \_\_\_\_\_

Hospitalizations since last visit? Y N Dates: \_\_\_\_\_

**Bronchodilator:** \_\_\_\_\_

**Controller:** \_\_\_\_\_ **Other:** \_\_\_\_\_

**Peak flow:** Pre: \_\_\_\_\_ Post: \_\_\_\_\_ **Triggers this visit:** \_\_\_\_\_

**History:** \_\_\_\_\_

**Pertinent ROS:** Derm: \_\_\_\_\_ GI: \_\_\_\_\_ ENT: \_\_\_\_\_ Other: \_\_\_\_\_

**Physical exam:** HNT: \_\_\_\_\_

CV: \_\_\_\_\_

Pulm: \_\_\_\_\_ wheezes \_\_\_\_\_

GI: \_\_\_\_\_ I:E \_\_\_\_\_

Other: \_\_\_\_\_

**Treatment notes:** \_\_\_\_\_

**Assessment:** 1. Asthma \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

**Plan:** 1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

**TEACHING** *Review / Update* \_\_\_\_\_ *Review / Update* \_\_\_\_\_

**Action plan/Education:** \_\_\_\_\_ **Trigger avoidance/coping:** \_\_\_\_\_

**Smoke/Environment:** \_\_\_\_\_ **Controller meds:** \_\_\_\_\_

**Peak flow:** \_\_\_\_\_ **What asthma is:** \_\_\_\_\_

**Use of MDI/spacer/neb:** \_\_\_\_\_ **Exercise:** \_\_\_\_\_

**Other:** \_\_\_\_\_ **School/work issues:** \_\_\_\_\_

**Planned F/U:** \_\_\_\_\_ **MD/PA/NP:** \_\_\_\_\_





Ninety-two percent of patients felt the visits improved their asthma care, and classification rates increased from 20 percent to more than 90 percent.



The Asthma Days program generated \$5,600 over three months.



Ongoing follow-up is assured when return visits are made at the time of check-out.



The Asthma Days principles may be applied to any chronic disease care plan.

percent of these patients felt that the visits improved their asthma care. Classification rates for these patients increased from about 20 percent to more than 90 percent, use of inhaled corticosteroids increased from 50 percent to 87 percent, and the number of patients with persistent asthma who had action plans increased from 20 percent to 80 percent.

Our nurses also liked this approach. Since it allowed them to focus mostly on one condition the entire morning, they felt their ability to provide consistently good nursing care and education was improved.

The financial outcomes for this project were also positive. The program generated more than \$5,600 (excluding allergy testing, which was billed separately by an outside lab) over the three-month period from charges that would have been lost and planned care that would not have been provided. The cost of the mailings (dictation time, letters and postage) was only about \$1 each. In many cases, good asthma care will result in a detailed level of service, and many patients will have related problems that require further evaluation, such as allergies and eczema. Capturing all of these diagnoses can make the care plan more successful and merit a higher level of service. Our asthma documentation form helped us to do this.

### Lessons learned

To achieve success now and in the future, we've continued to make improvements along the way. Here are some of the challenges we faced in our first three months:

- Though we now have a better idea of who and where our asthma patients are, the practical difficulties of assuring ongoing follow-up and maintaining the process we've started remain challenging. We found that it is easy to allow the follow-up visits to fall through the cracks, so we now stress the importance of making the follow-up appointment at the time of checkout.

- Reorientation and reinforcement of the process for our nurses was necessary to answer questions and improve the practical implementation of the process.

- The front-office staff was occasionally finding it difficult to recognize the asthma patients, and, if the phones were busy, they

### AAFP RESOURCES

- "Asthma Update: Part I. Diagnosis, Monitoring, and Prevention of Disease Progression." Mintz M. *American Family Physician*. 2004;70(5):893-898. <http://www.aafp.org/afp/20040901/893.html>.
- "Asthma Update: Part II. Medical Management." Mintz M. *American Family Physician*. 2004;70(6):1061-1066. <http://www.aafp.org/afp/20040915/1061.html>.
- *The Asthma and Allergy Resource Guide*. Elward KS, Pollant S, Kline KM. Leawood, Ks: American Academy of Family Physicians; 2004. <http://www.aafp.org/asthmaallergyguide.xml>.

would sometimes forget to give the patients their asthma self-review sheets. We have tried to address this problem by placing the review sheet on the front of the chart the day before.

We are continuing to fine-tune this program as we learn by experience. At the same time, our positive results have incentivized us to develop similar pilot programs for other chronic conditions, such as diabetes.

### A final word

In my practice, Asthma Days was viewed very positively by patients and nursing staff. It improved adherence to key asthma-management goals as recommended by the NHLBI guidelines, and it provided a specialized focus on asthma within the context of family medicine. I believe many family physicians can incorporate this approach to asthma care into their own practices to improve

efficiency and effectiveness. The principles outlined here could apply to any chronic disease, such as diabetes, heart failure and hypertension. While it is not the only way to provide excellent care for chronic diseases, it has performed very well in supporting the goals we've set for our practice. **FPM**

**Asthma Days provided a specialized focus on asthma within the context of family medicine.**

Send comments to [fpmedit@aafp.org](mailto:fpmedit@aafp.org).

1. National Institutes of Health, National Heart Lung and Blood Institute. Guidelines for the Diagnosis and Management of Asthma. Update 2002. NIH Publication No. 02-5075. Available at <http://www.nhlbi.nih.gov/guidelines/asthma/>.