

## **Starting Up a Residency Rotation Through Your Office**

Resident rotations in Allergy/Asthma/Immunology are an important component of the educational experience of primary care physicians. They also help to assure the future of our subspecialty, since many residents do not receive sufficient opportunities to explore the A/I career path at their teaching institutions nor are they adequately exposed to the treatment of common allergic disorders that they will encounter in their practices.

This document is meant to introduce community allergists, not currently involved in teaching rotations, to the ease of setting up resident educational experiences through their offices and the rewards of participating in this endeavor. It addresses the teaching objectives of such a program; identifies the factors involved in successful rotation experiences; explains the appropriate role expectations for both teaching allergist and resident; lays out the logistical issues involved in preparing your office and staff; isolates those materials needed to maximize your effectiveness; and provides information on evaluating allergy rotations. Lastly, lists of references are provided that give the prospective teaching allergist a broader view of issues involved in the education of residents in community settings.

The *Primary Care Rotations in Allergy and Pierson Visitation Program* was established by the AAAAI in the early 1990s to increase primary care residents' exposure to Allergy/Immunology. Today, over 700 allergists currently form an informal nationwide network of dedicated teachers. The program's role is to support the development of community rotations and to provide resources to those who are involved in educational activities.

The following sections provide an outline of the important issues involved in establishing and running a successful rotation program through your office. While a challenging task, those who love to share their knowledge will find the rotations to be a highly rewarding learning experience as well. In that sense, community teaching acts as a perfect, creative antidote to the typical routines of the practice setting.

### **Getting Started: Promoting Office Rotation Opportunities**

To begin, you will need to contact the local primary care residency director(s) in Internal Medicine, Pediatrics and/or Family Medicine directly to discuss opportunities. You may also wish to contact the Dean of Undergraduate Medical Education responsible for the clinical experience of medical students. Let them know that you believe this is an important aspect of patient care training. Rationale might include the high frequency of asthma and allergic problems in the general population, the recognition and appropriate treatment of which are appropriate to the goal of training good physicians. Sharing the teaching curriculum with directors should help them understand your objectives and preparations. While extremely comprehensive, it provides a "road map" for the kinds of disorders that their residents will confront.

Exhibit booths and speaker presentations at local and regional medical society meetings are also

potential ways to become acquainted with residency programs and their directors at various institutions. If programs are not within close proximity, contact the Program liaison for assistance. Networking with recent training program graduates is also effective at promoting rotation opportunities in your office.

### **Creating a Successful Rotation Experience**

The rotation experience can be very rewarding for both the allergist and resident. There are several factors that contribute to the success of a rotation experience. First, you must possess the desire to train residents in an office setting. This includes the willingness to accept the additional time requirements taken for patient examinations and discussion. The entire office staff must also be willing to cooperate and participate in the teaching process. Teaching allergists must also be willing to incur any monetary impact that a rotation may present. Realistically, losses due to a decreased number of patients seen and disruptions in efficiency can result. However, residents can actually improve patient flow by assuming some responsibilities such as initial history taking and some patient examinations.

Patients are an excellent source for residents' learning. Past survey feedback tells us that residents and medical students want hands-on, case-based experiences. As you know, permission from the patient must always be obtained before the learner participates in any aspect of the patient's visit, including the initial history, physical examination, procedures, and patient education.

Finally, close collaboration between allergy practitioners and primary care training program directors is an integral component of the rotations' success. Goals and objectives collaboratively set forth are more easily met, especially when they are clearly identified and open communication exists.

### **The Role Expectations of Allergists and Residents**

The primary roles of the teaching allergist are that of model and mentor. An important expectation of the allergist is to adequately prepare materials for office and home study by the resident. It is essential to respect the resident's desire to learn, especially since they may lack knowledge of allergic or immunologic diseases. Also, try to build upon the residents' prior knowledge when teaching.

The requirements of residency programs have changed significantly over the past five years or so. Whether you have taught in the past or are a new volunteer, you should know that there are 6 areas of core competency required for each resident, regardless of specialty. You will need to complete an evaluation form specified by the institution which addresses these areas in some way, but we thought it might be of assistance for you to know what these general areas are and how they may be evaluated before you fill out the form.

The areas of competency with some commonly used assessment criteria modified for our specialty are listed below:

1. Patient care (basic skills):

- a. Demonstrate the ability to take an appropriate history and perform a quality, pertinent physical exam
  - b. Demonstrate skill at performing oral presentations of history and physical exam and keep accurate written documentation.
  - c. Demonstrate the ability to educate the patient and family in using:
    - i. Metered dose inhaler with/without spacer
    - ii. Peak flow meters and home charting
    - iii. Home nebulizers
    - iv. Dry powder inhalers (Advair or Serevent, Pulmicort, Foradil)
  - d. The ability to interpret basic pulmonary function tests (spirometry, flow-volume loop)
  - e. Demonstrate skill in counseling patient and/or family in asthma care for daily and emergency situations
  - f. Be able to teach environmental controls for animals, dust mite, mold, and pollens
2. Core knowledge – the core knowledge will differ slightly depending on the level of training and career path of the learner.
- a. Environmental controls (see above)
  - b. Environmental controls for tobacco smoke and other air pollution
  - c. Be able to assess severity of asthma and outline a basic pharmacologic treatment regimen
  - d. Be able to initiate treatment for allergic rhinitis
  - e. Discuss the differential diagnosis and initial approach to treatment of atopic and contact dermatitis
  - f. Discuss differential diagnosis and pathophysiology of anaphylaxis and urticaria/angioedema.
  - g. Discuss the pharmacologic management of these conditions
    - i. Discuss the use of Epi-pen for emergent treatment
  - h. Identify common foods causing allergic symptoms and presenting symptoms of food allergy
3. Interpersonal and Communication Skills
4. Practice-based Learning and Improvement
5. Professionalism
6. Systems-Based Practice

### **Teaching Methods**

Various teaching methods are used to create a successful rotation experience. The resident should be allowed to observe the allergist in all aspects of a patient's visit, including history, physical examination, procedures, discussion, training, and interpretation.

With the patient's permission, residents should be allowed and encouraged to participate in patient visits. Allergists should show physical findings to residents and allow them to examine the patient for these findings. Students should also be encouraged to ask questions.

Ample time should be allotted for case history presentation and discussion of patients seen by the resident. In these discussions, *highlight the applicability and frequency of findings in relation to the residents' specialty*. Reading material relevant to observed case histories should be assigned as well. Having daily feedback sessions provides continuity to the rotation experience.

In addition to patient care, the allergist should expose the resident to all other aspects of the office practice. For example, it would be beneficial to the resident in their future practice to learn aspects of patient scheduling, coding and billing, as well as information management.

A good way to promote the rotation learning experience is to administer the pre/post test evaluation provided by the program at the onset of the rotation and again at the end. This tool can be an excellent way to identify and discuss areas needing improvement and to gain a sense of closure on the learning experience. The JACI Primer and, where available, allergy manuals and videos can also complement the office rotation experience.

### **Rotation Evaluations**

An ongoing evaluation process is essential for quality management of rotation experiences and evaluations provide "markers of progress" for both the allergist and resident. Residents should be given constant verbal feedback on their performance on a regular basis. Keeping a daily log on the residents may prove useful for monitoring their progress and providing feedback.

The learner will also be evaluating your teaching abilities. Undergraduate learners in one recent study evaluated the teachers in the following areas:

- Allow the student to complete the history and physical
- Hear the full results of the student's evaluation
- Observe the student performing (any part of) the physical examination
- Ask any questions beyond the assessment and plan
- Hear the student's assessment and plan before giving one's own
- Hold any discussion with the student away from the patient
- Observe the student interviewing or counseling the patient
- Allow the student to do the visit closure
- Provide any feedback to the student

Studies have demonstrated that using most, if not all, of the above techniques improves the rotation experience for the learner, regardless of level of training. Allergists should also encourage the residents and their program directors to provide feedback throughout the rotation experience to ensure that their expectations are being met.

Finally, we hope you will also have each of your learners complete the AAAAI's form to

evaluate the rotation. We suspect that there are many more allergy/immunologists engaged in teaching than the AAAAI is aware of. We would like to have a better idea of the impact (both numerically and otherwise) of our efforts, as dedicated allergy/asthma/immunology teachers, on the training of future practicing physicians. Since the medical schools and residency programs do not provide feedback to the AAAAI, the feedback of you and your learners is critical. You may also become the next recipient of the Teaching Allergist of the Year award!

### **Check List**

The following materials for your teaching rotations can be found on the AAAAI Web site in the Member Resource Center:

- Online Teaching Curriculum
- Pre-Rotation Test
- Post-Rotation Test
- Rotation Evaluation Forms
- Guide for Starting a Residency Rotation
- Consultation and Referral Guidelines

To following materials are also available by contacting Ashley Raspor at the AAAAI executive office, at (414) 272-6071 or [araspor@aaaai.org](mailto:araspor@aaaai.org):

- A copy of *Community Based Teaching: A Guide to Developing Education Programs for Medical Students and Residents in the Practitioner's Office* (ACP 1997)
- Answer Keys for Pre/Post-Rotation Tests

### **References**

*Allergy-Clinical Immunology Elective for Medical Students and Residents*. Joint Committee on Primary Care Rotations in Allergy. Sponsored by the American Academy of Allergy, Asthma and Immunology and the American College of Allergy, Asthma and Immunology.

*Allergy-Clinical Immunology Learning Objectives for Medical Students*. American College of Allergy, Asthma and Immunology.

Deutsch, S, Noble, J, Co-editors. *Community-Based Teaching: A Guide to Developing Education Programs for Medical Students and Residents in the Practitioner's Office*. Philadelphia: ACP. 1997.

Roberts, KB, DeWitt, TG, Co-editors. "Pediatric Resident Education in Community Settings." *Supplement to Pediatrics*. 1996; 98: 1249-1301.