ASHP Research and Education Foundation's Antithrombotic Pharmacotherapy Traineeship: A trainee's view

Q: Why would a pharmacist apply for and participate in the ASHP Research and Education Foundation's Antithrombotic Pharmacotherapy Traineeship?

A: With the initiation of the Joint Commission's 2008 National Patient Safety Goal 3E for hospital programs, which requires hospitals to "reduce the likelihood of patient harm associated with the use of anticoagulation therapy," there have been a lot of questions and answers on the listservers as to what pharmacists are doing and how they expect to meet this requirement. The Joint Commission has outlined its expectations for planning, development, and testing at three, six, and nine months in 2008, with the expectation of full implementation by January 1, 2009. The antithrombotic traineeship program addresses an area of health care that has been in place for years.

Q: What should be considered when deciding to apply for the traineeship?

A: Pharmacists who are interested in leading the design of an inpatient, pharmacist-driven antithrombotic service, improving an already existing pharmacist-driven antithrombotic service, or incorporating pharmacists into an established antithrombotic service should consider applying for this traineeship. My initial thoughts and considerations were, Is this in the best interest of patient care? Where do we begin? Who is already doing this? How do we get in contact with these individuals so we are not recreating the wheel? I agreed to facilitate the creation of a pharmacist-driven antithrombotic service at my institution. I knew that it would not be an easy task by any means, but I knew without a doubt it was the right thing to do to improve patient care, especially in the realm of antithrombotic therapy.

Q: How can pharmacists begin the process of a pharmacist-driven antithrombotic service at their institution to avoid "reinventing the wheel?"

A: I began my search by calling on a group of colleagues with whom I have worked on a variety of clinical and organizational levels. I began my search locally on both a metropolitan level and a state level to see what my local colleagues were doing or had done. I was fortunate to find a number of health systems that had already established programs very similar to what we had in mind. Several of my colleagues in Ohio had implemented functional inpatient, pharmacist-driven antithrombotic services. Those individuals generously provided me with a plethora of information, such as policies and procedures, monitoring forms, and preprinted order sheets. This information provided me with a wonderful starting point for getting initial ideas, strategies, and paperwork in order.

The Q&A column features ASHP staff responses to inquiries from pharmacists in health systems. Through this column, more practitioners can benefit from the answers prepared by the staff. The column may also include answers solicited from others, including government agencies such as OSHA, FDA, and DEA.

Pharmacists with questions for ASHP should write directly to the appropriate staff member, not AJHP. *Frequently called extensions are listed in every issue of* AJHP *on the page after the Table of Contents.*

Q: What are some examples of possible plans of actions?

A: Start by brainstorming ideas of what an inpatient, pharmacist-driven antithrombotic service should include. Consider one of these two general plans of action. You can develop a very extensive, all-encompassing program that has pharmacists taking care of all antithrombotics in the institution or some portion of antithrombotics or a program that deals specifically with warfarin, something that has a significant body of literature to support improved patient outcomes from pharmacist-driven services. Our administration agreed on an inpatient, pharmacist-driven warfarin dosing service, as its success would provide a tremendous steppingstone for further antithrombotic services.

Q: How can pharmacists learn more about the antithrombotic pharmacotherapy traineeship program?

A: During the process of putting this service together for my institution, I received an e-newsletter from the ASHP Research and Education Foundation that highlighted its antithrombotic pharmacotherapy traineeship. I read the brief description of the traineeship and then clicked on the hyperlink to access the full description of the traineeship, requirements, and application at www.ashpfoundation.org/MainMenuCategories/Education/Traineeships/PharmacotherapyTraineeship.aspx. I realized that the traineeship would augment all of the work that I had been doing and provide me with the frontline experience I needed to really put all of the pieces together in a solid, cohesive service.

Q: What does the application process entail?

A: I began the application process, and my Director of Pharmacy assisted in contacting the appropriate health-system executives for their approval and support

of this traineeship and a pharmacist-driven antithrombotic service. I completed the application, obtained my letters of endorsement from our health-system executives, and mailed all of that information off to the ASHP Research and Education Foundation. This process did require a fair amount of time, with the most challenging process being the letters of recommendation from the health-system executives. The executives were extremely supportive of these endeavors, but the demands on their time can present a number of challenges when trying to meet the necessary deadlines.

Q: What happens after submission of the application, and what can be expected if a pharmacist gets accepted to participate in the antithrombotic pharmacotherapy traineeship?
A: I had been accepted as 1 of 14 participants nationwide for the 2007 antithrombotic pharmacotherapy traineeships. I was informed that a didactic portion of material would be arriving soon and a deadline for completion of this material would proceed the one-week experiential portion of the traineeship. A large packet of educational materials arrived shortly after my acceptance notification. I proceeded to familiarize myself with the updated guidelines for antithrombotic therapies as well as every other piece of antithrombotic literature available. I began to go out of my way to participate in continuing-education programs that specifically dealt with antithrombotic therapies. I began to realize the crucial role that pharmacists have in providing care for patients when it comes to antithrombotic therapies.

Q: What resources and factors would you consider important in successfully finishing an antithrombotic pharmacotherapy traineeship?
A: First and foremost, I believe that the support of your department and institution to provide an antithrombotic service to patients is the key for a successful program. I believe that you as an individual also have to have the will and desire to take a lead in the improvement of patient care as it pertains to antithrombotic therapy. You must be willing and able to make the commitment to become your institution's "guru" for antithrombotic therapy. You must continue to focus your professional efforts to "keeping ahead of the curve" and must be the foundation on which your institution's antithrombotic services are built. You need to be the person that others in the institution look to for their antithrombotic information and patient care needs. You need to work hard to gain the respect of the medical profession and gain the confidence of other practitioners that you can take care of their patients' antithrombotic needs.

Q: What can a pharmacist expect from the experiential portion of the antithrombotic pharmacotherapy traineeship?
A: During the first week of April I had the opportunity to spend a week working with one of the most knowledgeable and well-respected individuals in the specialty of antithrombotics. We spent time with the inpatient and outpatient antithrombotic services at the University of California—Davis Medical Center (UCDMC). We had hands-on training with the patients on their services, and our knowledge, assessments, and therapeutic suggestions for the patients with whom we interacted were critiqued. We were given valuable opportunities to interact with patients in a wide variety of inpatient care settings including critical and intensive care, orthopedics, and general medicine. In the outpatient setting, we were able to see well-established patients as well as newly established patients. We were given the opportunity to spend time with other departmental personnel who provided support services, such as radiology and laboratory. The time spent with these individuals allowed a more comprehensive understanding of the entire process, from diagnosis to continued optimal therapeutic treatment of these patients. Each day was spent concentrating on a different aspect of antithrombotic service. We were given the opportunity to see the different aspects of the antithrombotic services provided at UCDMC, from the business aspects to the clinical care aspects and everything inbetween. The service that these participating sites and preceptors provide is invaluable not only to the profession but the health of our patients.

Q: What can a pharmacist expect to gain from the experience of participating in the traineeship?
A: My experience with the traineeship was one of the most professionally rewarding experiences of my career. This traineeship provided me with the necessary tools and guidance, as well as superb resources, to build, mold, and implement the right service for my institution based on our needs and desires. The foundation that this traineeship provided for me was an incredibly solid basis for my endeavor in providing an inpatient, pharmacist-driven warfarin-dosing service. The educational and knowledge component was incredibly complemented by the experiential element of this traineeship. This process was crucial to improving patient care in the institutions and providing yet another precious service to physicians who requested our assistance with the pharmacotherapy management of our patients. The sense of accomplishment for myself as well as the improved patient medication safety and care of our patients will continue to drive me toward a more interdisciplinary approach to health care for the betterment of all patient care. I would highly recommend this traineeship to any pharmacist who is interested in antithrombotic therapy and in improving existing services or would like to begin a pharmacist-driven antithrombotic therapy service.

Q: Can you describe the process of implementation for the pharmacist-driven antithrombotic service that you put together at your institution and how you demonstrated what you learned from the traineeship?
A: The process of implementation for the pharmacist-driven antithrombotic service at my institution was a fairly normal institutional procedure. For our warfarin monitoring service, I spent months putting together policies and procedures as well as dosing guidelines in conjunction with a team of other pharmacists within our department. We discussed how our current staffing would handle the increased workload. We discussed what we needed to do to provide our entire pharmacy staff with the knowledge of the pathophysiology, warfarin, policies and procedures, and dosing guidelines to

provide the highest level of care for our patients. We worked with specific physicians to discuss the opportunities for pharmacy to work with physicians to provide this service to our patients. We spent time speaking with physicians to gain their support of this service before formal presentation to the pharmacy and therapeutics (P&T) committee.

Once we felt comfortable with our policies and procedures for this service, we submitted our request to place this on the P&T committee's agenda for review. The general consensus from the P&T committee was favorable, but there were some questions and concerns that were brought up in this initial meeting. After we examined and addressed these concerns, we gained the committee's approval for this service to be presented to the medical executive committee for final approval. During this time, we were also putting together an educational program that consisted of the pathophysiology of thrombotic disorders, guidelines for warfarin dosing, and a hands-on component of patient monitoring before beginning this pharmacist-driven warfarin-dosing service. We provided our staff with the most recently updated guidelines for warfarin therapy as well as the policies and procedures for this service. We reviewed information concerning the need and use of vitamin K_1 (phytonadione) as well as general pharmacy staff concerns regarding the service. This educational process was conducted over 3–4 months to ensure that all parties involved were comfortable with the provision of this service. The entire process took about 12–15 months from inception to full implementation.

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