PGY-1 Pharmacy Practice Residency:

A Focus on Ambulatory Care

The pharmacy practice residency program at the William S. Middleton Veterans Hospital (also known as the "Madison VA") has been in existence since 1983 and has trained hundreds of residents. This first year residency program has been designed to develop ambulatory care practitioners with the high level of skill required to manage patient care as integral members of interdisciplinary teams. Graduates of this program have been successful in both clinical and academic positions.

The VA clinics provide primary care as well as a wide variety of medical subspecialty care for Veterans throughout Wisconsin and northern Illinois. Residents co-manage patients as part of an interdisciplinary team in a practice that has evolved over the years, allowing pharmacists to practice at the top of their scope. In addition to completing patient appointments, residents write progress notes for patients they assess and (in collaboration with preceptors) have authority to write prescriptions, order laboratory and other diagnostic tests, consult other services when indicated, and develop therapeutic and monitoring plans for patient follow-up, all within a scope of practice. Care is provided via face-to-face and telephone appointments. Residents take an active, direct role in patient care. Within primary care itself, patients are seen in the Medication Management service for a variety of medical problems. As part of this service, residents provide interim care for patients between visits to primary care providers. Care in subspecialty clinics includes diabetes, allergy/asthma, rheumatology, epilepsy, osteoporosis, pain management, mental health, and anticoagulation clinics. Residents also have the opportunity to provide care as part of a home-based primary care team and to develop formulary management skills. Residents may also choose 2 electives from various other clinics, including infectious disease, hepatitis C, erythropoietin/ anemia, dermatology, and women's health.

The residency is affiliated with the University of Wisconsin (UW) School of Pharmacy, where residents serve as clinical instructors. In this capacity, residents teach in the Pharmacotherapy Lab. Residents also have the opportunity to participate in a teaching certificate program offered by the UW School of Pharmacy. This program offers a seminar series throughout the residency year. Participants attend series sessions, assess their own teaching experiences, and develop a teaching portfolio as a requirement for this certification. Additional teaching experiences include opportunities to deliver didactic lectures at the School of Pharmacy as well as to provide in-service education to pharmacy staff. Residents are required to participate in journal clubs and case conferences.

Completion of a project of the resident's choosing is a longitudinal requirement of this program. Residents work with a pharmacy staff mentor to plan, carry out, and evaluate the results of these projects. The resident's findings are presented at the Great Lakes Pharmacy Residency Conference in April of each year. A final manuscript of the project's results is a requirement for completion of the residency.

All goals and objectives of the PGY1 residency as specified by the American Society of Health System Pharmacists accreditation standards are met by this residency.

PGY-1 Pharmacy Practice Residency Application Procedure

Applicants must be a graduate of an American Council of Pharmaceutical Education accredited School of Pharmacy with a PharmD degree. Applicants must have an aptitude and motivation for ambulatory patient care.

Some of the criteria considered in choosing residents include knowledge of professional practice, communication skills and ability to apply theory to practice, leadership ability, interest in the program, confidence, and professionalism.

To apply, a cover letter stating career goals and an application form (Form 10-2850D) must be completed. In addition, three letters of reference and college transcripts are required. The application process should be completed through PhORCAS. An onsite interview is also required.

See ASHP website for application deadline.
Address inquiries to:
Maria Wopat, PharmD, BCACP
Residency Director –119
William S. Middleton VA Hospital
2500 Overlook Terrace
Madison, WI 53705

Phone: 608-256-1901, extension 15020
Email: Maria.Wopat@va.gov

PGY-1 Pharmacy Practice Residency Rotation Descriptions

Required Rotations

A Focus on Ambulatory Care

Allergy and Asthma – Residents are responsible for independently interviewing and monitoring patients with allergic rhinitis, sinusitis, and asthma. The resident obtains a medical history, symptom and disease history, performs a brief physical exam including ears, nose, throat and lung assessments, and monitors medication efficacy, safety, and adherence. The resident will learn to effectively evaluate spirometry results and symptoms to determine medication appropriateness and efficacy. An allergist oversees the clinic and staffs with the resident to provide optimal patient care.

Anticoagulation – This clinic is pharmacist-managed and is responsible for managing all VA patients receiving warfarin and direct oral anticoagulants (DOACs) from our hospital; the clinic provides care for over 700 Veterans. Residents see patients in clinic and complete telephone follow-up to assure safe and effective use of antithrombotic therapy. They also initiate therapy and participate in transitions of care from inpatient to outpatient. Residents also coordinate interruptions for procedures, using low molecular weight heparin if warranted. Residents are involved with patient education as needed.

Diabetes – Patients with complicated and difficult to control diabetes are referred to this clinic. The clinic uses a multi-disciplinary approach to the management of Type 1 and Type 2 Diabetes. Residents see patients in both a Pharmacist-managed clinic and in a clinic staffed by both Pharmacist and Endocrinologist attendings. The resident is responsible for all aspects of diabetes-related care. The program is structured to provide the resident the opportunity to monitor the safety and efficacy of drug therapy in ambulatory care settings, including medical record review, patient interview and targeted physical assessment, interpretation of laboratory data, consultation with staff, and patient education to achieve optimal patient outcomes. In addition to face-to-face clinic appointments, telephone follow up is completed using patient home glucose monitoring.

Epilepsy Clinic – Residents evaluate patients with a wide range of seizure disorders. Residents will also gain experience evaluating patients with various psychiatric comorbid conditions including major depression, bipolar disorder, and anxiety. The resident is responsible for obtaining a medical history, symptom and disease history, performing a short neurological exam, and monitoring AED therapy for these patients. The resident works closely with Barry Gidal, Pharm.D., a nationally recognized epilepsy clinical pharmacy specialist, as well as the epilepsy nurse case manager and an attending neurologist to provide optimal patient care. Residents may also be asked to provide telephone follow-up to select patients when antiepileptic drug therapy has been recently initiated or modified. The resident is also responsible for assisting in precepting fourth year pharmacy students who rotate through this clinic.

Formulary Management – Residents are responsible for a variety of duties during this rotation, including education and guidance of prescribing through electronic consults and ordering tools; review of non-formulary drug requests for appropriateness, safety, and cost effectiveness; monitoring medical center medication utilization to identify areas for improvement; management of national cost saving initiatives; working on formulary conversions; completing a medication use evaluation; and management of the adverse drug reaction program. Requirements for completion of this rotation include completion of one drug monograph, one medication use evaluation, documentation of adverse drug reactions, clinical reviews pertaining to non-formulary or restricted medication requests, completion of new patient orientation notes, assisting with management of manufacturer back orders, PBM/FDA Patient Safety Alerts, and pharmacists clinical interventions. Residents may also be required to attend Madison P&T, regional P&T, and regional PBM meetings during this rotation.

Heart Failure – This clinic focuses on ensuring patients are on evidence-based medication therapies for heart failure and are titrated to goal doses. Routine lab monitoring is an essential part of this clinic. Follow-up is conducted via face-to-face and phone appointments. During face-to-face visits, physical assessments are performed to evaluate blood pressure, pulse, and fluid status.

PGY-1 Pharmacy Practice Residency Rotation Descriptions

Required Rotations

A Focus on Ambulatory Care

Home-Based Primary Care (HBPC) – The HBPC team is an interdisciplinary team that provides team-based, patient-centered care to veterans. It is comprised of nurse case managers, nurse practitioners, occupational therapists, social workers, clinical psychologists, clinical dietitians, a clinical pharmacist, and a physician. Residents work closely with the clinical pharmacist to perform medication reviews, educate patients about their medications, monitor chronic disease states, and participate in home visits for new and established patients.

Medication Management – Residents manage care of chronic disease states for veterans by ordering and interpreting labs and prescribing and adjusting medications. They are responsible for the education and follow-up of their patients; residents staff care plans with attending physicians or clinical pharmacists. Patients seen in this clinic are referred by their primary provider for co-management of chronic conditions including but not limited to hypertension, hyperlipidemia, diabetes, hypothyroidism, BPH, gout, and COPD.

Mental Health – This rotation provides residents with a broad interdisciplinary experience. Residents gain experience in medication management in a pharmacist run clinic, including participation in our centralized intake system. Objectives include experiential learning of different DSM-IV axial diagnosis, clinical interview skills, psychopharmacology initiation, monitoring and evaluation, as well as completion of a mental health-related project.

Osteoporosis – In this clinic, Veterans with osteoporosis or history of non-traumatic fractures are evaluated for secondary causes of osteoporosis and for management of their reduced bone density. Residents assess patients, order bone density studies and other tests needed to look for risk factors, and provide and monitor bisphosphonates and other therapies. The resident may also assist in precepting fourth year pharmacy students who rotate through this clinic.

Pain Management – The Pain Management team is an interdisciplinary team comprised of a neurologist, rehabilitation medicine specialist, nurse practitioner, clinical psychologist, and clinical pharmacist. Patients are referred to the clinic for chronic pain management with an emphasis on improvement of quality of life. Residents are responsible for reviewing patients' pain medication histories prior to their first visit with the clinic and assisting with selection of appropriate medication treatment. Residents are also required to perform telephone follow-ups with patients following any changes in their pain medication regimen.

Rheumatology – Patients with a wide variety of rheumatologic disorders are cared for in this clinic. Residents provide direct patient care including physical assessment and development of therapeutic and monitoring plans. These patients are co-managed with a Pharmacist preceptor and Rheumatologist attending physicians.

Tobacco Treatment – This is a clinic run by the pharmacy residents and a clinical pharmacist. Residents provide tobacco cessation counseling and evidence-based medication therapy through group sessions and individual phone counseling. Participation in group sessions may be through face-to-face meeting and video conference. This is a free service for Veterans.

PGY-1 Pharmacy Practice Residency Rotation Descriptions

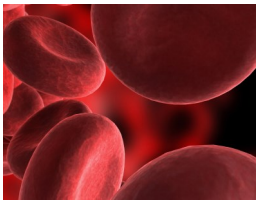
Elective Rotations

A Focus on Ambulatory Care

Dermatology – Residents work with attending dermatologists in addition to dermatology fellows and medical residents. Emphasis is placed on recognizing common dermatologic problems and their management.

Hepatitis C – The resident works with the clinical pharmacist in this clinic to co-manage patients with the gastroenterology team. Evaluation and treatment of patients with the hepatitis C virus is the focus of this clinic. Patient education, lab ordering, monitoring, dose adjustments, and side effect management are needed monthly throughout drug treatment and are largely the responsibility of the pharmacist.

Mental Health – This rotation provides residents with an opportunity for an additional experience in mental health. Residents travel to a VA clinic in Rockford, Illinois, to see patients in the mental health clinic at that site. Residents benefit from the guidance of the Madison VA mental health pharmacy preceptor as well as the other mental health providers (including a nurse practitioner) based at the Rockford clinic.



Erythropoietin/Anemia – This is a medication management clinic specifically for those patient receiving either erythropoietin or darbepoeitin therapy for treatment of anemia. Patients are managed by a pharmacist and therapy is adjusted based on patient's symptoms and laboratory tests. Some patients require administration of the injections at their clinic visit. This experience includes managing patient's anemia, with a primary emphasis in anemia with chronic kidney disease or anemia of chronic diseases.

Infectious Disease – The ID clinic serves as the primary care clinic for all HIV+ patients at the Madison VA. It is also a consult clinic for patients with severe or chronic infectious diseases. All patients on home IV antibiotics are followed by the ID clinic. Experiences during the rotation may include HIV, home infusion, diabetic or ischemic ulcers, wound care, and treatment of conditions including osteomyelitis, endocarditis, and more.

Women's Health – This elective rotation offers an opportunity for the resident to refresh knowledge and skills related to the female patient. Residents spend time observing and consulting with clinic providers.

CBOC Medication Management – This elective rotation has all the main components of Medication Management in Madison, but is completed at one of the rural community-based outpatient clinics (CBOC). This rotation will help you develop the skill set needed to excel in within a rural primary care setting. You may select which CBOC you are most interested in. Car pooling with preceptors is available.

Teaching Responsibilities

One of the goals of the residency program is to provide residents with the opportunity to develop and improve their communication and teaching skills. As part of their residency appointment, Madison VA residents have an appointment as Clinical Instructors at the UW School of Pharmacy. With this appointment, residents spend five weeks over the course of the year teaching in the Pharmacotherapy Laboratory at the School of Pharmacy. This course focuses on clinical application of various therapeutic topics and skills. The appointment also grants residents access to UW resources including the medical library. In addition, residents are involved in a number of ongoing teaching and in-service activities including the following:

- Residents provide in-services to hospital administrative personnel, nurses, pharmacy personnel, students, and providers as assigned by rotation preceptors.
- Residents may help precept pharmacy students completing introductory and advanced pharmacy practice experiences at the VA hospital.
- Residents have an extensive role in precepting students through the VALOR program, a student internship designed for pharmacy students who have completed their second year of pharmacy school.

Teaching Certificate Program with the University of Wisconsin

The teaching certificate is a separate, voluntary program that complements the experiences obtained in the Pharmacotherapy Laboratory. Residents are taught strategies to teach the adult learner, facilitate discussions and design a lecture. As part of this program, residents take turns presenting the course topics and facilitating discussions. In addition, guidance is provided on the development of a teaching portfolio and a completed teaching portfolio must be submitted to receive a certificate. A certificate, signed by the Dean of the School of Pharmacy, will be presented to the resident after successful completion of this program.

THE UNIVERSITY of WISCONSIN MADISON

Topics discussed in the Teaching Certificate Program include:

- Creating a lesson plan
- Creating abstracts & posters
- Facilitating classroom learning
- Providing effective feedback
- Objectives & outcomes
- Methods to assess student learning
- Matching your teaching style to the learning environment
- Designing and implementing an effective rotation

Residency Research Project

West Lafayette, Indiana: Site of the Great Lakes Pharmacy Resident Conference

Successful completion of an original research project is a requirement for attainment of a residency certificate. The purpose of the longitudinal project is to develop problem solving skills and to expose residents to research methodology. Each resident will choose a primary preceptor for his/her residency project who will serve as the Primary Investigator.

Residents are encouraged to consider several factors when selecting a topic for their major project. First, the topic selected should be one of personal interest to the resident. The needs of the Pharmacy Service should also be considered when selecting a topic. The topic should be relevant to medication use, patient safety, or resource utilization management. Finally, resident projects should be selected with the intent of submitting the results for publication in an appropriate professional journal. All major projects must be presented to invited guests locally, as well as at the Great Lakes Residency Conference. A manuscript drafted in AJHP format must be submitted for successful completion of the residency.

In-Services

Each resident presents a minimum of two formal presentations during the year on a topic of the resident's choosing. The purpose of the formal presentations is to improve the resident's ability to prepare for a formal presentation with handouts, to provide an oral presentation to peers, to provide an opportunity for education for the other residents and staff, and to increase the resident's familiarity with various types of literature associated with pharmacotherapy.

Journal Clubs

Residents are required to attend and participate in the Pharmacy Residency Journal Club. This activity is coordinated by the Education and Research Coordinator. Residents present journal articles and support interactive discussions of presented articles. The Journal Club meets weekly during the residency year and is regularly attended by residents, pharmacists, and students.

Case Conferences

Residents and preceptors meet once a month to discuss interesting patient cases, clinical pearls, or new information learned during rotations. This activity is coordinated by the Education and Research Coordinator. Residents take turns preparing cases to present. These sessions provide an opportunity to learn with and from fellow residents and preceptors about interesting, challenging, or unique clinical questions.