

PGY-1 General Pharmacy Practice Residency

(Inpatient & Outpatient)

PGY-1 pharmacy residency programs at the William S. Middleton Veterans Hospital (also known as the “Madison VA”) have been in existence since 1983 and trained hundreds of residents. This first year residency program has been designed to develop 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. During the ambulatory care blocks, 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. 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, rheumatology, osteoporosis, pain management, 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.

The main hospital also provides acute care to patients on seven different inpatient wards. Resident spend their first block completing an inpatient orientation rotation. This will assist the resident in becoming acclimated to inpatient pharmacy services and serve as a foundation for future acute care rotations and weekend staffing responsibilities. Additional inpatient rotations include general medicine, ICU, and a rehab/transitional care ward. 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.

PGY-1 General 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.

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 10-2850C) 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:
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Residency Director –119
William S. Middleton VA Hospital
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Madison, WI 53705

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

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(Inpatient & Outpatient) - Acute Care Rotations

Inpatient Orientation - Throughout this rotation, residents become familiar with the process for inpatient pharmacy including order entry and verification, outpatient processing, kinetic and anticoagulation monitoring, formulary processes, medication reconciliation upon admission and discharge, discharge counseling, overview of technician functions including our admission history technicians, controlled substance protocols, and other responsibilities. Residents maintain close contact with their primary preceptor, as well as gain experience with inpatient staff within their respective services. The exposures that residents receive in this orientation are applied to their subsequent general inpatient rotations.

Acute Care General Medicine - The purpose of this rotation is to prepare the resident with skills necessary to become a competent inpatient clinical pharmacist. This rotation will allow the resident to gain experience in managing pharmacotherapy for acutely ill patients, to develop independent judgment and accountability, and to improve the verbal and written communication skills necessary to be an effective clinical pharmacy practitioner. Training activities will involve rounding with a medical team and monitoring patient medication profiles daily to ensure the provision of evidence-based, patient-centered medication therapy management. This will include monitoring for appropriate dosing and indication, efficacy, adverse effects, and cost-effectiveness. The resident will answer drug information questions, perform pharmacokinetic monitoring, obtain medication histories, and provide medication education and counseling for his or her patients. The resident will learn to be a liaison between the pharmacy service and other health-care providers, serving as an active member of an interdisciplinary team. The resident will also be involved in precepting pharmacy students and providing education to staff such as leading journal article discussions or presenting educational inservices.

Critical Care - There are two intensive care units at the Madison VA. The patient population on these units is a mix of surgical (cardiac, general/thoracic, and neurosurgery) and medical (cardiac, pulmonary, infectious disease). Patients on these units are managed by medical, surgical or specialty teams. An oversight team, comprised of a critical care pharmacist, an intensivist or internist, a nutritionist, intensive care nurses and a respiratory therapist, provide review of care during rounds on Monday through Friday. The critical care pharmacist, in addition to participating in rounds and providing review of care, performs medication histories, tube feeding consultations, and pharmacokinetic consultations, precepts pharmacy students, answers drug information questions, and completes medication discharges. The PGY-1 resident is responsible for contributing on rounds as well as the other functions of the critical care pharmacist outlined above for patients that he or she is following.

Community Living Center - The purpose of this rotation is to provide the resident with pharmacy experience in a long-term care environment. The Madison VA Community Living Center (CLC) is a 26 bed facility that cares for patients who are no longer acutely ill, but have continued needs for skilled nursing, rehabilitation or hospice care. This rotation will allow the resident to gain experience in managing pharmacotherapy for these patients, to develop independent judgment and accountability, and to improve the verbal and written communication skills necessary to be an effective clinical pharmacy practitioner. The resident will be assigned patients and be responsible for all their pharmacy care. This includes their initial intake note which requires the resident to document a comprehensive review of all of a patient's disease states and medications. Additionally, the resident will complete daily monitoring including anticoagulation and pharmacokinetic notes, discharge counseling, and attending interdisciplinary meetings and discussing any patient care needs with the entire team.

Antimicrobial Stewardship (longitudinal) - This experience is an opportunity to participate in the continuing development of an antimicrobial stewardship program with the objectives of improving safety and preserving effectiveness of antimicrobial therapy. Residents are invited to the monthly meetings and participate in a longitudinal project which may include a medication use evaluation or development of protocols, pathways, or educational materials.

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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 coordinate warfarin interruptions for procedures, using low molecular weight heparin if warranted, and 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 multidisciplinary 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.

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.

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.

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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 hypertension, hyperlipidemia, diabetes, hypothyroidism, BPH, gout, COPD, and others. Residents will also receive training in Patient Aligned Care Teams (PACT) working alongside Primary Care Providers to address chronic disease state needs and improve epidemiologic patient outcomes through population management.



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.



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(Inpatient & Outpatient) - Academic Opportunities

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 inservice 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 or 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.

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



PGY-1 General Pharmacy Practice Residency (Inpatient & Outpatient) - Other Activities

Residency Research Project

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.



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

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.

