

The University of Pittsburgh Medical Center St. Margaret

The University of Pittsburgh Medical Center (UPMC) St. Margaret is an interprofessional pharmacy residency program that is uniquely integrated into a family medicine residency. UPMC St. Margaret is a 249-bed community teaching hospital. The hospital is associated with three family health centers and two geriatrics outpatient practices, all of which are certified patient-centered medical homes in the city of Pittsburgh and surrounding areas. The three family health centers serve a low socioeconomic population and an estimated 15,000 patients overall, with a 1:5000 pharmacist-to-patient ratio. About half of the insurance payers for these patients are Medicaid, and the other half is a mix between the health-system insurance plan and Medicare. The purpose of the residency is to train highly motivated, team-oriented pharmacy residents on advanced patient medication management skills, teaching techniques, and practice-based research methods, preparing them to be leaders of change in the medical and academic community.

Begun in 2003 with just one pharmacy resident, the program has now grown to include a total of 10 pharmacy residents, 5 PGY1 residents, and 5 PGY2 residents (three in PGY2 ambulatory care and two in PGY2 geriatrics positions). Different from traditional residency positions, each pharmacy residency position is a PGY1/PGY2 position whereby candidates apply to the program with the intention of staying for pharmacy practice and specialty training over 2 years. During the interview process, each candidate commits to and is conditionally accepted into (if matched) either ambulatory care with an emphasis in family medicine or geriatrics.

The goal of the PGY1 year is to provide residents with a wide variety of experience in direct patient care in both inpatient and outpatient settings while developing their leadership and scholarly skills. Required rotations include inpatient family medicine, inpatient geriatrics, emergency medicine, critical care/ICU, outpatient family medicine, outpatient geriatrics, and infectious diseases. As part of the greater UPMC health care and University of Pittsburgh academic systems, many elective opportunities are available, such as global health, academia, palliative care, and psychiatry. Integration into the UPMC St. Margaret Family Medicine Residency Program allows interprofessional practice and training to be a cornerstone for each rotation.

In the PGY2 year, two residents continue into the PGY2 geriatrics program, and three residents continue into the PGY2 ambulatory care with emphasis in family medicine program. The interprofessional teaching environment at UPMC St. Margaret encourages co-learning and teaching between PGY2 residents, family medicine physician residents, and geriatrics physician fellows. All PGY2 pharmacy residents have additional teaching opportunities and serve as primary preceptors for APPE pharmacy students, family medicine physician residents, and other medical and pharmacy learners who rotate through each practice site.

For the PGY2 ambulatory care program, each resident is assigned one family health center as their continuity site and takes ownership of the pharmacy practice together with the ambulatory care clinical pharmacists. Longitudinal rotations include ambulatory care practice at a private practice physician office, outpatient geriatrics, and inpatient family medicine. At each of the family health centers, PGY2 pharmacy residents participate in direct patient care by seeing patients by appointment through the "medication management" schedule. This schedule has collaborative scheduled time, during which PGY2 pharmacy residents see patients alongside various medical and pharmacy learners, as well as pharmacist-only time, during which pharmacists see patients independently. Because of their presence in the family health centers, real-time collaboration occurs daily with family medicine physician residents, family medicine physician faculty, behavioral health providers, and nursing. The patient population at each health center ranges from neonates to older adult patients. Each resident is responsible for various quality improvement initiatives and research projects at their practice site. They maintain patient lists for chronic disease states including diabetes, hypertension, and anticoagulation. In

addition, PGY2 pharmacy residents maintain their health center formulary for on-site medications and vaccines.

PGY2 geriatrics pharmacy residents, together with geriatrics clinical pharmacists, provide coordinated, direct patient care across each of the health care settings, including the outpatient, skilled nursing, and inpatient settings. Longitudinally, residents spend time on a senior living campus to provide direct patient care in the skilled nursing and personal care settings. Residents also spend time in the outpatient setting, where they complete comprehensive medication management, serve as a drug resource to both patients and clinicians, and complete daily targeted drug therapy monitoring/dosing. PGY2 pharmacy residents also round on the inpatient geriatrics teaching team to provide evidence-based pharmacotherapy recommendations and deliver regular medication-related topic discussions. Geriatrics clinical pharmacists and PGY2 pharmacy residents take great pride in ensuring seamless transitions between all levels of care. Throughout the week, patient-specific handoffs are consistently communicated between geriatrics clinical pharmacists and PGY2 pharmacy residents to guarantee the safest and most effective pharmacotherapy regimens. In addition to these core experiences, residents round on an interprofessional inpatient geriatrics psychiatry team. Elective time is available for residents to expand on their experiences.

At UPMC St. Margaret, residents at all levels receive advice and mentoring in every aspect of their residency training. This includes having a staffing mentor at the hospital pharmacy, a residency coach, and a research adviser. In addition, residents have quarterly meetings with their program directors and the option to be supported by the behavioral health faculty during Resident Support Group.

All pharmacy residents receive training to become educators through the University of Pittsburgh Faculty Development Fellowship directed by Drs. Stephen Wilson and Linda Hogan. The fellowship is an interprofessional program that includes 10 pharmacy residents, 3 faculty development physician fellows, and 3 geriatrics physician fellows. The fellowship includes a summer intensive series during the PGY1 pharmacy residency year with longitudinal weekly afternoon didactic and interactive sessions. The mission of the fellowship is to “develop family medicine educators to become master teachers, exemplary clinicians, collaborative researchers, and effective leaders.” This occurs through faculty teaching and participant experiential learning across five domains: Teaching & Learning (TL), Professional & Leadership Development (PLD), Administrative & Management (AM), Research & Scholarship (RS), and Clinical Care (CC). There are opportunities for teaching at the University of Pittsburgh School of Pharmacy and throughout UPMC St. Margaret at various educational conferences and in everyday practice. These teaching opportunities include medical and pharmacy grand rounds, didactic lectures, small-group teaching, curriculum design, and faculty development seminars. Through fellowship, there are also many opportunities for scholarship and publication at the regional and national level.

Finally, residents at UPMC St. Margaret are nationally involved in various pharmacy and medical organizations with the American College of Clinical Pharmacy, Society of Teachers of Family Medicine, American Society of Health-System Pharmacists, and American Geriatrics Society and internationally as part of the North American Primary Care Research Group. Each year, all residents are accepted to present and recognized for their research and other scholarly works at these organizations’ prestigious conferences. In addition, all pharmacy residents participate regionally and nationally in the Pennsylvania Academy of Family Physicians, Family Medicine Education Consortium, and American Academy of Family Physicians.