Healthcare evidence integration and data analytics are evolving areas within the healthcare industry. As the prevalence of electronic health records, integration of health systems, and emphasis on business intelligence increases as well as the need to monitor health outcomes, the demand for clinically competent healthcare pharmacy benefits managers and data analysts becomes greater. The VA Heartland Network (VISN 15) PGY2 Pharmacy Outcomes and Healthcare Analytics Residency Program will help to meet this demand through its innovative approach to training and education. This PGY2 program is designed to develop accountability, practice patterns, habits, and expert knowledge, skills attitudes and abilities to meet the needs of this advanced area of pharmacy practice.

The purpose of the VA Heartland Network (VISN 15) PGY2 Pharmacy Outcomes and Healthcare Analytics Residency Program is to develop clinically proficient pharmacy benefits managers who will improve the quality and outcomes of patient care services through the integration of evidence-based medicine, formulary management, outcomes analysis, and process improvement. The resident will gain advanced skills in information technology, informatics, and data analysis to ensure success in pharmacy benefits management in integrated health systems. While special emphasis is placed on developing residents for VA careers, the residency will encourage each resident’s intellectual and personal development and foster the development of lifelong learners committed to advancing the profession of pharmacy.

VA Heartland (VISN 15) Network

The VA Heartland Network is the regional unit that directs activities for Veteran Integrated Service Network (VISN) 15. The VA Heartland Network is one of 18 VISNs in the Veterans Health Administration (VHA). It is composed of seven integrated healthcare systems that include 9 medical centers (all provide ambulatory care services), 56 community-based outpatient clinics (CBOCs), 7 long-term care facilities, and numerous specialized services. The VA Heartland Network spans a geographic area of 162,207 square miles across Kansas and Missouri, as well as parts of Illinois, Indiana, Kentucky and Arkansas. VISN 15 provides health care services to over 340,000 Veterans annually and has an annual operating budget of $2 billion with 11,000 employees. VA Heartland Network is one of the only VA networks in the country to be endorsed by the National Committee for Quality Assurance (NCQA).
The residents are scheduled for experiences throughout the year in order to allow for learning in various areas. Most of the learning experiences during this PGY-2 residency are longitudinal in structure. To successfully complete the program, the resident will be expected to achieve proficiency in the 21 required critical objectives and ‘Satisfactory Progress’ rating on the remaining 42 non-critical required objectives.

**Mission:**
“*To improve the quality and provision of healthcare to veterans by leveraging best practice outcomes, health analytics, and optimal use of medications.*”

**Vision:**
*We will build and enhance relationships and collaborations with all members of the healthcare team. We will control costs to the best of our ability while maximizing the value of medications for our veterans. We will utilize the most evidence-based biomedical literature to improve veteran outcomes. We will promote quality measures and metrics to hold ourselves accountable for the care we provide. We will advance the use of innovative data technologies to ensure safe and optimal care is being consistently provided to our veterans.*

### PGY-2 Program Vision and Purpose

The PGY2 residency in pharmacy outcomes and healthcare analytics builds upon PGY1 residency graduates’ patient-care competence, clinical foundation, and overall knowledge of pharmacy operations to prepare residents to assume high level, multifaceted careers in a variety of healthcare settings. The residency promotes the integration of evidence-based medicine, outcomes measurement, and process improvement with information technology, informatics, and data analysis to inform decisions surrounding pharmaceutical products and services. Throughout the program, residents will develop proficiency in applied pharmacoeconomics, data analytics, and population level health improvement. Residents enjoy frequent collaboration with staff VISN-wide, such as pharmacoeconomic pharmacists, clinical program coordinators, clinical pharmacy specialists, PACT teams, and specialty providers who provide evidence-based care to our veterans. They will assist in establishing multi-facility metrics/monitors and will lead, facilitate, and collaborate with active taskforces, committees, and regional health care teams comprised of interdisciplinary experts.

**The Outcomes:**
1. Demonstrate effective leadership and practice management skills in the areas of administration, analytics, informatics, and outcomes.
2. Optimize patient outcomes through the provision of evidence-based, patient-centered therapy and fostering effective decision support as an integral part of interdisciplinary healthcare teams. Provide medication and practice-related information, education, and/or training
3. Serve as an authoritative resource on the optimal use and development of analysis tools, formulary management, and pharmacy outcomes.
4. Demonstrate excellence in the provision of training and educational activities for health care professionals, health care professionals in training, and the public.
5. Demonstrate the technical skills essential to the role of a pharmacist specializing in pharmacy outcomes and healthcare analytics.
6. Understand a pharmacy benefits management structure and contribute to the organization’s formulary management.
7. Contribute to the body of pharmacotherapy knowledge by conducting outcomes-based research or quality improvement projects with the assistance of analysis tools.

### Core Rotation Experiences

The residents are scheduled for experiences throughout the year in order to allow for learning in various areas. Most of the learning experiences during this PGY-2 residency are longitudinal in structure. To successfully complete the program, the resident will be expected to achieve proficiency in the 21 required critical objectives and ‘Satisfactory Progress’ rating on the remaining 42 non-critical required objectives.

- **Data Management and Analytics**
- **Pharmacoeconomics and Formulary Management**
- **Pharmacy Practice Foundation, Service, and Policy Development**
- **Clinical Research Project**
- **Academic Detailing**
Data Management and Analytics

The resident will develop data skills ranging from advanced Excel analytics and data extraction from multiple sources, to creating and maintaining population health management dashboards and reports.

Knowledge and applied use of query languages for interacting with relational databases will be taught and developed.

Resident will become proficient in advanced Excel functions, including, but not limited to writing functions with various commands and creating pivot tables to analyze data.

The resident will also learn to work proficiently in business intelligence (BI) platforms, such as Pyramid Analytics. The resident, upon graduation from the program, will have an understanding of the VA health data repository enterprise architecture data warehouse structure.

Pharmacoeconomics and Formulary Management

The resident will develop skills of practical application of pharmacoeconomic principles to assess pharmaceutical-related economic and clinical health outcomes. Expertise will be gained in the complete cycle of formulary management from technology review, decision making to operationalizing decisions and tracking impact on costs and quality. Additionally, the resident will understand legislative and regulatory effects on delivery of VHA prescription benefits to veterans. The resident will develop initiatives to address population health management gaps in care and solutions including focused interventions by pharmacy specialists.

The resident works with VISN employees in diverse areas of practice to accomplish tasks. For example, the resident works with VISN 15 Formulary Management Workgroup, VISN Pharmacy & Therapeutics Committee, and facility pharmacy services to improve value of therapies through formulary and utilization management.

The resident applies expertise in rendering prior authorization decisions, contract compliance, and inventory control activities to achieve maximum savings and data accuracy.

Pharmacy services at VISN and facility levels implement national formulary and utilization management decisions. The resident is integrated into the VISN 15 PBM work unit, contributes to the development and achievement of pharmacy goals at the local, VISN, and Nation levels, and applies principles of leadership to improve practice within the health system.

The purpose of the rotation is to prepare the resident to take on the role of a formulary manager at local and VISN levels and to prepare for challenges of a pharmacy benefits manager or drug information pharmacist. The resident will apply knowledge of the VHA drug benefit and market trends to design analyses to track cost savings, cost avoidance, and to forecast pharmacy budgets.
Pharmacy Practice Leadership, Foundation, Service, and Policy Development

This is an extended learning experience that begins after orientation and continues throughout the residency.

This experience is designed to expose the resident to leadership nomenclature, key principles, tools, and available resources that will assist them in growing as clinicians, practitioners, and leaders.

Topics may include mission/vision statements, strategic plans, effective communication, networking, mentoring, clinical leadership, leadership strategies, available resources, opportunities, regulatory bodies, finances, medication safety, organizations, the importance of publishing, and various programs/activities designed to develop the resident’s pharmacy practice/leadership foundation.

Clinical Research Project

This learning experience is designed to develop, execute, and report results of investigations of pharmacy practice-related issues. The resident will be responsible for obtaining experience in all areas of a research or quality improvement project including development of a hypothesis, submission of a project proposal, application to IRB (for research approval or classification as a QI), data collection, data analysis, drawing conclusions, and manuscript presentation. The resident will work with the RPD and one or more preceptors throughout the project life cycle who will assist in coordinating project deadlines and IRB approval. Residents will be encouraged to conduct outcomes-based research or quality improvement projects, preferably incorporating the skills learned from other rotations and building a new analysis tool that will assist in the data mining component of the project. In addition to the manuscript, residents are required to present a project poster at the annual Midwest Pharmacy Residents Conference or other conference approved by preceptors.
Academic Detailing

The purpose of the Academic Detailing experience is to introduce the pharmacy resident to the skills and techniques of Academic Detailing and to allow them to practice management of an Academic Detailing program.

The Academic Detailer is responsible for providing Academic Detailing to staff based on national and VISN initiatives. Academic Detailing involves reviewing and learning evidence-based medicine, developing and/or promoting educational pieces that include key messages, providing Academic Detailing outreach visits to VA staff, identifying and resolving barriers, and socializing new Academic Detailing campaigns.

Additional Skills Development

- Healthcare Analytics Certificate Program
- Pharmacy Teaching Certificate through the University of Missouri—Kansas City
- Didactic Teaching and Student Preceptorship
- Academic Detailing Basic Skills Training
- Lean Yellow Belt Certification
- Board Certification Review Sessions and Study Groups

Meet The Program

**Monica Schaefer, PharmD**
Residency Program Director
VISN 15 Pharmacy Program Manager
Monica.Schaefer@va.gov
Preceptor for: Pharmacoeconomics and Formulary Management, Clinical Research Project

**Shauna Leonard**
VISN 15 Pharmacy Executive Manager
Shauna.Leonard@va.gov
Preceptor for: Pharmacy Foundation and Leadership

**Patrick Spoutz, PharmD, BCPS**
VISN 20 Pharmacy Program Specialist and graduate of the program
Patrick.Spoutz@va.gov
Preceptor for: Data Management and Analytics

**Kimberly Schaffer, PharmD**
Pharmacoeconomics Facility Program Manager
Kansas City VA Medical Center
Kimberly.Schaffer@va.gov
Preceptor for: Pharmacoeconomics and Formulary Management

**Mark Patterson, PhD, MPH**
Assistant Professor of Pharmacy Practice & Administration at the University of Missouri - Kansas City School of Pharmacy
Pattersonmar@umkc.edu
Preceptor for: Clinical Research Project

**Chris Sedgwick, PharmD, BCPS**
VISN 15 Pharmacy Program Manager and graduate of the program
Christopher.Sedgwick@va.gov
Preceptor for: Data Management and Analytics
Benefits:

- Competitive stipend: $45,279
- Eligible for medical and life insurance as a VA employee
- Thirteen (13) days each of annual leave and sick leave, ten (10) paid federal holidays
- Teaching certificate, Health Analytics Certification Course

Qualifications:

- United States citizen
- Graduated from an ACPE accredited school of pharmacy with a Doctor of Pharmacy degree
- Possess a valid US pharmacist license
- Complete a first-year pharmacy practice residency or equivalent experience

Application:

- Letter of Intent
- Curriculum Vitae
- Three (3) professional letters of references
- OF 306 – Declaration for Federal Employment
- Application for Health Professions Trainees VA Form 10-2850d

VA Heartland (VISN15) Network Office

The PGY2 Pharmacy Outcomes and Healthcare Analytics Residency is located at the VA Heartland Network (VISN 15) Executive offices at 1201 Walnut Street in downtown Kansas City, MO. The building is located in the central business district. Renowned restaurants, lounges and shops intertwine with chic lofts and the city’s core business community, all within an eight-block area. A unique system of covered walkways connects 1201 Walnut with buildings spanning more than six city blocks. This climate-controlled environment provides a pleasant walk, regardless of the weather. In addition, access to the building’s attached parking garage is provided so there is no need to worry about finding a parking space. Free access to the property’s fitness center is also provided.