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 will become greater. The VA Heartland Network (VISN 15) PGY2 Population Health Management and Data 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 Population Health Management and Data 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 population health management, formulary management, outcomes analysis, and process improvement. The resident will gain advanced skills in population health management, informatics, and data analytics to ensure successful pharmacy services 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 275,000 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).
**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.

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**PGY-2 Program Vision and Purpose**

The PGY2 residency in Population Health Management and Data Analytics builds upon PGY1 residency graduates’ competence in the delivery of patient-centered care and support of optimal medication therapy outcomes. The residency trains pharmacists to integrate health information, evidence-based medicine, outcomes measurement, and data analytics to inform decisions surrounding pharmacy services and population health management. Graduates are adept in discovering and optimizing synergy between clinical knowledge, information technology, and pharmaceutical operations, equipping them to function in a multifaceted professional environment and lead change to improve patient outcomes.

Graduates of this program will become skilled in concepts of population health management, applied pharmacoeconomic principles, and data analytics, thereby enabling them to create, implement, and optimize population health care initiatives designed to improve health outcomes of patients covered by government, managed care, or public/private health care systems, agencies, companies, and organizations.

**Program 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. The learning experiences are longitudinal in structure. To successfully complete the program, the resident will be expected to achieve proficiency in the required critical objectives and ‘Satisfactory Progress’ rating on non-critical required objectives.

The core rotations will be in the areas of:

- Data Management and Analytics
- Pharmacy Benefit Design and Formulary Management
- Population Health Management
- Pharmacy Practice Foundation, Service, and Policy Development
- Quality Improvement or Research Project
The resident will learn and apply a variety of data skills from Excel analytics, database extraction, and on final product development such as creation and maintenance of electronic dashboards and reports. Knowledge and applied use of query languages will be taught and developed for interacting with relational databases. The 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 (PowerBI, Pyramid Analytics). Upon graduation from the program, the resident will have an overall understanding of the VA health data repository enterprise architecture data warehouse structure applied to VISN 15. This will include specialized knowledge of use of BI platforms, collaborative development environments, digital report development and maintenance, and formulating, executing, and revising plans and coding procedures for database searches using SQL.

### Data Management and Analytics

The resident will learn and apply a variety of data skills from Excel analytics, database extraction, and on final product development such as creation and maintenance of electronic dashboards and reports. Knowledge and applied use of query languages will be taught and developed for interacting with relational databases. The 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 (PowerBI, Pyramid Analytics). Upon graduation from the program, the resident will have an overall understanding of the VA health data repository enterprise architecture data warehouse structure applied to VISN 15. This will include specialized knowledge of use of BI platforms, collaborative development environments, digital report development and maintenance, and formulating, executing, and revising plans and coding procedures for database searches using SQL.

### Pharmacy Benefits Design and Formulary Management

The resident will gain experience in integrated health systems formulary management through involvement in all levels of VHA Formulary decision making. Through various activities, the resident will understand the complete cycle of pharmaceutical contract negotiation, drug ordering and procurement, and monitoring contract compliance. The resident participates in VISN 15 Formulary Management Workgroup and VISN Pharmacy & Therapeutics Committee, and collaborates with operational and clinical pharmacy staff throughout VISN 15 to implement VHA Formulary decisions and cost saving strategies. The resident will develop skills in practical application of pharmacoeconomic principles, outline and implement methodologies to assess pharmaceutical-related economic and clinical health outcomes, improve contract compliance to achieve maximum savings, render prior authorization decisions, and implement national Formulary and utilization management decisions at VISN and facility levels. The resident will focus on developing initiatives that involve operational and clinical pharmacy staff to engage in cost savings initiatives. The resident will also apply knowledge of the VHA drug benefit and market trends to design drug utilization analyses, track cost savings/cost avoidance, and to forecast yearly pharmacy budgets.
Population Health Management

During this longitudinal learning experience, the resident will gain foundational population health management knowledge, with an emphasis on utilizing clinical pharmacy services to address important gaps in care that exist in cohorts of a health system’s patient population.

The resident will participate in the life-cycle of a population health initiative by identifying a gap in care within the patient population served by VISN 15 enrollees through both evidence based literature evaluation and detailed analytics, apply literature research and evaluation to identify best treatment approaches to patients with the identified gap(s), develop a population management tool to assist clinical personnel to identify and prioritize filling those gaps, and work with all stakeholders to implement the tool.

Intrinsic to the process, the resident will also define Specific, Measurable, Attainable, Relevant and Time-based (SMART) goals for a major longitudinal project by which milestones can be set and evaluated for success and continuous quality improvement. The resident will engage clinical staff to adjust approaches based on SMART goals performance results.

Pharmacy Practice Leadership and Policy

The resident is fully integrated into the VISN 15 PBM work unit, contributes to the development and achievement of pharmacy goals at the local, VISN, and National levels, and applies key principles of leadership to improve practice within the health system.

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. Emphasis will be placed on creating strategic plans, effective communication, networking, mentoring, clinical and operational service leadership, managing available resources/ opportunities, oversight and preparation for regulatory compliance, managing finances, medication safety and various programs/activities designed to develop the resident’s pharmacy practice/leadership foundation.

The overarching goal of this longitudinal experience is to enable the resident to apply the knowledge gained to any pharmacy practice setting to improve their individual practice and confidently utilize leadership skills.

Quality Improvement/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 manuscript, and detailed oversight and preparation for regulatory compliance, 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.

Additional Skills Development

♦ Pharmacy Teaching Certificate through the University of Missouri—Kansas City
♦ Didactic Teaching and Student Preceptorship
♦ Lean Yellow and Green Belt Certification
♦ Board Certification Review Sessions and Study Groups
Meet The Program Preceptors

Monica Schaefer, PharmD
Residency Program Director
VISN 15 Pharmacy Program Manager
Monica.Schaef@va.gov
Preceptor for:
- Population Health Management
- Pharmacy Benefit Design and Formulary Management
- Clinical Research Project

Colleen Lewellyan, PharmD, MBA, BCPS
Kansas City VA Pharmacoeconomics Program Manager
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Preceptor for:
- Pharmacy Foundation and Leadership

Andrea Chen, PharmD, BCPS
VISN 15 Academic Detailing Program Manager
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Preceptor for:
- Population Health Management

Patrick Spoutz, PharmD, BCPS
VISN 20 Deputy Pharmacy Executive
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Preceptor for:
- Data Management and Analytics
- Clinical Research Project

Chris Sedgwick, PharmD, BCPS
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Preceptor for:
- Data Management and Analytics

Shauna Leonard, PharmD
VISN 15 Pharmacy Executive
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Preceptor for:
- Pharmacy Foundation and Leadership

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Residency Program Director
VISN 15 Pharmacy Program Manager
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Preceptor for:
- Data Management and Analytics

Shauna Leonard, PharmD
VISN 15 Pharmacy Executive
Shauna.Leonard@va.gov
Preceptor for:
- Pharmacy Foundation and Leadership

Robert Fredenrich, PharmD
Current PGY2 Resident
Robert.Fredenrich@va.gov
Benefits:

- Competitive stipend: $45,681
- 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

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
- Official College of Pharmacy Transcript(s)

Application must be submitted by: January 9, 2022

Candidates will be ranked according to the National Match Program. This residency site agrees that no person at this site will solicit, accept, or use any ranking-related information from any residency applicant. Information about registering for the Match can be found at: www.natmatch.com/ashprmp